

***DRAFT***

**SIXTH FIVE YEAR PLAN**

**1980—85**

***(Volume I—Review)***

**UTTAR PRADESH  
PLANNING DEPARTMENT**

***November, 1980***

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This plan is being presented in three volumes, while the first two volumes' I and II respectively, contain descriptive portions of the Sixth Plan, 1980—85 and Annual Plan, 1981-82, volume III incorporates the prescribed statements in respect of these plans.

## P R E F A C E

U. P.'s draft Sixth Five-Year Plan for the period 1980—85 sets out a programme of action which would give a positive turn to the economy of the State and the nation. It aims to achieve during the plan period a rate of growth slightly higher than the average for the whole country. This rate of growth is not merely essential for enabling U. P. to begin to catch up with other areas but has also been verified as within reach of the State. Detailed sectoral exercises have been carried out which show that U. P. has the agricultural and industrial potential to achieve this goal. Of course, a great deal of hard and persevering effort will have to be put in for improving the performance of the Public Sector, streamlining administrative arrangements, decentralising administrative and financial powers, removing bottlenecks in the way of rapid development of private sector of the economy in agriculture and industry, and so on. The State Government will also have to ensure rapid improvement in supply of power, speedy implementation of on-going projects, effective policies of manpower utilization and management, systematic monitoring and utilization of results of evaluation studies, and effective co-ordination in ensuring timely completion of works.

The draft plan also represents an attempt to correct the imbalance created on account of inadequate development of social services and essential infrastructure of roads and transport. On account of heavy commitments of funds for long-gestation projects in power and irrigation sectors, people in U. P. have been deprived of satisfactory educational and health facilities for a long period. Time has come for a serious reassessment of the strategy in this regard. The human dimension of development simply cannot be ignored any longer. Human resources development has to be given a higher priority. But it would be futile to expect that this would actually come about unless national support is made available for substantially augmenting the State's own resources. The nation as a whole cannot progress without a State as large as U. P., with one-sixth of the country's population, ensuring that its inhabitants are able to lead a full and healthy existence. Developmental planning would acquire real content and significance only when this happens.

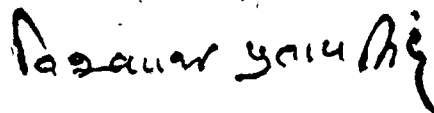
In this context, the State has necessarily to be provided much greater access to national resources. A partial alteration in the Gadgil formula and an acceptance of the demand for more market borrowing for backward States were announced at the last National

## II

Development Council meeting. Means have to be found to enable U. P. to meet its investment requirements as set out in this document through these and other means. We expect a much more positive reappraisal of investment policies of Central financial institutions and nationalised banks, and a fairer deal for the State in the location of Central projects and the flow of international project aid. All agencies concerned with promotion of development have to play a mutually-supportive role in implementing a common strategy for bringing forward the nation's backward regions. On our part, we assure that all efforts will be forthcoming for maximum resource mobilisation, and for ensuring highest productivity of the capital investments. Improvements recorded by us in the recent past have been noted in various forums.

The State Government is determined to ensure that maximum benefits reach the relatively poorer sections of its population and less developed areas of the State. In order to achieve this, the 24-point programme will be implemented, intensive development of hill area will be undertaken, the special component plan will be effectively implemented to ensure that at least half the scheduled castes population is covered within the five year period.

I will plead for sympathetic consideration of the draft plan. In fact, I regard the plan both as an expression of the needs of the State as well as a challenge for which all of us have to strive hard to fulfil. This is not an easy task. It is, however, an extremely urgent and essential task. It involves the future of nearly 100 million human beings. In all humility, I dedicate this Plan to the weak and poor in U.P.



LUCKNOW :

Chief Minister

*Dated November 10, 1980.*

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## PLAN IN OUTLINE

This outline is divided into two sections:

- (a) Plan Strategy
- (b) Selected Programmes

### PLAN STRATEGY

2. *Background and goals*—The Fifth Five Year Plan was originally intended to cover the period from 1974-75 to 1978-79. However, in October 1977, the then Planning Commission and the Government of India decided to terminate the Fifth Plan on 31st March, 1978, and to formulate a new Five-Year Plan for 1978-83. Simultaneous to the decision to terminate the plan one year in advance, it was also decided to introduce some basic changes in the planning process which would permit of greater flexibility and timely corrections for unforeseen events. The name given to these changes was the methodology of 'rolling plans'. This methodology implied that after formulating the Five year plan for 1978-83, during the year 1978-79 and after taking note of developments till then, the plans for 1979-84 and 1983-84 would be projected. A similar process would then be repeated each year and there would have been a changing five year perspective year after year. Meanwhile, the economic situation remained difficult as prices started to rise at a very rapid rate. Talk of a plan holiday also gained momentum.

3. The above methodology could not fructify and 1978-83 Plan could not go beyond its revised Draft stage. The re-constituted Planning Commission at its meeting held in April, 1980 decided that there should be no plan-holiday and that the new Sixth Five Year Plan should cover the period from 1980-81 to 1984-85. Brief guidelines were issued by the Planning Commission in May, 1980 for the preparation of the Plan. These guidelines, *inter alia*, stated that in drawing up physical targets for 1980-85 Plan, 1979-80 may be adopted as the base year and as an initial working hypothesis, the growth in plan investment may be projected on data implicit in the Draft Plan 1978-83. According to these guidelines, the main thrust in the Plan should be towards better capacity utilisation of power and irrigation pro-

jects and completion of all on-going major projects. It was further stated that it would be equally necessary to consolidate the existing productive infra-structure and to make it yield better results. Highest priority was to be given to making past investments in industrial and agricultural infra-structure yield good dividends.

4. The National Development Council at its meeting held on 30-31st August, 1980 adopted a "Framework" for the Sixth Five Year Plan. The main objectives\* of the Sixth Plan are given in this "Framework". While States are free to draw up their own objectives, optimization of benefits is best achieved when State's objectives are, by and large, in conformity with those of National Plan. Keeping in view these objectives, the strategy underlying the State Plan would consist of the following :

(1) Making all-out efforts for maximising production in various sectors in order to enable the State to achieve a substantial degree of self-sufficiency in respect of key sectors, supply of foodgrains and other essential commodities, power supply, etc., and to build up a solid production base for future growth.

(2) Maximising benefits from investments made in the past in public, corporate, co-operative and private sectors, and from infrastructure and institutions already set up.

(3) Reducing difference between U. P.'s *per capita* income and the national *per capita* income.

(4) Improving standards and quality of life of the rural as well as urban poor by increasing their purchasing power for private consumption, and by delivering greater benefits to them through enlarged access to social consumption and communally supplied goods and services.

(5) Developing the vast human resources of the State so that they may contribute effectively to the process of economic development.

(6) Reducing levels of unemployment and underemployment.

(7) Giving higher priority to solving problems of economically and socially handicapped persons, in particular, scheduled castes and scheduled tribes, landless labourers, marginal and small farmers and those engaged in hereditary occupations, like handicrafts, as well as freeing and resettlement of bonded labourers.

(8) Ensuring balanced development of all regions of the State, including ecologically handicapped regions and regions in which ecological degradation is occurring.

(9) Stabilising the size of population, and reducing birth and death rates through a concerted programme of delivery of services and education.

(10) Taking economic and organisational steps to contain price increases.

5. *U. P.'s economic situation*—Some basic facts which would give a fair idea of U. P.'s present situation are briefly given below :

*Area*—With 2.94 lakh sq. km. of geographical area, representing 9 per cent of the area of the country, U. P. ranks fourth in area amongst the States of the Union. The States having larger area being Madhya Pradesh, Rajasthan and Maharashtra.

*Population*—The total population of the State on March 1, 1979 is estimated at 102 million, accounting for about 16 per cent of the population of the country. About 85 per cent of the population resides in rural area. The scheduled caste/scheduled tribe population constitutes about 21 per cent of State's total population and 25 per cent of the country's population of scheduled caste/scheduled tribe.

*Density*—According to 1971 census, the density of population of U. P. and the country as a whole was 300 and 173 per sq. km. respectively.

*Literacy*—21.7 per cent of the population is literate. Male literates are 31.5 per cent which is much higher than females, where the literacy rate is only 10.6 per cent. The corresponding

percentages for India are 29.5 for total, 39.5 for male and 18.7 for females.

*Settlement Pattern*—According to 1971 census, there were 325 towns in the State and 22 of these had a population of one lakh and above.

*Vocational pattern*—According to the census of 1971, about 31 per cent of the total population was included in the category of workers. The largest number of workers (78 per cent) were engaged in agriculture and allied activities. Agricultural labourers constitute much as 20 per cent of total workers in the State.

*Per capita income*—The *per capita* income of the State (at 1970-71 prices) was Rs.509 in 1978-79 against an all-India average of Rs.712.

*Economic structure*—The economy of the State is mostly agrarian, with a weak industrial base for secondary sector. A little less than 60 per cent of the total State domestic product originates from agriculture and allied sectors. The contribution of primary sector in the State income during 1978-79 was 57.3 per cent, secondary and tertiary sectors contributing 16.4 per cent and 26.3 per cent respectively.

*Distributive pattern of land holdings*—Preponderance of small holdings, with over 69 per cent of holdings being below one hectare, these account for about 24 per cent of the total area.

*Land use*—Out of the total reporting area of over 29.8 million hectares, the net area sown in U. P. during 78-79 was 17.5 million hectares, that is, about 58.7 per cent. The net area irrigated was 8.9 million hectares in 78-79 i. e. 50.9 per cent of the net area sown. The intensity of cropping is about 139 per cent.

*Production and productivity*—Relatively low agricultural productivity in the State is to be noted. The production of foodgrains registered an all time record of more than 231 lakh tonnes in 1978-79 against the level of 212 lakh tonnes in 1977-78. Value of output of foodgrains and main commercial crops in 1977-78 (at 1976-77 prices) was Rs.573 per hectare in U. P. against Rs.779 in Punjab, Rs.1,172 in Haryana and Rs.630 in Maharashtra.

*Irrigation*—The total irrigation potential created up to 1979-80 was 163.09 lakh hectares, including 88.01 lakh hectares through State major, medium and minor irrigation works. Utilisation of potential created through major and medium irrigation works was, however, low at about 63 per cent.

*Infrastructure*—The installed capacity of power by the end of 1979-80 would be 3,379 MW but current level of generation remained low around 43 per cent. The total length of surfaced roads in 1978-79 was 51,039 kms. or 17 kms. per 100 sq. kms. of area. This level had been achieved by all the major States by 1975. Punjab and Haryana respectively have 53 kms. and 34 kms. of roads per 100 sq. kms. of area.

*Social Services*—The number of junior basic, senior basic and higher secondary schools in 1979-80 was 70,292, 13,127 and 4,953 respectively. The number of allopathic hospitals and dispensaries at the end of 1979-80 was 2,999.

6. U. P.'s greatest asset is plentiful availability of surface and underground water. With progressive enhancement of irrigation potential agricultural productivity should go up, leading to greater and more diversified consumption, higher savings rate and diversification of the economy. There has been a quantum jump during the last five years in the application of fertilizers. At the end of 1976-77,

U. P.'s average input of plan nutrients per hectare was higher than all other States in India, except for Punjab and Tamil-Nadu.

7. If adequate investments are made in the development and mobilisation of human resources for production and economic diversification with special reference to modernisation and industrialisation, U. P. should be able to forge ahead purposefully. This can happen only if its Plan size is also raised to a level commensurate with its size, population and problems. Even then power shortages would not be overcome in the next five years.

8. *Income growth targets overall*—The question of inter-State disparities has been discussed in various forums in the past. It has been admitted at the national level also that a large gap exists between the States. It is also accepted that this gap has been widening over the years. The indicator of *per capita* income encompasses the overall impact of developmental efforts. The following table would show that the gap between the *per capita* income of U. P. and India as a whole has widened during the period 1970-79. The details given below show that the percentage share of U. P.'s income in the total income of the country was less in 1978-79 as compared to the corresponding figure for 1970-71 :

*Total Income and Per Capita Income of India and U. P.*

Serial no.	Year	Total income (Rs. in crores) At constant prices (1970-71)		Percentage share of U.P. to India	Per Capita income (Rs.) at constant Prices (1970-71)		Percentage of U.P. to India	Gap (Rs.) (Col. 6- Col. 7)
		India	U.P.		India	U.P.		
1	2	3	4	5	6	7	8	9
1	1970-71	34368	4256	12.4	635	486	76.5	149
2	1971-72	34865	4017	11.5	629	451	71.7	178
3	1972-73	34334	4254	12.4	607	469	77.3	138
4	1973-74	36134	4059	11.2	624	439	70.4	185
5	1974-75	36504	4237	11.6	618	450	72.8	168
6	1975-76	39849	4611	11.6	660*	481	72.9	179
7	1976-77	40534	4678	11.5	658*	479*	72.8	179
8	1977-78	43857	4989*	11.4	697*	501*	71.9	196
9	1978-79	45637	5159	11.3	712†	509†	71.5	203

\*Provisional Estimates

†Quick Estimates.

9. It may also be mentioned here that going through the figures\* of *per capita* income of India and U. P. in a historical context, it would be seen that increase in

*per capita* income between two different points of time has been of the following order :

Percentage increase in 1960-61 over 1948-49		Percentage increase in 1969-70 over 1960-61		Percentage increase in 1978-79 over 1970-71	
India	U.P.	India	U.P.	India	U.P.
30.4	7.4	95.4	93.2	97.3	91.3

It was during the period 1948-49 to 1960-61 that U. P.'s *per capita* income grew at a much slower pace than the all-India figure. Even though during the subsequent two periods of time the growth of U. P.'s *per capita* income was less than the growth of India's *per capita* income, the differences were of a much lesser order. This provides a basis for optimism about U. P.'s perspective development given the right policies and effective implementation in various spheres.

10. Some important inter-State statistics high-lighting disparities among them are given† to further illustrate the point of U. P.'s relative backwardness and inadequacy of resources made available for economic development in the past years.

11. *Structure of income*—A comparative picture of the structure of income in India and in U. P. at two different points of time is given below :

*Percentage shares of different sectors of economy*

Sectors	1970-71		1978-79		
	India	U.P.	India	U.P.	
	1	2	3	4	5
1. Primary ..	50.1	60.2	44.8	57.3	
2. Secondary ..	19.7	14.9	21.9	16.4	
3. Others ..	30.2	24.9	33.3	26.3	
Total ..	100.0	100.0	100.0	100.0	

While percentage share of income from primary sector decreased both in India and in U. P., the order of decrease was sharper in the country 5.3 per cent than in U. P. (2.9 per cent). Similarly, percentage shares of secondary and other sectors have shown an increase both in the country and in U. P., but the order of increase was higher in the former 5.3 per cent than U. P. (3 per cent). This only proves that the pace of diversification of U. P.'s economy has not matched that of the country.

12. The trends of growth observed in the State's economy during different periods ending 1978-79 are given below, alongwith corresponding figures of the country as a whole, to enable a comparison to be made.

*Growth rates observed in different sectors of the economy—various periods*

Sector/Period	Agriculture and Animal Husbandry		Manufacturing				Rest of the sectors		Total Income			
			Organised		Unorganised							
	U.P.	India	U.P.	India	U.P.	India	U.P.	India	U.P.	India		
1	2	3	4	5	6	7	8	9	10	11	12	13
1960-61 to 1978-79 ..	1.9	1.3	5.8	3.3	2.9	2.6	4.2	3.0	3.3	3.0	2.6	2.2
1968-69 to 1978-79 ..	2.6	2.9	5.8	5.2	2.9	4.4	4.3	5.2	3.4	4.6	3.0	3.8
1970-71 to 1978-79 ..	2.8	2.0	5.3	5.3	3.1	5.3	4.8	5.3	2.8	4.7	3.0	3.6
1972-73 to 1978-79 ..	4.2	3.0	8.1	6.0	3.0	5.5	6.3	5.8	3.1	5.2	4.0	4.8
1973-74 to 1978-79 ..	5.3	3.2	10.5	5.3	4.7	5.9	7.6	5.8	3.8	6.0	5.0	4.8
1974-75 to 1978-79 ..	4.8	4.8	14.0	6.3	5.1	6.1	8.2	6.2	4.2	6.7	4.8	5.8
1976-77 to 1978-79 ..	5.6	6.5	8.6	6.9	3.7	6.8	6.3	6.9	3.5	5.5	5.0	6.2

13. It will be seen that the performance of the State's economy during the later

half of the seventies was much better than over a longer period. It was also better

\*Annexure II  
†Annexure III

than that of the country during the period, 1973-74 to 1978-79. The table is indicative of the fact that the State's economy really picked up since 1972-73 and the performance, thereafter, has been consistently encouraging in all sectors.

14. *Income distribution and poverty*—An aspect of income distribution, which has major policy implications, is that of measurement of the degree and extent of poverty. Poverty is measured with reference to the number of persons whose consumption expenditure is below the minimum required to buy a package of nutrition, clothing and housing which is regarded as essential for sustaining life. While significant regional differences in practice exist in respect of such needs, considering anthropometric measurements and climatic factors, the common standard used at present in the country is based on minimum nutritional requirements of 2,400 calories per day *per capita* in rural areas and 2,100 calories in urban areas. Applying these norms to cut-off points for U. P. in respect of *per capita* monthly expenditure, required to attain these minimum standards 47.85 per cent of the rural population and 43.53 per cent of the urban population in the State are estimated to be living below the poverty line in the base year 1979-80. Compared to NSS results for U. P. for the earlier year 1973-74, the proportion of people living below the poverty line has decreased quite significantly from 63.19 per cent and 49.52 per cent, respectively, for rural and urban areas. Higher growth rates since 1973-74 noted in an earlier para seem to have a direct relevance to and bearing on the improvement recorded.

15. In absolute numbers, if the proportion as in the base year were to remain unchanged, persons who may be estimated to be below the poverty line in the last year of the Sixth Plan would be as follows :

Area	Percentage of population below poverty	Persons below poverty line (in lakhs)	
		1979-80	1984-85
Rural	.. 47.85	416.80	450.45
Urban	.. 43.53	68.55	78.40
State	.. 47.18	485.35	528.86

It is apparent from the above table that there would be net addition of 43.5 lakh persons among the poor during Sixth Plan unless deliberate measures are taken to reduce the proportion of the people living below the poverty line.

16. *Employment situation in U. P.*—It is estimated U. P.'s Sixth Plan would open with a back log of 26.47 unemployed and under-employed persons as at the end of 1979-80. When calculated in terms of whole time employment opportunities, jobs/equivalent to 13.44 lakh person-years would have to be created in the State to cover the complete back log of unemployment and under-employment of this about 8.96 lakh person years would be needed for wholly unemployed persons, and 4.48 lakh person years would take care of 17.51 lakh inadequately employed persons. The rural urban break-up of the above unemployment figures is as follows :

	(In lakh person years)		
	Rural	Urban	Total
Wholly unemployed	6.68	2.28	8.96
Under employed ..	3.91	0.57	4.48
Total ..	10.59	2.85	13.44

17. In addition to the above, about 48 lakh persons would be added as new entrants to the labour force during the year 1980-85, who would also be needing whole-time jobs. Their rural urban break-up is as follows :

	(In lakh persons)		
	Rural	Urban	Total
Rural ..	..	..	38.93
Urban ..	..	..	9.07
Total ..	..	..	48.00

18. Thus, the demand for employment in the State during the Sixth Plan period is estimated to be of the order of 61.44 lakh jobs, 49.52 lakh in rural areas and 11.92 lakh in urban area.

19. *Inter-regional variations in the state*—There are substantial variations in levels of development in different regions of the State. The measure which is commonly used for assessing relative economic status is *per capita* income. However, figures of *per capita* income for individual regions are not available. Variations are,

therefore, observed with reference to certain indicators of productivity, infrastructure and social services comparative

data presented below shows an increase in inter-regional variations in the last decade :

*Co-efficient of variation*

Serial no.	Indicators	Co-efficient of Variation	
		1968-69	Latest Year
1	2	3	4
1	Value of agricultural produce per net hectare of area sown	.. 23	89 (1975-76)
2	Intensity of cropping	.. .. 7	12 (1977-78)
3	Net irrigated area to net area sown	.. .. 41	40 (1975-76)
4	<i>Per capita</i> net output from commodity producing sectors	.. .. 13	20 (1975-76)
5	<i>Per capita</i> gross industrial produce	.. .. 56	60 (1975-76)
6	<i>Per capita</i> consumption of electricity	.. .. 46	75 (1976-77)
7	Length of pucca roads per lakh of population	.. .. 30	75 (1978-79)
8	Number of junior basic school per lakh of population	.. .. 33	35 (1977-78)
9	Number of senior basic school per lakh of population	.. .. 33	34 (1977-78)
10	Number of beds in allopathic hospitals per lakh of population	.. .. 36	46 (1977-78)

20. It is obvious from the data\* that the Eastern region and Bundelkhand have slid back in respect of almost all indicators in comparison to the State averages. On the other hand, the Western region has

moved upwards.

21. *Past five year plans*—Some relevant facts about U. P.'s previous Five year plans, and past growth rates are given below :

Plan Period	Expenditure (in crore Rs.)	Percentage share of Central assistance	Per Capita Outlay (Rs.)		Rate of growth of U.P.'s economy	Rate of growth of the Country's economy
			U.P.	All comparable States		
1	2	3	4	5	6	7
I	.. .. 153.37	56.86	25	38	1.9	3.4
II	.. .. 233.34	51.68	32	51	1.8	4.0
III	.. .. 560.63	63.54	72	92	1.6	2.3
IV	.. .. 1165.39	54.51	132	142	2.3	3.3
V	.. .. 2924.46	44.02	287	328	4.9	4.9

22. It will be seen from the above data that—

(i) The percentage share of Central assistance in Plan outlays has declined over a period of time.

(ii) The *per capita* outlay of U. P. has consistently remained less than for comparable States.

(iii) U. P.'s growth rates during each Plan period have been lower than those of the country.

23. *Total Plan Size and Public Sector outlays during 1980-85*—Development is largely a function of investment, consequently, targets of growth need to be deter-

mined keeping in view, amongst other factors, the volume of investment which can be mobilized. Briefly speaking, the growth rate at which the State's economy should be planned to grow in short run will be determined on the basis of the following set of considerations :

(i) Relative national and State rates of growth of *per capita* incomes in the past.

(ii) Tolerable limits of the gap that ought to be allowed to persist between the national and State *per capita* incomes at the end of the Sixth plan.

(iii) Potentials available for exploitation, particularly in the productive sectors.

(iv) Need to create substantial employment opportunities with a view to providing purchasing power to a large mass of people living below the poverty line, and to reduce unemployment and under-employment.

(v) Requirements of future growth.

(vi) Desired long-term trend of diversification of the economy and diversion of surplus manpower from agriculture to non-agriculture.

(vii) The role which the State may play in realisation of national goals and objectives.

24. The implications of adopting different growth rates during the Sixth Plan period are given in a summarised\* form and need to be perused.

25. Based upon an assessment of potentials of growth in agriculture and in industry, and the rate of growth observed from 1974 to 1979, it would appear reasonable to adopt a target of 6 per cent per annum growth rates for the State for the period of the Sixth Plan, 1980-85.

26. The requirements of investment for achieving the target of 6 per cent rate of growth\* has been worked out on the basis of incremental output ratios as evidenced

in a study of U. P.'s economy conducted by the State Planning Institute. The estimate arrived at is that a total investment of Rs. 19,732 crores will be required during the Sixth Plan period 1980-85 in order to achieve 6 per cent growth. Based upon past trends of the share of public sector outlay in total investment, it is accordingly estimated that public sector outlay will have to be Rs. 9,661 crores.

27. The sectoral distribution of Plan outlays reflects the basic objectives of the Plan. While deciding upon the sectoral distribution of Plan outlay for the years 1980-85 projects which would help in maximizing production and raising State's income in the short run have been fully provided for. Similarly, programmes which generate maximum employment contribute to raising the standard of living of the poorest sections of society have in particular been given full support.

28. For purposes of comparison sectoral\*\* figures of Plan expenditure during 1974-79, outlay for 1978-83 and proposed outlay for 1980-85 have been given. Percentage increases in sectoral outlays of 1980-85 over 1974-79 expenditure and Plan outlays of 1978-83 have also been given.

29. The figures given below show details by major heads of development :

*Public Sector Outlay by Major Heads of Development*

Head of Development	(In lakh Rs.)							
	1974-79 expenditure (Rs. 2,924 crores)	1978-83 Outlay (Rs. 5,000 crores)	1980-85 proposed Outlay (Rs. 9,661 crores)	Increase in		Percentage increase in 1980-85 outlay over		
	1	2	3	1980-85 Outlay over 1974-79 Expenditure	1980-85 Outlay over 1978-83 Outlay	1974-79 Expenditure	1978-83 Outlay	
	1	2	3	4	5	6	7	8
1. Agriculture and Allied services.	40687	74116	142198	101511	68082	249.49	91.86	
2. Co-operation ..	3329	5510	7950	4621	2440	138.81	44.28	
3. Water and Power Development.	167951	283700	481200	313249	197500	186.51	69.62	
4. Industry and Minerals	18216	22601	59728	41512	37127	227.89	164.27	
5. Transport and Communications.	24702	41722	104811	80109	63089	324.30	151.21	
6. Social and Community Services.	36837	70680	166278	129441	95598	351.39	135.25	
6.1 Education ..	9949	15208	30185	20236	14977	203.40	98.48	
6.2 Medical & Public Health	3784	10352	30250	26466	19898	699.42	192.21	
6.3 Sewerage and Water Supply.	11248	22854	53362	42114	30508	374.41	133.49	
6.4 Other Social Services	11856	22266	52481	40625	30215	342.65	135.70	
7. Miscellaneous ..	724	1671	3935	3211	2264	443.51	135.49	
Total ..	292446	500000	966100	673654	466100	230.35	93.22	

\*Annexure V.

\*\*Annexure VI.

It will be seen from the above table that the total outlay for 1980-85 is higher by Rs.6737 crores and Rs.4661 crores as compared to 1974-79 Plan expenditure and 1978-83 draft Plan outlay indicating percentage increases of 230.35 and 93.22 respectively. The outlays of Social and community services show highest increase (351.39 per cent) over 1974-79 expenditure followed by Transport and Communication (324.30 per cent) and Agriculture and allied services (249.49 per

cent). However, as compared to 1978-83 Plan, highest increase (164.27 per cent) has been proposed in Industries and mining followed by Transport and communication 151.21 per cent) and Social and community services 135.25 per cent).

30. The percentage share of the outlays of different sectors have been given separately\* whereas the details below show these percentage shares for major heads of development :

*Percentage shares of outlays of Major Heads of Development*

Serial no.	Head of Development	1974-79	1978-83	1980-85	Percentage increase in 1980-85 Outlay over	
		expenditure (Rs. 2924 crores)	Outlay (Rs. 5000 crores)	Outlay (Rs. 9661 crores)	1974-79 Expenditure	1978-83 Outlay
1	2	3	4	5	6	7
1	Agriculture and Allied Services .. ..	13.91	14.82	14.73	249.49	91.86
2	Co-operation .. ..	1.14	1.10	0.82	138.81	44.2
3	Water and Power Development .. ..	57.43	56.74	49.81	186.51	69.62
4	Industry and Minerals .. ..	6.23	4.52	6.18	227.89	164.27
5	Transport and Communications .. ..	8.44	8.35	10.85	324.30	151.21
6	Social and Community Services .. ..	12.60	14.14	17.21	351.39	135.25
6.1	Education .. ..	3.40	3.04	3.12	203.40	98.48
6.2	Medical and Public Health .. ..	1.29	2.07	3.13	699.42	192.21
6.3	Sewerage and Water Supply .. ..	3.85	4.57	5.52	374.41	133.49
6.4	Other Social Services .. ..	4.06	4.46	5.44	342.65	135.70
7	Miscellaneous .. ..	0.25	0.33	0.40	443.51	135.49
Total ..		100.00	100.00	100.00	230.35	93.22

It will be seen from above table, that the percentage share of Social and Community Services, Transport and Communication and Industries and Mining are higher in 1980-85 Plan as compared to their corresponding percentage shares in 1974-79 expenditure and 1978-83 plan.

31. As mentioned earlier net increases in Plan outlay 1980-85 over Plan expenditure in 1974-79 and outlay during 1978-83 are 230 per cent and 93 per cent, respectively. The sectors where percentage increase in their outlays are more



than the above overall increase are shown in the table below :

*Sectors in which percentage increase of outlay are significant*

Serial no.	Sectors	Percentage increases	
		1980-85 outlay over 1974-79 expenditure	1980-85 outlay over 1978-83 outlay
1	2	3	4
1	Soil and Water Conservation.	284.25	..
2	Area Development	456.82	138.47
3	Animal Husbandry ..	267.82	..
4	Dairy and Milk Supply.	241.11	..
5	Fisheries ..	851.22	162.63
6	Forests .. ..	381.82	..
7	Community Development and Panchayati Raj.	1322.66	616.97
8	Flood Control	279.46	98.18
9	Large and Medium Industry.	244.56	269.49
10	Sugar Industry	..	340.00
11	Village and Small Industry.	330.45	..
12	Geology and Mining	281.82	..
13	Roads and Bridges	360.25	178.22
14	General Education ..	..	98.48

1	2	3	4
15	Scientific Services and Research.	488.24	140.38
16	Medical and Public Health.	699.42	192.21
17	Water Supply and Sanitation.	374.71	133.49
18	Housing ..	299.85	128.40
19	Urban Development	1521.14	267.86
20	Information and Publicity.	928.77	500.80
21	Labour and Labour Welfare.	254.93	100.40
22	Social Welfare	1395.33	152.37
23	Economic Services	490.54	151.50
24	General services (Printing and stationery).	340.53	98.41

32. The notable increase in the outlays of the above sectors should be seen in the background of the Sixth Plan objective of maximising growth and utilization of capacities created and provision of basic needs of the people.

33. The break-up of Sixth Plan outlay on 'Production as compared to infrastructure and services' is shown below :

Major Heads of Division	1974-79		1978-83		1980-85	
	In crore Rs.	Percentage	In crore Rs.	Percentage	In crore Rs.	Percentage
1. Production .. ..	2301.9	78.7	3859.3	77.2	6910.8	71.5
2. Infrastructure and services .. ..	611.8	20.9	1117.7	22.3	2693.3	27.9
3. Others .. ..	10.8	0.4	23.0	0.5	56.9	0.6
Total .. ..	2924.5	100.0	5000.00	100.0	9661.0	100.0

Seventy-two per cent of the outlay is proposed to be spent on 'Production' programmes during the Sixth Plan period. At the same time, increase in outlay on 'Infrastructure and services' as a proportion of total Plan outlay is indicative of the priority given to this sector in this Plan.

#### 34. Case for higher central assistance

and other resources outside the state plan—Uttar Pradesh has been persistently representing since work was initiated on the formulation of the Fourth five year Plan that the policies of the Central Government and the Planning Commission in relation to the allocation of central assistance, market borrowings and loans from central financing institutions has been

fair to backward States. Besides this, investments by central undertakings and the banking policies and priorities followed have also led to the slowing down of process of development of U. P. which, in 1951 had a *per capita* income above the corresponding national average, but now takes the second position from the bottom among the 14 comparable States.

35. At the start of Fourth Plan the Gadgil formula was adopted by the National Development Council, but during this Plan period itself it was admitted by the Planning Commission in its Midterm appraisal document that this formula was not fair to backward States like Bihar and Uttar Pradesh. Recently the Chief Minister of Uttar Pradesh stressed this point in his speech before the National Development Council of August 30 and 31, 1980. It is constantly being argued by U. P. before the Prime Minister, the Union Finance Minister, Planning Commission and at the national forum of the National Development Council that the main reason for its present backwardness has been that in different ways the State had been starved of investment resources. The N.D.C.'s meeting of February 24 and 25, 1979 took two major decisions. One was to reduce the allocation of funds for Centrally sponsored and similar Central schemes in the period 1978-83, from Rs.6,000 crores to Rs.4,000 crores, i.e. by Rs.2,000 crores, and to add this to the corpus of central assistance for 1979-83. The second decision was to distribute this amount of Rs.2,000 crores to all States on the basis of the inverse of *per capita income* multiplied by population (IATP formula).

36. It may be mentioned here that richer States tend to get a larger share of funds provided under Centrally sponsored schemes as compared to the poorer States. This contention about imbalance in accruals for Centrally sponsored and similar Central schemes is borne out by the fact that during the period 1974-78 Uttar Pradesh was able to get only 12.86 per cent of the funds provided for these, a proportion less than not only its share in population of 14 comparable States but also lower than what it would have got if the funds for these has been distributed under even the relatively unfair Gadgil Formula for

distribution of Central assistance than in vogue.

37. It has been stated by some States that decision taken by the N.D.C. regarding the manner of distribution of the additional assistance of Rs.2,000 crores has made up for the injustices done to Uttar Pradesh between 1951-79. Actually this is a wholly misleading position since the real benefit to U. P. on all accounts of above the decision has been very marginal. Unless a major part of Central assistance is distributed on progressive criteria and distribution of overall outlays is restricted to backward States, the rectification of overall outlays which is needed will not take place.

38. Since the taxable capacity of residents of this poor State is extremely limited, it would be difficult to raise public sector investments to the desired levels through additional resource mobilization within the State.

39. Ways in which public sector, investment in Uttar Pradesh can be raised are :

(i) through additional allocation of market borrowings ;

(ii) more liberal provision in the funds earmarked for externally-aided projects ;

(iii) funds for special problems especially for the Minimum Needs Programme and for hilly areas ; and

(iv) direct investments in the State by the Central Government on a substantial scale.

40. The State Government had been particularly concerned about the manner in which market borrowings have been distributed between the States. The Chief Minister in his speech before the N.D.C. on August 30 and 31, 1980 dwelt on this point in detail and pleaded for a change in the present formula of allocation of market borrowing limits to States. As regards internationally assisted projects the State Government is trying to alter the presently prevailing situation which is to its disadvantage. International aid agencies usually favour irrigation and hydel projects, which for U. P. are apparently not being accepted because of the question of waters in the Ganga basin being subject to international agreements.

41. The following conclusions emerge in relation to U. P.'s Plan :—

1. In spite of the decisions taken in the meeting of the National Development Council held on February 24-25, 1979, the difference in *per capita* outlay between U. P. and other backward States on the one hand and comparatively prosperous States on the other would be so much that the inter-State disparities in *per capita* income might continue to further increase.

2. After providing for inescapable outlays for power and irrigation projects, U. P. will be left with such a small amount that not much can be achieved towards abolition of poverty and unemployment, and of improving the standards of social services.

#### SELECTED PROGRAMMES

##### *Agriculture and Allied services*

42. *Agriculture production*—In the foreseeable future agriculture will continue to play a predominant role in the State's economy. About 50 per cent of the State Domestic Product originates from the agriculture sector, which employs about 78 per cent of the total work force.

43. Considerable progress has been made in the process of agricultural production. Yet, recent droughts and floods have proved that there is still considerable vulnerability to natural calamities, it has not been possible to reduce the dependence of agriculture on nature to a level where growth in agricultural production could be achieved with a high degree of stabi-

lity. For sustained growth of agriculture at a rate of 5.5 per cent per annum during the Sixth Plan, a broad strategy on the following lines has been envisaged :

(i) Promotion of ecological balance essential for sustained growth of agricultural production through.

(a) efficient soil and water management on scientific lines ;

(b) maintenance of soil fertility through judicious land use and cropping pattern ; and

(c) optimum utilization of water available, both in irrigated and rainfed areas.

(ii) Reduction of fallow land during Kharif and Zaid seasons. Coverage of such fallow areas by sowing suitable crops, depending on the type and quality of the land in different areas.

(iii) Increase in cropping intensity, especially in Bundelkhand and Eastern regions, by adopting programmes of dry farming, mixed farming and inter-cropping.

(iv) Conservation of farm produce through safe storage and appropriate post harvest technology.

(v) Increase in per hectare application of fertilizers.

(vi) Improved package of practices, to step up productivity of small and marginal farmers.

44. Targets of production for 1980-81, 1981-82 and 1984-85 and achievements of the base year level for 1979-80 are presented below :—

Item	1979-80 (Achievement)		Targets (Lakh tonnes)		
	Area (Lak hect.)	Production (lakh tonnes)	1980-81	1981-82	1984-85
1	2	3	4	5	6
<b>1. Foodgrains—</b>					
(a) Rice .. .. .	49.39	24.65	60.00	62.00	77.00
(b) Wheat .. .. .	74.36	96.69	106.00	114.00	130.00
(c) Total Pulses .. .. .	28.85	15.20	30.50	33.00	37.50
(d) Others .. .. .	43.86	24.78	35.50	33.00	35.40
Total .. .. .	196.46	161.32	232.00	242.00	279.90
<b>2. Oil seeds .. .. .</b>	8.00*	14.00	23.00	24.00	30.00

\*The area for 1979-80 is for pure oil seeds.

45. To ensure achievement of proposed target of production, special emphasis

would be laid on irrigation and the distribution of chemical fertilizers. The proposed targets for the same are as below :—

Item	Achievement			Targets		
	1977-78	1978-79	1979-80	1980-81	1981-82	1984-85
1. Net irrigated area ('000 ha.) ..	8493	8892	9000	8800	9300	9800
2. Distribution of Chemical Fertilizers ('000 Tonnes)—						
(i) Nitrogeous .. ..	648	772	756	1000	1100	1400
(ii) Phosphatic .. ..	139	207	182	250	266	350
(iii) Potassic .. ..	73	79	72	110	104	150
Total .. ..	860	1058	1010	1360	1470	1900

46. The outlay for 1980-81, proposed outlay for 1981-82 and for the Sixth Plan

Period (1980—85) and actual expenditure incurred during 1979-80 are noted below :—

(Lakh rupees)

Head	Expenditure 1979-80	Outlay		
		1980-81	1981-82	1980-85
1	2	3	4	5
Agriculture programme .. ..	369.74	440.00	515.00	5500.00

47. *Horticulture*—The geographical and climatic conditions prevailing in the different parts of the State are congenial for successful cultivation of various horticultural crops, fruits, vegetables, potato, ornamental and flowering plants, spices, pan etc. The Sixth Plan aims at achieving substantial increase in area and productivity in respect of horticultural crops all over the State, particularly in the Hills, in Bundelkhand and in the Eastern regions. Broad strategy for planned development of horticulture during the Sixth plan is as below :—

(i) Increase in existing area under horticultural crops.

(ii) Increase enhancing producti-

vity of the existing area under these crops.

(iii) Increase in cropping intensity and diversification of cropping pattern.

(iv) Increase in the use of inputs and their scientific and judicious application.

(v) Developing storage, processing and marketing facilities to ensure reasonable returns to the producer.

(vi) Special package of practices for tuber crops, mainly potato.

48. The physical targets for plains in respect of area coverage and production are as below :—

Group	1979-80 (Achievements)		1980-81 Target		1981-82 Target		1984-85 Target	
	Area (lakh hect.)	Production (lakh tonnes)	Area	Production	Area	Production	Area	Production
1	2	3	4	5	6	7	8	9
1. Fruits ..	4.50	27.80	4.72	29.80	4.94	30.00	5.60	34.80
2. Vegetables..	5.10	50.00	5.50	64.32	5.90	70.04	7.10	86.60
3. Potato ..	2.70	40.70	2.83	44.50	2.86	45.40	3.00	48.10

49. Horticulture programmes are specially suited for U. P. hill areas and as such special programmes are being taken up in

the hills. Targets of area, coverage and production are indicated below :—

Crops	1979-80 (Achievement)		1980-81 Target		1981-82 Target		1980—85 Target	
	Area	Production	Area	Production	Area	Production	Area	Production
1	2	3	4	5	6	7	8	9
1. Fruit ..	0.99	2.00	1.05	2.20	1.11	2.50	1.29	3.30
2. Vegetables..	0.21	0.85	0.22	0.95	0.23	1.00	0.26	1.30
3. Potato	0.27	2.30	0.28	2.50	0.29	2.50	0.32	3.10

N. B.—Area is in lakh hectares, production in lakh tonnes.

50. Outlays for the horticultural programmes in plains and hills, for 1980-81,

and proposals for 1981-82 and Sixth Plan (1980—85) are noted below :

(In lakh Rs.)

Head	1979-80 Expenditure	Outlays		
		1980-81	1981-82	1980—85
1	2	3	4	5
Plains .. .. .	74.47	87.25	100.00	1650.00
Hills .. .. .	132.74	160.75	200.00	2052.00
Total ..	207.21	248.00	300.00	3702.00

51. *Minor irrigation*—Minor irrigation works provide the most important input of assured irrigation for cultivation of high yielding varieties, for increasing the intensity of cropping and for general increase in productivity of different crops in areas served by them. The pace of minor irrigation work is proposed to be stepped up in the Sixth Plan 1980—85.

52. *State minor irrigation*—Irrigation potential of 23.80 lakh hectares was created through State minor irrigation works till the end of the Fifth Five Year Plan. An additional irrigation potential of 2.86 lakh hectares was created during the year 1978-79 and 1979-80. The target for creation of additional potential in 1980-81 is 1.70 lakh hectares. It is proposed that an additional irrigation potential of 8.15 lakh hectares will be created during the Sixth Plan Period 1980—85.

53. An outlay of Rs.264.74 crores is proposed for the Sixth Five year plan 1980—85, out of which Rs.45.00 crores is for the hills. The programme-wise break-up of outlays and physical targets is as follows :—

Serial no.	Programmes	Financial Outlay 1980—85 (in crore Rs.)	Additional irrigation potential ('000.00 ha.)
1	State tube-wells ..	231.24	790.00
2	Minor Lift Schemes ..	2.00	25.00
3	Other Minor Works ..	31.50	..
	Total ..	264.74	815.00

54. *Private minor irrigation*—Due to vagaries of the monsoon and non-availability of timely irrigation from other sources, private minor irrigation works play a very significant role in agricultural development. These schemes can be implemented quickly and provide cultivators with an assured means of irrigation which can be utilised at will. Tremendous expansion of private minor irrigation works has been proposed. Special steps have been taken to provide financial assistance to small and marginal farmers and to cultivators of 2 to 4 hectares of holdings in the form of subsidy and free borings. The organization will have to be strengthened in order to enable it to undertake planning at micro-level after detailed surveys and studies.

55. An additional irrigation potential of 21.02 lakh hectares was created during the year 1974—78 through private minor irrigation works. During the years 1978-79 and 1979-80, an irrigation potential of 14.01 lakh hectares has been created. The total irrigation potential of 64.87 lakh hectares was created through private minor irrigation works by the end of 1979-80. An additional irrigation potential of 29.15 lakh hectares is proposed to be created during the Sixth Plan 1980—85, mainly through the construction of private tube-wells and installation of pumping sets.

56. An outlay of Rs.74.00 crores is envisaged for the Sixth Plan period 1980—85,

out of which Rs.10.50 crores is for the hills. This outlay includes the expenditure on departmental boring organisation, ground-water prospecting and survey, and subsidies to the farmers.

57. *Soil and water conservation*—The primary objectives of soil and water conservation programmes in the State are (i) to protect agricultural lands, reduce soil erosion and water losses, (ii) reclaim denuded and degraded land through an integrated watershed development programme.

58. Keeping the above objectives in view the main strategy of the soil and water conservation programme for the Sixth Plan period would be as follows :—

- (i) Integrated watershed planning.
- (ii) Land resource survey.
- (iii) Preparation of the project plans.
- (iv) Agronomical programmes.
- (v) Forestry programmes.
- (vi) People's participation.
- (vii) Training and demonstrations.
- (viii) Maintenance of soil conservation works.
- (ix) Water development.
- (x) Revision of Soil Conservation Act, 1963.

59. The following targets have been proposed for the Sixth plan :—

Items	Unit	1979-80 Achieve- ment	Targets		
			1980-81	1981-82	1980—85
1. Treatment of problem areas in plains ..	'000 Hect.	44.7	49.2	52.8	228.0
2. Treatment of problem areas in hills ..	..	5.2	7.0	8.7	52.5
3. Protection of table land and stabilization of ravinous land.	..	2.8	2.8	2.8	14.3
4. Soil and Water conservation in the catchment of—					
(a) Matatila .. .. .	..	1.6	.9	2.0	9.9
(b) Ramganga .. .. .	..	..	0.2	0.7	3.0
5. Flood control works .. .. .	..	..	3.8	13.1	60.0
6. Intensive development of Usar and eroded land	..	0.1	0.1	0.1	0.5
7. Usar reclamation .. .. .	..	20.0	20.0	20.00	100.0

60. The outlays for 1980-81, 1981-82 and 1980-85 and expenditure for 1979-80 are listed below :—

(In lakh Rupees)

Head	Expenditure 1979-80	Outlays		
		1980-81	1981-82	1980-85
1. Soil and water conservation .. (Agriculture department)	769.47	735.00	825.00	5500.00

61. *Area development*—The main aim of initiating the Area Development Programme is to accelerate the process of socio-economic development in a particular area or on a particular group of targeted population. The broad programmes like C.A.D.A., D.P.A.P. fall under the first category whereas activities like S.F.D.A., I. R. D. local level planning belong to the second category. With the in-

creased emphasis on social justice and the objective of full employment much stress is being laid in area development programmes particularly productive programmes suited to the local needs and conditions.

62. Physical achievements and targets of important items in various Area development programmes are given below :—

Item	Unit	Achievement 1979-80	Target		
			1980-81	1981-82	1984-85
1	2	3	4	5	6
<b>I—Command area development :</b>					
(a) Soil survey	Lakh ha.	6.64	6.40	6.40	32.00
(b) Irrigation channels ..	'000 Kms.	16.34	26.57	27.50	140.00
(c) Lining of channels ..	..	1.01	2.96	4.60	29.00
(d) Drains .. ..	..	0.52	2.96	4.60	29.00
<b>II—Drought prone area programme</b>					
<b>(a) Irrigation potential</b>					
(i) State irrigation work ..	'000 ha.	13.78	20.00	25.00	100.00
(ii) Private minor irrigation ..	..	..	..	..	..
(b) Soil conservation .. ..	..	31.44	27.50	30.00	100.00
(c) Afforestation .. ..	..	1.87	2.50	3.00	20.00
(d) Pasture development .. ..	..	0.75	1.70	2.00	10.00
<b>III—Small farmers development agency :</b>					
(a) Beneficiaries assisted .. ..	Thousand numbers	2.24	8.00	8.82	80.00
<b>IV—Integrated rural development :</b>					
(a) No. of blocks .. ..	No.	476	549	885	885
(b) Beneficiaries identified .. ..	lakh no.	6.00	6.23	8.00	43.00
(c) Beneficiaries assisted .. ..	..	4.95	..	..	..

63. The outlay for 1980-81, 1981-82 and 1980-85 and expenditure incurred

during 1979-80 on Area development programmes are shown below :—

(In lakh Rs.)

Programmes	Expenditure— 1979-80	Outlay		
		1980-81	1981-82	1980—85
1	2	3	4	5
1. Command area development authority	.. 863.85	966.46	1710.00	13500.00
2. Drought prone area programme	.. 420.25	450.00	600.00	4000.00
3. Integrated rural development	.. 1068.81	543.00	1700.00	10000.00
4. Small and marginal farmers agency	.. 363.75	320.75	400.00	2400.00
5. Divisional development corporation	.. 3.37	50.00	100.00	750.00
6. Trysem	.. ..	1.00	100.00	500.00
7. Local level planning	.. 1118.00	1000.00	1000.00	5000.00
8. Hill area development programme	.. 100.00	80.00	100.00	1160.00
9. I.R.D. (P.R.A.D.)	.. 108.00	70.00	200.00	1350.00
Total	.. 4046.03	3481.21	5910.00	38660.00

64. *Animal husbandry*—The primary objective of the animal husbandry activities is to augment the production of animal-based products like milk, meat, eggs, and wool. With the added emphasis on social justice and on the need for occupational diversification of small and marginal farmers, animal husbandry programmes have an immense value. The thrust of the programmes would be on providing better

breeding facilities, ensuring adequate health cover and feed and fodder production. The main strategy in milk production would be to intensify the cattle breeding programme in operational areas of milk plants.

65. A substantial step in physical and financial target is proposed during the plan period :—

*Physical targets and achievements*

Item	Unit	Base year level achievement 1979-80	Target		
			1980-81	1981-82	1984-85
1. Animal based products					
(a) Milk	.. .. '000 tonnes	5494	5721	5963	6830
(b) Eggs	.. .. Million	295	302	314	357
(c) Wool	.. .. Lakh kg.	15.81	17.36	18.93	21.83
(d) Meat	.. .. „	886.34	910.15	934.03	1005.51
2. Veterinary hospitals	.. .. No.	1169	1179	1204	1244
3. Stockman centres	.. .. „	2257	2257	2312	2401
4. Deep frozen semen station	.. .. „	3	..	2	6
5. Intensive sheep development project	.. .. „	2	2	13	4
6. Intensive poultry development and marketing	—	9	9	12	13



66. In order to meet the expenditure need, the plan outlay has been worked out :

### Financial Outlay

(In lakh Rupees)

Head	Expenditure 1979-80	Outlay		
		1980-81	1981-82	1980-85
Animal husbandry	303.65	305.00	375.00	3200.00

67. *Dairying and milk supply*—Dairying is an effective means of socio-economic uplift for rural masses particularly the weaker sections of the society, by opening avenues of self-employment and supplementing the income of the weaker sections of the society on the one hand and of ensuring supply of hygienic milk and milk products at reasonable rates to the urban consumers, on the other hand.

68. The sectoral strategy for the Sixth plan would be :—

(i) Strengthening the primary  
*Physical Targets and Achievements*

milk co-operative societies.

(ii) Strengthening existing plants to enable them to process increased milk.

(iii) Sustained manpower development to enable the plants to improve operational efficiency.

(iv) Sound pricing policy to encourage the producers.

69. The following are Physical targets and achievements and financial outlays of Dairying and milk supply programme :—

Item	Unit	Base year level achieve- ment 1970-80	Targets		
			1980-81	1981-82	1984-85
Handling of milk per day	Lakh litters	2.14	2.30	2.50	3.00

### Financial Outlays

(In lakh Rupees)

Head	Expenditure 1979-80	Outlay		
		1980-81	1981-82	1980-85
Handling and milk supply	138.09	210.00	300.00	1900.00

70. *Fisheries*—Fisheries development has a direct impact on the weaker sections of the society. It generates income for socially backward and economically weaker sections of the society. Fisheries being labour intensive also generate employment with relatively low investment.

71. The main thrust during the Sixth Five Year Plan would be on :—

(i) Assessment of the natural resources.

(ii) Fish seed production.

(iii) Intensification of fisheries development work in departmental waters.

(iv) Fish culture in rural areas.

(v) Cold water fisheries.

(vi) Marketing of fish.

72. The following are the physical targets and achievements and financial

outlays of Fisheries programmes :—

Item	Unit	Base year level achievement 1979-80	Target		
			1980-81	1981-82	1984-85
1. Fish production .. .. .	'000 tonnes	30.00	33.00	38.00	50.00
2. Fish seed					
(i) Fry (Spawn) .. .. .	Million	108.00	225.00	300.00	520.00
(ii) Fingerlings .. .. .	„	47.60	61.50	75.00	130.00

*Financial outlays*

(In lakh Rs.)

Head	Expenditure 1979-80	Outlay		
		1980-81	1981-82	1980-85
Fisheries .. .. .	48.32	50.00	85.00	780.00

73. *Co-operation*—Co-operative banking institutions are providing support to agriculture production programmes by providing institutional credit by way of short, medium and large term loans. Co-operatives have also assumed responsibility for processing and marketing of agricultural produce. Co-operatives also serve as an effective base for building a strong public distribution system. Consumer goods are being distributed, in a limited scale, through co-operative agencies in rural and urban areas. Efforts are being made to provide adequate storage facilities in the rural areas for storing agricultural produce. In order to provide better return to the farmers, schemes for setting up cold storages have also been taken up in the co-operative sector. Co-operatives have been striving to help the weaker sections of the society by implementing various specific schemes for their benefit.

74. *Objectives and strategy*—Set out for the sector are :—

(i) Strengthening of primary societies and diversification of their activities.

(ii) To build up a strong and effective marketing structure by utilising primary co-operative societies.

(iii) To augment the existing storage and warehousing capacity in the co-operative sector.

(iv) To set up agro-based processing units.

(v) To strengthen the Apex co-operative institutions by providing financial and managerial inputs.

(vi) To strengthen the consumer co-operatives in rural and urban areas.

(vii) To design specific schemes for benefitting the weaker sections of the society.

(viii) To have an effective monitoring system.

75. Targets of various important programmes included in the Sixth Plan are

given below :—

Item	1979-80 base year level	Targets		
		1980-81	1981-82	1984-85
1. Cooperative loaning (crores Rs.)				
(i) Short term .. .. .	166.24	230.00	250.00	385.00
(ii) Medium term .. .. .	19.91	25.00	30.00	45.00
(iii) Long term .. .. .	56.86	60.00	65.00	85.00
2. Storage ( '000 tonnes) .. .. .				
{(i) State ware housing corporation .. .. .	774.00	80.00	80.00	1174.00
(ii) Co-operatives .. .. .	672.00	197.00	62.00	930.05
3. Retail sale of fertilizers (crores Rs.) .. .. .	106.85	181.00	210.00	375.00
4. Retail sale of consumer goods (crores Rs.) .. .. .				
(i) in rural areas .. .. .	25.28	58.06	90.00	520.00
(ii) in urban areas .. .. .	28.22	42.70	85.00	485.00
5. Processing units organised (No.) .. .. .	98	8	4	25
6. Cold storage organised (No.) .. .. .	75	10	10	130

Level of achievement.

76. *Financial outlays are as follows :—*

(In lakh Rs.)

Head	Expenditure 1979-80	Outlay		
		1980-81	1981-82	1980—85
Co-operation .. .. .	1069.49	900.00	1030.00	7800.00

#### IRRIGATION AND POWER

77. *Major and medium irrigation—*  
In formulating the 1980—85 Plan the following strategy and objectives have been kept in view :—

(i) Early creation of additional irrigation potential by completion of on-going projects as early as possible. An optimum mix of on-going projects and new projects has been incorporated to maintain balance between immediate attainment and laying foundations for future development.

(ii) Modernisation of existing irrigation systems in the State to ensure more efficient use of the available water resources.

(iii) To promote conjunctive use of water from surface and ground resources.

(iv) To take up schemes for removal of regional imbalances and for backward areas.

78. The pace of development of irrigation facilities was stepped up during Fifth Five Year Plan. During 1974—78, and an additional irrigation potential of 13.68

lakh hectares was created through major and medium irrigation schemes. An additional irrigation potential of 5.57 lakh hectares was also created during the years 1978-79 and 1979-80. A total irrigation potential of 60.29 lakh hectares was created by the end of 1979-80, which figure 34.65 per cent of the net area sown. It is proposed to create an additional irrigation potential of 15.99 lakh hectares during the plan period 1980-85, out of which 2.97 lakh hectares additional irrigation potential is planned to be created during the first year (1980-81) itself.

79. An outlay of Rs.1464.00 crores is proposed for the Sixth five year plan 1980-85. Category-wise break up of the financial outlays and physical targets envisaged is given below :—

Minor headwise break up of outlays and additional Irrigation potential.

Serial no.	Minor head of development	1980-85 Plan outlay (In lakh Rs.)	Additional potential during 1980-85 ('000 hect.)
1	Multi-purpose projects—		
	(a) Continuing ..	19795.00	..
	(b) New ..	3550.00	..
	Total ..	23345.00	..
2	Major irrigation projects—		
	(a) Continuing ..	57180.00	1238.73
	(b) New ..	9513.00	..
	Total ..	66693.00	1238.73
3	Medium irrigation projects—		
	(a) Continuing ..	2241.00	157.66
	(b) New ..	2548.00	2.44
	Total ..	4789.00	160.10
4	Modernisation schemes—		
	(a) Continuing ..	5487.00	149.07
	(b) New ..	8495.00	..
	Total ..	13982.00	149.07

5	Schemes for conjunctive use—		
	(a) Continuing ..	2525.00	50.80
	(b) New ..	400.00	..
	Total ..	2925.00	50.80
6	Water development Scheme.	3314.00	..
7	Crash scheme ..	1592.00	..
8	World bank projects ..	29760.00	..
	GRAND TOTAL	146400.00	1598.70

80. Flood control—The area damaged by flood in Uttar Pradesh is the highest in the country. Out of a total area of 294.71 lakh hectares in the State, an area of about 24.71 lakh hectares (8.38 per cent) is on an average affected by floods annually. During the year 1978, about one-fourth of the State viz. 74.17 lakh hectares was flooded and 23 per cent population of the State was affected. Keeping in view magnitude of the problem of flood control, a high priority has been accorded to this sector in the Sixth Plan, 1980-85.

81. During various plan periods, the State Irrigation Department executed a large number of flood control works cumulatively incurring an expenditure of Rs.120.07 crores up to the end of 1979-80. Out of this amount, as much as Rs.40.67 crores has been incurred during the years 1978-80.

82. In physical terms, the flood works executed by the end of 1979-80 are as below :—

Description of works executed	Unit	Achievement up to 1979-80
1. Length of marginal embankments.	kms.	1389
2. Raising of villages ..	Nos.	4500
3. Town protection works	„	58
4. Length of drainage	kms.	12433
5. Area benefited ..	Lakh hect.	11.56

83. An outlay of Rs.218 crores is proposed for the Sixth Five year plan, 1980-85, out of which Rs.7.50 crores will be utilized in the hill region. An area of 7.25 lakh hectares will be benefited by the above measures.

84. *Power*—Power is a major input in the process of economic development. The installed capacity has increased as follows :—

Period ending	(MW)	
	Additions during the Plan period	Cumulative at the end of Plan period**
Pre-Plan .. .. .	..	178.54
First Plan .. .. .	109.34	287.88
Second Plan .. .. .	82.29	370.17
Third Plan .. .. .	539.97	910.14
Three Annual Plans (1966-69)	399.90*	1310.04
Fourth Plan .. .. .	363.70	1673.74
Fifth Plan .. .. .	1518.00	3186.95
1979-80	200.00	3378.95

\*includes 125 MW from Renusagar.

\*\*After taking retirement into account.

85. *Per capita* consumption of power in U. P. continues to be only 88.56 KW as against the all-India figure of 131.34, i.e. 67.4 per cent of the National average. Per capita consumption of power in some of more developed States are as follows :—

	(MKW)	
Punjab .. .. .	..	307.61
Gujarat .. .. .	..	330.29
Maharashtra .. .. .	..	227.51
Haryana .. .. .	..	212.03
Tamil Nadu .. .. .	..	184.55

86. From the above figures of installed capacity it will be seen that during the Fifth plan period alone, U. P. added additional power generation capacity of 1558 MW. This capacity was greater than the

total additional capacity created during the period 1951-74 (First Plan to the end of the Fourth Plan). In spite of this performance, U. P. has continued to face acute power shortage. By 1980-81, against the unrestricted demand of 3000 MW, the peaking capacity is expected to be 2273, giving a shortage of 727 MW, i.e. about 23 per cent. Even after the projects included in the Sixth plan are achieved, at the end of 1984-85 shortfall in peaking capacity would increase to 1286 MW. In percentage terms, the shortage will increase from 23 per cent to around 27 per cent.

87. The power plan for the Sixth Plan has been formulated keeping in view the following objectives :—

(i) Creation of additional capacity for power generation by speeding up implementation of ongoing schemes and undertaking new schemes keeping in view the future demand. Efforts would be made to complete some of the new schemes during the Plan period.

(ii) Since the gestation period of hydel projects is very long, keeping in view the forecasts of power demand, survey and investigation of new hydel projects is being stepped up.

(iii) Strengthening of transmission and distribution system both for better power management and reduction of line losses.

(iv) Steps to improve plant load factor in thermal units.

(v) Slippages in execution of projects has been a major problem. Special attention will be paid to monitoring of schemes and greater stress will be laid on proper costs and materials management as well as man management with a view to improve both implementation of new projects and the performance of the existing units.

(vi) Even at the end of plan, U. P. would face power shortage. For this it is necessary to resort to a planned system of power rostering to optimise the use of power and to minimise economic loss to the State.

(vii) Power sector programmes have been dovetailed with other sectoral programmes with a view to provide necessary infra-structure and support for implementation of specific identifiable projects and schemes for the benefit of backward and weaker sections. Stress has been laid on rural electrification and electrification of Harijan bastis.

(viii) It would be necessary to obtain greater share for U. P. from Central sector electricity generation projects, and enter into agreements for joint projects with neighbouring States.

88. Different programmes proposed for implementation in the Sixth Plan period are :

(a) *Generation*—It is proposed to create additional generation capacity of 2435 MW. This would bring the total installed capacity to 5814 MW by 1984-85. The main schemes which would be completed are :—

*A—Hydel*

1. Yamuna Hydel, Stage II	120 MW
2. Maneri Bhali Stage I ..	90 MW
3. Garhwal, Rishikesh, Chilla	144 MW
4. Khara .. ..	81 MW
	435

*B—Thermal*

1. Obra Extension Stage II and III.	400 MW
2. Parichha ..	220 MW
3. Tanda ..	330 MW
4. Nanpara ..	630 MW
5. Unchahar ..	420 MW
	2000

(b) *Transmission and distribution*—Transmission and distribution is as important as generation because proper utilisation of generated power

is possible only if there exists a transmission system capable of transmitting power from the generation sectors to consumption sectors both efficiently and reliably. During the plan period, it is proposed to add 1122 Ckt. Kms of 400 KV lines, 3438 Ckt. Kms. of 220 KV lines and 3643 Ckt. Kms. of 132 KV lines. It is also proposed to strengthen the secondary transmission and distribution programmes which are necessary for better load management, proper consumption service and reduction of line losses. During the plan period, it is proposed to reduce line losses from 18.8 per cent to 18 per cent.

(c) *Rural electrification*—U.P. has over 1.12.000 villages. While major efforts for electrification were made in earlier plans, the position of U. P. *vis-a-vis* other States is unsatisfactory. While Haryana and Punjab have electrified 100 per cent of their villages and Tamil Nadu and Kerala more than 98 per cent, only 32.2 per cent villages were electrified in U. P. by March 1979. In this sphere, the only States whose performance is poorer than U. P., are West Bengal (32 per cent), Bihar (28.1) and M. P. (27.1 per cent). The all-India average for rural electrification is 40.5 per cent. In view of financial constraints, it is not possible to plan for 100 per cent electrification of villages by 1984-85. It is proposed to electrify at least 60 per cent of villages by the end of the plan. Special programme has been formulated for electrification of Harijan bastis and during the plan period it is proposed to electrify 21,226 Bastis. During the plan period, it is also proposed to electrify 2,81,000 pump sets.

(d) *Survey and investigation*—Keeping in view the power requirements by the end of this decade and early 90s, it is proposed to take up investigations and surveys on 17 hydro-electric schemes. Of these, 5 schemes are in Yamuna valley, 9 in the Ganga valley and 2 in the Sharda valley.

89. Even at the end of the Sixth plan, U. P. would face a peaking shortage of 1286 MW. To meet this shortage it would be necessary to devise schemes for power rostering with a view to derive the maximum benefit from the available power as also to minimise economic losses to the State. To meet the shortages, it is absolutely necessary that U. P. must get its due share from both hydel and thermal generating schemes being taken up in the Central sector. It has been taken that 700 MW generating capacity will be available to U. P. from the Singarauli Super Thermal power plant and the Narora atomic power plant. It is necessary that U. P.'s share from these projects as also from other hydel schemes being taken up in the entire northern region in the Central sector is increased, keeping in view the backwardness of the State and the objective of reducing regional imbalances. Additional efforts have to be made to persuade the Centre to take up additional central projects in U. P., the power from which will be allocated either totally or substantially to the State.

#### INDUSTRY AND MINERALS

90. *Large and medium industry*—Among the main reasons for the State's industrial backwardness have been inadequate investments in Central and State Projects, as well as lack of entrepreneurship. In spite of these handicaps, growth rates in the organized manufacturing sector have shown remarkable improvement since 1973. However, growth rates in the unorganized sector have gone up only marginally. The average annual rate of growth proposed for the manufacturing sector for the Sixth Plan is 10.9 per cent. In order to achieve this rate of growth, growth rates for large and medium industries and for village and small industries, respectively have been kept at 10 to 12 per cent and 15 per cent to 16 per cent respectively.

91. The approach during the Sixth plan would be to step up investment in the state as well as joint sector projects, and to give priority to such industries as have greater potential for employment. The State Government has a well-organized institutional framework for providing infra-structural facilities and financial and

other assistance for setting up industries. These facilities will be extended. Measures for better utilization to capacities will be taken, including provision of unrestricted power to new units, subsidising installation of generating sets, setting up of captive power plants in specified industrial areas and revival of such sick units as can become viable. Attention will also be paid to bringing the benefits of the Research and design to village and small scale industries.

92. Some of the important public sector plans are discussed in the following paragraphs :

(a) *U. P. textile corporation*—The corporation has set up 8 spinning mills in the past, having a capacity of 2 lakhs spindles, essentially in order to fulfil the demands of handloom weavers. However, there is still a considerable gap between demand and supply of yarn. Accordingly, the programme envisages installation of 2 lakhs additional spindlage by expansion of existing mills and 10 lakhs additional spindlage by setting of 20 new mills, 10 new mills will be in the State sector and 10 in the Co-operative sector, each of 50,000 spindles capacity. It is also proposed to set up rayon pulp/viscose fibre unit, and a polyester unit, with capacity of 100 tonnes/day and 75 tonnes/day respectively, to meet the increasing demand for rayon polyester fibre.

(b) *U. P. electronics corporation*—The corporation is engaged in promoting development of the electronic industry in the State. It has set up 7 joint sector projects and 4 public sector projects. The corporation also provided consultancy services to entrepreneurs for preparation of techno-economic feasibility reports, market surveys, etc. Apart from the completion of on-going programmes new projects in the State/Joint sector are proposed to be undertaken. The corporation also proposes to set up Electronics testing and development and R and D facilities, and to strengthen the marketing organization.

(c) *U. P. cement corporation*—There is acute shortage of cement in the country and the Government of India has given a number of licences for setting up of

cement factories. During the Sixth plan it is proposed to set up 3 large projects and 9 mini-projects in the State.

(d) *U. P. state industrial development corporation*—The functions of the corporation are to develop industrial plots and provide infra-structural facilities to industries. Another main function of the corporation is to participate financially in industrial units proposed to be set up in the State. The corporation has 31 projects in hand of which 5 have been commissioned and 5 more are expected to commence production by the end of 1980-81, Rs.10 crores is proposed to be provided by way of additional share capital for joint sector projects, development of industrial areas, subsidies, etc.

(e) *NOIDA*—In addition to its industrial area development, the authority is engaged in setting up a housing-cum-commercial complex on Delhi-U. P. border, 4,000 units are proposed to be set up here. More than 4,00 units have already started production in the industrial area, and 600 sheds are under construction.

(f) *U. P. State small industries corporation*—During the Sixth plan, the corporation will expand its existing activities and take up some new activities. The total allocation of funds during the Sixth plan period will be Rs.500 lakhs.

93. *Sugar industry*—Sugar industry of the State consists of three sectors, namely corporate/co-operative and private. Presently, there are 89 sugar mills in the State of which 16 are managed by U. P. co-operative sugar factories federation, and 19 are under control of the State sugar corporation. Total sugar production in the last good year 1978-79 was of the order of 12.63 lakh tonnes as against the country's production of 58.58 lakh

tonnes. The industry in U. P. is in a bad shape. A large number of sugar mills are sick and need modernization and expansion.

94. To meet shortages of sugar, the co-operative federation will undertake modernization and expansion of its 10 sugar mills. The State sugar corporation has drawn up a programme to expand, modernise and rehabilitate 12 acquired sugar factories, Pipraich sugar factory and 3 subsidiary companies. It is also proposed to set up 10 new mills in the Co-operative sector of which two sugar mills proposed at Sultanpur and Mahmoodabad have been provided equity in the year 1980-81.

95. *Village and small scale industry*—Efforts will be made to provide various types of assistance and encouragement for village and small scale industries. One of the biggest problems of these industries is that of marketing. It is proposed to take concrete steps during this plan to solve this problem. Handloom and handicrafts are two main industries, which are providing maximum employment at present. A number of schemes have been prepared for increasing production in these sectors as also for improving their quality. Proposed outlays for the Sixth Plan 1980-85 are given in the following table :

	Amount (In crore Rs)	
(i) Industrial estates .. ..	10.00	
(ii) Small scale industry .. ..	45.00	
(iii) Handicrafts.. ..	30.00	
(iv) Khadi and village industry .. ..	12.00	
(v) Handlooms .. ..	46.00	
(vi) Sericulture .. ..	17.00	
Total .. ..	160.00	

96. Total outlay for "Industries and minerals" is given below :—

Head	(In crores rupees)		
	1974-79 Expenditure	1978-83 Outlay	1980-85 Outlay
1. Large and medium industry .. ..	101.66	94.80	350.28
2. Sugar industry .. ..	37.83	15.00	66.00
3. Village and small scale industry .. ..	37.17	98.03	160.00
4. Mining .. ..	5.50	18.18	21.00
Total .. ..	182.16	226.01	597.28



## TRANSPORT AND COMMUNICATION

97. *Roads and bridges*—For road development, a 20-year Nagpur Plan was prepared in 1943. According to this plan, U. P. requires to have 25,715 km. of motor roads with a road density of 26 miles per 100 square miles of area (or 16 kms. roads per 100 sq. kms. area) in a span of 20 years. Thereafter, the Bombay plan (1961–81) was formulated to provide for the following objectives :

(1) In developed agricultural areas, maximum distance of a village was to be 6.4 kms. from a metalled road and 2.4 kms. from any kind of roads.

(2) In semi-developed areas these distances were to be 12.8 and 4.8 kms. respectively.

(3) For undeveloped areas relevant provisions were to be 13.2 and 8 kms. respectively.

98. According to the norms fixed by the Bombay plan the total length of roads should be 94,200 kms. by 1981. Against this, the existing road length is 58,406 kms. as on April 1, 1980. With the completion of sanctioned projects worth Rs. 239 crores, this would increase to 63,540 kms., leaving a balance of about 31,000 kms.

99. National guidelines under the revised minimum needs programme pro-

vide that all villages having a population of 1,500 and above, and 50 per cent of villages having population between 1,000 and 1,500 should be connected with truck roads. For this purpose, the 1978–83 Plan provided an outlay of Rs. 800 crores. Besides this, some other essential works such as construction of missing links and bye-passes, reconstruction and improvement of roads, etc. are required to be completed during the Sixth Plan. The total requirement of these works was estimated by the State working group as Rs. 1,209 crores. Against this requirement, an outlay of Rs. 948.76 crores has been provided in the Sixth Plan, 1980–85.

100. The balance of incomplete sanctioned works which has spilled over to the 1980–85 Plan is of the order of Rs. 239.20 crores. (Rs. 170.43 crores for plains and Rs. 68.77 crores for hills). During this Plan emphasis has been placed on completion of the entire spill-over works on priority basis.

101. There are still 5,234 villages in U. P. having population of 1,500 and above which are yet to be connected with metalled roads. For this, construction of 13,210 kms. of roads is required, involving an investment of Rs. 224.57 crores.

102. With an outlay of Rs. 948.76 crores for the Sixth Plan, 1980–85, the following physical targets have been fixed :

Serial no.	Item	Unit	Targets as proposed in 1980-85 Draft Plan		
			MNP	Others	Total
1	2	3	4	5	6
1	Spill-over works .. .. .	km.	6,376	263	6,639
2	Rural roads .. .. .	"	9850	..	9,850
3	Missing links .. .. .	"	750	..	750
4	Missing bridges .. .. .	No.	222	..	222
5	Weak and narrow bridges .. .. .	"	..	89	89
6	Roads in backward areas .. .. .	km.	2,235	..	2,235
7	Roads in high density scheduled castes areas .. .. .	"	689	..	689
8	Bye-passes .. .. .	"	..	330	330
9	Roads of other departments .. .. .	"	..	1,217	1,217
10	Modernization, strengthening and widening .. .. .	"	14,600	7,400	22,000

103. *Tourism*—Uttar Pradesh with its rich cultural and religious background, historical monuments and relics, pre-eminent pilgrimage centres, and the Himalayas has tremendous potential for promotion of tourism. The State tourism development corporation is undertaking commercial activities in the plains areas, while Kumaon and Garhwal mandal vikas nigams are active in the hill areas.

104. Up to March, 1978, at an expenditure of Rs. 657.50 lakhs about 1,893 beds (479 in plains and 1,414 in hills) were made available at various tourist places in the State. During 1978-79 and 1979-80,

at a cost of Rs. 426.32 lakhs, 210 additional beds have been made available, thus raising the bed strength to 2,103 by the end of March, 1980.

105. For the Sixth five year plan 1980-85, an outlay of Rs. 2,000 lakhs has been proposed. Priority will be given to complete continuing works worth Rs. 326 lakhs. For the annual Plan 1980-81, an outlay of Rs. 225 lakhs including Rs. 90 lakhs for hills was approved, and for 1981-82 a Plan of Rs. 300 lakhs has been proposed, out of which Rs. 105 lakhs is allocated for hills. The break up of outlay is given below :—

(In lakhs Rs.)

Serial no.	Item	1980-81		Proposed Outly for 1980-85	Proposed Outlay for 1981-82
		Outlay	Anticipated Expenditure		
1	Direction and administration .. ..	6.77	6.77	50.00	8.86
2	Tourist accommodation .. ..	181.84	181.58	1615.62	236.10
3	Survey and statistics .. ..	..	..	11.37	1.62
4	Tourist information and publicity .. ..	19.87	19.87	152.63	24.00
5	Tourist centres .. ..	12.71	12.71	91.51	16.57
6	Others .. ..	3.81	14.07	78.87	12.85
	Total .. ..	225.00	235.00	2000.00	300.00

#### SOCIAL SERVICE AND WELFARE

106. *General education*—Educational planning has been adequately emphasised in the various Five-year plans of the country and rapid expansion of educational facilities in the unserved areas has been taking place. The Constitution of India incorporates specific provisions for free and compulsory education to children in age-group of 6-14 years. Side by side, expansion of secondary and higher education has also received due attention.

107. Considering the importance of education in total development, the broad strategy proposed in the Sixth five year plan 1980-85 for expansion and qualitative improvement of educational facilities is as follows :

(i) To impart free and compulsory education to children up to the age of 14 years ;

(ii) Vocationalisation of secondary education ;

(iii) Consolidation and qualitative improvement of higher education ;

(iv) Expansion of non-formal education for age-group 11-14 years, and adult education for age-group 15-35 years ; and

(v) To take steps for removal of regional imbalances and for bringing up backward areas.

108. The major problems in primary education are of stagnation and wastage. To overcome these problems remedial

measures in the form of incentives for attending school, and non-formal education for those who drop out from schools are proposed. 32,000 non-formal educational centres are proposed to be established during the Sixth plan.

109. For moving further towards universalization of education, in the year 1978-79, 2,047 primary and 1,038 middle schools in the rural areas and 123 primary schools in the urban areas were opened. Similarly, in the year 1979-80, 600 primary and 220 middle schools in the rural areas and 39 primary schools in the urban areas were opened. During the Sixth plan 1980-85, 11,333 primary and 800 middle schools in unserved areas will be opened to cater to the growing need of universalization of education. Steps will also be taken for environmental improvement in existing schools and providing basic amenities in these schools.

110. Under the adult education programme, 1.14 crores of illiterates in the age-group 15-35 years will be covered during the Sixth Plan, by opening 3,18,000 adult education centres. Efforts will also be made to create general awareness among the people to attend adult education classes, and for their sustained involvement in learning.

111. During the Sixth plan 1980-85, an outlay of Rs.301.85 crores has been proposed for general education. Out of this ceiling, Rs.167.72 crores has been earmarked for minimum needs programme. The sub-sectorwise break-up of outlay is as under :

	(In crores Rs.)
1. Elementary education ..	159.01
2. Secondary education ..	74.05
3. Teachers education ..	11.11
4. University education ..	29.03
5. Adult education ..	8.71
6. Games and sports and others ..	19.94
<b>Total ..</b>	<b>301.85</b>

112. *Technical education*—In the Sixth five year plan 1980-85, the main emphasis will be on consolidation and strengthening of schemes already in operation. Programmes for intensive work-cum-training and product development, inculcation of

entrepreneurial skills, short-term courses for extending benefits of technological advancement to the countryside by upgrading traditional crafts and skills, will be continued. Diversification of courses to take care of needs of employers will also be provided.

113. The intake capacity in technical education courses at various levels envisaged is given below :

Courses	In-take level	Proposed level
	1979-80	1980-85
1	2	3
1. Degree courses ..	1120	1505
2. Diploma courses ..	8070	8740
3. Certificate courses ..	860	1100

114. An outlay of Rs.16.00 crores is proposed for the Sixth Five year plan (1980-85), out of which Rs.3.00 crores is for the hills.

#### MEDICAL AND PUBLIC HEALTH.

115. The broad strategy in the Sixth Plan would be to organise health and medical care services in a manner so as to secure prevention of diseases and provide for reasonable range and scale of curative services in all parts of the State. In the matter of medical care services, there are considerable intra-regional and rural-urban disparities which will be corrected in a phased manner as per Alma Ata declaration for providing health for all by 2000 A.D. This emphasis in the Sixth plan would be laid on strengthening health services in the rural areas where facilities are still inadequate by upgrading PHCs, opening of MCH centres for every 5,000 population and one CHVs per 1,000 population ; initiating appropriate steps in environmental sanitation, promotion of family welfare plan programme and making it more educational base ; mitigating regional imbalances in the coverage and location of health services, consolidating existing infra-structure to make it yield better results, expansion and strengthening of ISM and homoeopathy, strengthening of planning and monitoring cell and consolidating existing facilities of medical education and to argument according to needs of time.

116. With the above objectives in view, formulation of Sixth plan 1980-85 proposes to develop a perspective plan so that with the availability of resources in terms of money, men and material, a truly realistic medical health planning may be done considering the needs of the community.

117. During the Sixth plan priority would be given to complete spill-over works and clearance of backlog of construction of PHCs, upgrading of PHCs, establishment of more additional sub-centres over 5,000 population in plains and 3,000 population in Bundelkhand and hill regions, construction of building of existing sub-centres, establishment of more additional PHCs over 50,000 population in plain and 30,000 population in Bundelkhand and 30,000 population in hills; covering remaining PHCs under community health volunteer scheme. Consolidation of facilities of communicable diseases, strengthening of T. B. Control programme and introduction of more T. B. isolation beds, establishment of more leprosy control centres and wards and upgradation of urban leprosy centres, also to expand facilities for prevention of blindness, strengthening of hospitals and dispensaries by providing more beds, intensive coronary care units, ENT sections, plastic surgery, burn units and upgradation of 50 tehsil headquarter hospitals. Provincialisation of 50 hospital/dispensaries and establishment of more male and female dispensaries in the rural areas; consolidation of medical education and establishment of Post-graduate institute of Medical research at Lucknow and expansion and strengthening of Ayurvedic/Unani dispensaries in rural areas and greater attention of family planning to achieve the national norm of reducing the birth rate to 25 per thousand by the end of Sixth plan. An outlay of Rs.302.50 crores is proposed for the Sixth plan for the medical health sector, schemes.

118. *Sewerage and water supply*—This programme is run through two agencies: (1) Jal Nigam, (2) Rural development department.

119. *Programmes of Jal Nigam*—Provision of adequate of safe drinking water, suitable sewerage and solid waste

disposal system are of basic importance. During previous Five year plans not much progress could be made in this sector in this State due to financial constraints. As part of the minimum needs programme, the State is called upon to give priority to extension of drinking water facility of the 644 urban local bodies (including five KAVAL towns), only 409 towns have so far been covered with water supply, and only 42 towns, with sewerage schemes. Thus, at the start of Sixth plan, water supply was yet to be provided in 235 towns, and sewerage facility in 602 towns.

120. In rural areas, safe drinking water is being made available through piped water supply. Priority is being given to cover 35,506 scarcity villages which have no source of drinking water within a radius of 1.6 km. or where water available is unsafe for human consumption. Out of such 35,506 scarcity villages about 7,001 villages were covered with piped water supply up to March 31, 1980, leaving a balance of 28,505 villages. Coverage of all the scarcity villages with piped water supply is a costly proposition and will take over 25 years. Some cheaper methods have to be explored, including hand pumps, digging of wide-diameter wells and diggias, augmentation of water-level in the existing wells, etc.

121. An I. D. A. assisted project was taken up in September, 1975, to extend water supply and sewerage services in five KAVAL towns, and for piped water supply to scarcity villages particularly in Bundelkhand, Kumaon and Garhwal. The project was initiated with an outlay of Rs. 60 crores, but actual cost has since gone up to Rs. 84 crores which is under negotiation. The project is being financed by I. D. A., L. I. C and State Government in the ratio of 32 : 20 : 32. Prospects of further assistance have to be explored. The total releases, including the L. I. C. share, up to March 31, 1980, were Rs.55.51 crores. With a view to completing the project by the scheduled date of June, 1982, balance outlay of Rs.28.49 was to be made available to Jal Nigam against which Rs.15 crores have been provided in 1980-81 and Rs.13.49 crores are proposed for 1981-82.

122. Under the normal programme, the Nigam has taken up work in towns and villages not covered under I. D. A. project.

An over-all view of the financial outlays and expenditure and physical targets and achievements is given below :

*Financial Progress of water supply and Sewerage schemes*

(In lakh Rs.)

Serial no.	Programme	1979-80		Outlay for		
		Outlay	Expenditure	1980-85	1980-81	1981-82
1	2	3	4	5	6	7
1	<i>I. D. A. Programme :</i>					
	(i) Urban water supply (5 KAVAL Towns)	139.50	262.40	1450.00	950.00	500.00
	(ii) Sewerage (Agra, Kanpur, Allahabad)	50.00	94.05	350.00	50.00	300.00
	(iii) Rural water supply((Hills and Bundelkhand)	784.50	656.30	1010.00	500.00	510.00
2	<i>Normal Programme :</i>					
	(i) Urban water supply (other towns)	417.00	350.46	7550.00	625.50	2200.00
	(ii) Sewerage (Other towns)	198.00	121.46	9000.00	337.00	1200.00
	(iii) Rural water supply	2272.00	2996.66	29490.00	2620.00	2740.00
3	Tools and plant	300.00	..	162.00	..	50.00
4	Water pollution and control board	6.00	..	650.00	6.00	..
5	Conversion of dry latrines	50.00	50.00	1700.00	50.00	150.00
6	Advance plan assistance	..	..	..	900.00	..
	<b>Total</b>	<b>4217.00</b>	<b>4531.33</b>	<b>51362.00</b>	<b>6038.50</b>	<b>7650.00</b>

*Physical progress of water supply and sewerage schemes :*

Serial no.	Item	Unit	Position as on 1-4-80	Proposed Target for		
				Sixth plan 1980-85	Annual Plan	
				1980-81	1981-82	
1	<i>Urban water supply :</i>					
	(i) Augmentation of water supply (5 KAVAL towns)	MLD	1,142	358	133	103
	(ii) <i>Other town water supply—</i>					
	(a) Original schemes	No.	404	235	25	50
	(b) Augmentation schemes	No.	12	57	8	13
2	<i>Urban sewerage :</i>					
	(i) 5 KAVAL towns	MLD	856	269	100	44
	(ii) <i>Other towns—</i>					
	(a) Original schemes	No.	37	25	3	5
	(b) Augmentation schemes	No.	2	13	1	3
3	Conversion of dry latrines	No.	38,800	2,26,700	9,000	30,000
4	<i>Rural water supply</i>					
	(i) <i>Scarcity villages —</i>					
	(a) Under R. M. N. P.	No.	6,251	14,395	950	1,630
	(b) Under accelerated water supply programme.	No.	750	1,850	300	1,850
	<b>Total</b>	No.	<b>7,001</b>	<b>16,245</b>	<b>1,250</b>	<b>3,480</b>
	(ii) Other villages	No.	3,055	7,755	400	870

123. *Rural development department scheme of water supply*—Construction of wells in plains and diggiss in hills for Harijan bastis has been undertaken since 1971-72. During 1971-74, this scheme was with the Harijan and social welfare department, and since 1974-75 it is with Gram vikas vibhag. Under these schemes, up to March, 1977, with an expenditure of Rs. 400.30 lakhs, 12,933 wells and 1,067 diggiss and 956 hand-pumps had been constructed. A survey undertaken in 1977 revealed that a total of 29,061 wells and

2,802 diggiss will be required in plains and hills respectively. During the years 1977-80, about 22,038 wells, 341 diggiss and 2,652 hand-pumps have been constructed, leaving a balance of 4,371 and 2,461 basties respectively to be covered in the plains and the hills.

124. For the Sixth plan 1980-85, an outlay of Rs. 20.00 crores (including Rs. 3.00 crores for hills) has been proposed, as follows :

*Outlay and Physical target*

Serial no.	Year			Outlay (in lakhs Rs.)	Target (No.)		
					Wells	Diggiss	Handpumps
1	2			3	4	5	6
1	1980-85 Draft Plan	..	..	2000.00	19,598	1,250	10,000
2	1980-81 (Annual Plan)	..	..	200.00	1,669	208	2,000
3	1981-82 (Annual Plan)	..	..	350.00	3,331	250	2,000

125. *Housing and urban development*—The programmes can be considered separately for urban housing, rural housing and urban development.

126. *Urban housing*—Housing shortages have become severe in recent years. Progress in Social housing schemes slowed down due to paucity of funds. However, till the end of 1979-80, 68,169 houses (includes 2,830 houses under Village housing project during the Second and Third plans) were constructed under the State plan allocations. The State working group on housing and urban development has estimated a shortage of 9.80 lakhs dwelling units in the urban areas in the year 1980, which is likely to increase to 14.84 lakhs by the end of Sixth plan. It is also estimated that a total investment of Rs. 2,230 crores would be required to wipe out this shortage. It is not possible to expect this order of investment on any pattern of mobilisation of resources of the public and private sectors.

127. The Sixth five year plan 1980-85 visualises a reorientation of Social housing—

schemes in such a way as to give priority to flow of benefits to poorer sections of the urban population. For provision of housing to economically weaker sections, the strategy is to provide Sites and Services, and Core housing programmes, which will enable the beneficiaries to own a shelter within affordable limits, and also leave scope later to gradually improve the quality of accommodation through own efforts. Private industrialists would also be encouraged to provide housing for their workers. A policy of large scale acquisition of surplus and urbanisable land in towns and cities would be adopted to implement housing schemes at reasonable costs through the Housing board, Local bodies and Development authorities.

128. For the Sixth five year plan, an outlay of Rs. 68.84 crores has been provided as per given on page 31.

129. In addition it is proposed that 2,14,750 houses would be constructed through institutional finances, mostly from HUDCO and GIC during this five year period.

*Financial and physical progress of urban housing*

Schemes	Financial progress (in lakhs)			Physical progress (number)						
	1974-79 Expen- diture	1979-80 outlay	Expen- diture	Outlay for			Achieve- ment upto 1979-80	Target proposed for		
				1980-85	1980-81	1981-82		1980-85	1980-81	1981-82
1	2	3	4	5	6	7	8	9	10	11
1 Subsidised in- dustrial housing	182.20	25.00	15.95	750.00	81.00	110.00	38,781	10,250	500	1,000
2 Low income group housing	158.17	52.00	75.00	1080.00	157.00	200.00	14,382	6,000	220	800
3 Middle income group housing	252.76	41.30	106.00	660.00	118.00	120.00	3,334	2,000	100	360
4 Slum clearance	36.37	3.00	1.80	50.00	5.00	5.00	8,738	1,000	80	80
5 Land [acqui- sition and deve- lopment.	575.00	140.00	617.45	3094.00	560.00	665.00	2,760 (ha.)	3,600 (ha.)	145 (ha.)	500 (ha.)
6 Seed capital	453.67	70.00	70.00	1250.00	80.00	100.00	..	..	..	..
Total ..	1648.17	331.30	886.20	6884.00	1001.00	1200.00	65,235 2,760 (ha.)	19,250 3,600 (ha.)	900 145 (ha.)	2,240 500 (ha.)

130. *Rural housing*—To meet requirements of the rural poor, a programme of allotment of house sites to scheduled castes, scheduled tribes, landless agricultural labourers and other backward classes was started in 1972 with 100 per cent central assistance. Approximately 12.40 lakhs house-sites have been made available to the targeted families. More allotment of house-sites does not serve much purpose unless these sites are developed and minimum facilities are provided to assist the actual construction of houses.

131. The State Government entrusted this work to Harijan and Nirbal Varg Avas Nigam in 1976. Up to the end of June, 1980, subsidy of Rs. 116.25 lakhs was paid by the Nigam and a total number of 1,082 houses was completed, and another 2,000 houses were under construction.

132. Since 1979-80, Rural development department has also started a comprehensive housing scheme for the rural areas. Against a budget provision of Rs. 588 lakhs in 1979-80 for 48 plains districts, Rs. 95 lakhs were spent and about 1,793 houses

could be constructed. For the year 1980-81, an outlay of Rs. 269 lakhs (Rs. 10 lakhs for hills) has been provided. In addition to this, a sum of Rs. 50 lakhs has been allocated under the Special component plan. A target of constructing 14,253 houses has been proposed for 1980-81.

133. An outlay of Rs. 2,800 lakhs has been proposed for the Sixth plan which includes Rs. 2,500 lakhs for Rural development department and Rs. 300 lakhs for site improvement, etc. by Revenue department. For 1981-82, an outlay of Rs. 325 lakhs has been proposed, which includes Rs. 300 lakhs for Rural development department and Rs. 25 lakhs for Revenue department.

134. To co-ordinate and guide various agencies involved in the rural housing programme effectively, a Rural housing board has been decided to be constituted under Rural development department.

135. *Urban development*—The share of urban population in the total population of the State went up from 12.85 per

cent in 1961 to 14.02 per cent in 1971 and the percentage may go up in census data for 1981. The conditions of living in U. P.'s cities have deteriorated on account of increase in slums and squatter areas, increasing backlog in services, lack of community facilities, staggering housing shortages, etc. It is noteworthy that a major share of the increase in urban population has gone to cities having population of 1 lakh and above, particularly KAVAL towns.

136. The Sixth five year plan 1980-85 visualises continued action for preparation of master plans and regional plans for planned development of urban areas. The development of small and medium towns will be encouraged in order to make them more attractive and viable alternative places of employment and stay

as compared to large cities. Emphasis will be given on improvement of conditions of slum dwellers in towns having population of 1 lakh and above as per 1971 census. Financial assistance would be provided to local bodies for Urban development projects envisaging development of commercial complexes, office complexes, auditoriums, theatres and community centres, parks and play grounds, etc. Steps are under way to finalise Kanpur urban development project-I with World Bank assistance.

137. For the implementation of various schemes, an outlay of Rs. 10,197 lakhs has been proposed for the Sixth five year plan. Scheme-wise financial and physical progress is shown below:

*Financial/physical targets in urban development*

Name of the Schemes	Financial (In lakh Rs.)					Physical (in numbers)				
	Expenditure 1974-79	1979-80		1980-85	Outlay for		Achievement up to 1979-80	Target for		
		Outlay	Expenditure		1980-81	1981-82		1980-85	1980-81	1981-82
1	2	3	4	5	6	7	8	9	10	11
1 Urban development scheme (financial assistance to local bodies).	15.00	12.00	11.00	482.00	7.00	30.00	594 Shops	2500 Shops	56	50
2 Town and regional planning.	108.71	11.00	4.39	105.00	9.00	24.00	20 MP 6 RP	40 MP 11 RP	2 MP	12 MP
3 Environmental improvement status.	240.00	126.00	126.00	3650.00	200.00	220.00	6,77,600	18,25,000	1,35,000	100000
4 Integrated development of small and medium town.	..	175.00	20.55	1480.00	123.00	178.00	3 towns	27 towns	7 towns	..
5 Kanpur development project (phase I and II)	..	..	..	4430.00	..	1200.00	..	..	..	..
6 Research and development.	..	2.00	..	50.00	..	13.00	..	..	..	..
7 Others	..	266.85	1.00	..	..	..	..	..	..	..
<b>Total</b>	..	<b>630.56</b>	<b>327.00</b>	<b>161.94</b>	<b>10197.00</b>	<b>339.00</b>	<b>1655.00</b>	..	..	..



138. *Special component plan for scheduled castes*—Uttar Pradesh has the highest number of members of the Scheduled castes among all the States. According to the census, 1971, Scheduled caste population of U. P. was 1,85,48,916, i. e., about 21 per cent of the State's population and for about 25 per cent of the total Scheduled castes population in the country. Out of 876 development blocks in the State and as many as 452 blocks have 20 per cent to 40 per cent population belonging to the Scheduled castes and 138 blocks have a higher percentage.

139. There are 66 scheduled castes in this State, 70 denotified tribes, 5 scheduled tribes, and 58 other backward classes. It may be roughly estimated that 50 per cent to 60 per cent of these social groups are living below the poverty line.

140. The State Government have been paying special attention to the welfare and uplift of scheduled castes since independence, but till late most of the outlay was spent on educational programmes. It has been realised that intensive programmes of economic development, through family oriented area wise approach are equally necessary so that over all improvement in socio-economic condition may be brought about.

141. The concept of social component plan has been recently introduced with Central Government assistance. All development departments of the State have to identify and quantify separately their financial, technological and manpower commitments towards this component. In 1979-80, from an annual Plan outlay of Rs.810 crores, schemes worth Rs.102 crores were quantified. The amount actually verified as spent on the target group was, however, reported as only Rs.23.34 crores. In addition 45.75 crores co-operative credit and 7.75 crores institutional finance was also quantified for Scheduled castes. For 1980-81, out of the annual Plan outlay Rs.933.83 crores : Rs.119.08 crores have been quantified for this special component plan and further augmentation by Rs.65 crores is expected. Arrangements for review and monitoring

of the implementation of these schemes have been strengthened.

142. Various strategies have been worked out to ensure that sizeable benefit flow to scheduled castes while planning for infrastructure also in the form of construction of roads, opening of new hospital and dispensaries and schools. These are to be preferably located in the areas having concentration of scheduled castes. 38 blocks having 40 per cent or higher complement of scheduled castes population have been taken up for intensive development. Besides plan outlay, the State Government are also taking various measures to raise institutional finance and co-operative credit for the economic uplift of scheduled castes. In the Sixth five year plan 1980-85, out of the total proposed outlay of Rs.9.661 crores, Rs.714.60 crores have presently been quantified towards the special component plan. Besides, Rs.150 crores as special central assistance under special component Plan, and Rs.100 crores for food for work programme would be utilised for schemes for the benefits of scheduled castes. The objective is to cover 50 per cent scheduled castes families in the plan period.

143. *Hill development*—As in the past, a separate outlay of Rs.969.45 crores has been ear-marked for U. P.'s hills out of the States' outlay of Rs.9.661 crores. Attempts are being made to obtain a higher proportion of central assistance towards these Plans and additional provisions would be available if those efforts succeed. The sectoral break-up\* of hills outlay has also been given.

144. The hill areas of the State represent a special case of economic backwardness and their peculiar geographical conditions and the nature of terrain imposes severe constraints on the level of development on the one hand and the efficiency of infra-structure facilities on the other. The factors inhibiting the pace of development are topography, settlement pattern, small and marginal holdings, difficult agricultural process, lack of diversification

and institutional support, inadequate essential infra-structural facilities of roads, irrigation and power, and utter lack of basic social inputs in remote and inaccessible areas, *viz.*, education, health and drinking water etc. Besides, severe soil erosion and ecological degradation is also a big problem.

145. Programmes of the hill area plan have to be established on a more secure and functional basis with adequate arrangements for monitoring and feed back. Keeping in view the special problems, potential and requirement of hill area, the main thrust would be focussed on regenerating the economy of hills by optimal utilization of existing potential capacities and human resources through defusion of technological benefits, scientific management, conservation and development of natural resources for ecological and environmental protection for increasing the income and employment opportunities in shortest possible time.

146. Obviously the strategy of development for hills would be integrated development of the area ensuring spatial co-ordination, inter-sectoral linkages and inter-action between various programmes. Accordingly the priorities of developments are re-assigned for augmenting production and employment oriented programmes. On the basis of felt needs and special problems, besides roads, drinking water and forestry and soil conservation, a high priority is assigned for diversification of agriculture and horticulture according to land capability and high value crops, animal husbandry, tourism, resource based industries, minor irrigation, power. Adequate attention would also be given for education, health and socio economic uplift of scheduled castes/tribes and other weaker communities.

147. Substantial funds would be required to make a dent in the economy of hills during the Sixth Plan. On account of constraints of resources of the State as also problems of other backward regions/pockets and present magnitude of problems, it

would not be possible for the State to set apart matching normal State share and give present weightage to hills. The State Government has been pressing to the Planning Commission, Government of India for parity of outlay and supplemental Central assistance as also its pattern with other hill States, especially Himachal Pradesh. Treatment of U. P. Hill areas as special category area like Assam, J & K, Nagaland and Himachal is also being pressed. It is, therefore, essential that total size of Sixth Plan outlay and supplemental Central assistance be given on the basis of 20 per cent State's resources and 80 per cent supplemental assistance from Government of India for U. P. Hills.

148. According to the priorities, allocation proposed for core sector programmes of hill areas for the Sixth plan are : Road Rs.272 crores ; Drinking water supply Rs.152 crores ; Forestry and soil conservation Rs.82.28 crores ; Power Rs.75 crores ; Irrigation (Private and State) Rs.55.50 crores ; Horticulture Rs.20.52 crores ; Industry and Mining Rs.40.83 crores ; Area Development Rs.30.60 crores ; Animal Husbandry Rs.12.50 crores ; Education Rs.96.30 crores ; Health Rs.41.62 crores ; Welfare of Backward Class and Social Welfare Rs.9.00 crores.

149. The important physical targets proposed for the Sixth Plan are : (1) 48,000 kms. new roads, 1,500 kms. reconstruction of roads and 150 bridges, (2) drinking water supply to 7,000 villages, (3) electrification of villages 7,344, (4) soil conservation (Agriculture department) area to be treated 55,500 hectares, (5) afforestation and pasture development (under forestry and soil conservation) 2.38 lakh hectares, (6) area under orchards 30,000 hectares, (7) production of foodgrains 17.50 lakh tonnes, (8) additional irrigation potential 1.11 lakh hectares, (9) new primary schools 667, junior high schools 200, higher secondary schools 50, (10) new PHCs 132, new primary health sub-centres 749, (11) veterinary hospitals 5 stockmen centre 50 and deep freeze semen centres 248, (12) village and small scale industrial units 2,730.

## ANNEXURE-I

*Extract pertaining to objectives of the Sixth Plan taken from Planning Commission's Document of "Framework"*

## OBJECTIVES OF THE SIXTH PLAN

The main objectives of the Sixth Plan should be the following—

- (i) a significant step up in the rate of growth of the economy, the promotion of efficiency in the use of resources and improved productivity ;
- (ii) strengthening the impulses of modernisation for the achievement of economic and technological self-reliance ;
- (iii) a progressive reduction in the incidence of poverty and unemployment ;
- (iv) a speedy development of indigenous sources of energy, with proper emphasis on conservation and efficiency in energy use ;
- (v) improving the quality of life of the people in general with special reference to the economically and socially handicapped population, through a minimum needs programme whose coverage is so designed as to ensure that all part of the country attain within a prescribed period nationally accepted standards ;
- (vi) strengthening the redistributive bias of public policies and services in favour of the poor contributing to a reduction in inequalities of income and wealth ;
- (vii) a progressive reduction in regional inequalities in the pace of development and in the diffusion of technological benefits ;
- (viii) promoting policies for controlling growth of population through voluntary acceptance of the small family norm ;
- (ix) bringing about harmony between the short and the long term goals of development by promoting the protection and improvement of ecological and environmental assets ; and
- (x) promoting the active involvement of all sections of the people in the process of development through appropriate education, communication and institutional strategies.

## ANNEXURE—II

Year-wise estimates of total income and per capita income of India and U.P.  
(1948-49 to 1978-79)

Year	Total income Rs. in crores		On current prices		
	India	U.P.	Per capita income (Rs.)		
			India	U.P.	
<i>Old Series</i>					
1948-49	.. .. .	8,650	1,490	250	243
1949-50	.. .. .	9,010	1,564	256	252
1950-51	.. .. .	9,530	1,628	266	259
1951-52	.. .. .	9,970	1,552	274	244
1952-53	.. .. .	9,820	1,561	265	242
1953-54	.. .. .	10,480	1,516	278	231
1954-55	.. .. .	9,610	1,397	250	210
1955-56	.. .. .	9,980	1,439	255	213
1956-57	.. .. .	1,1310	1,591	283	232
1957-58	.. .. .	11,390	1,600	280	229
1958-59	.. .. .	12,600	1,835	303	259
1959-60	.. .. .	12,950	1,821	305	253
1960-61	.. .. .	14,140	1,914	326	261
<i>New series</i>					
1960-61	.. .. .	13,263	1,843	306	
1961-62	.. .. .	13,987	1,936	315	260
1962-63	.. .. .	14,795	2,001	326	264
1963-64	.. .. .	16,977	2,221	366	288
1964-65	.. .. .	20,001	2,882	422	367
1965-66	.. .. .	20,637	2,986	426	373
1966-67	.. .. .	23,848	3,509	482	431
1967-68	.. .. .	28,054	4,073	554	491
1968-69	.. .. .	28,607	3,829	552	453
1969-70	.. .. .	31,606	4,186	598	487
1970-71	.. .. .	34,235	4,256	633	486
1971-72	.. .. .	36,573	4,434	660	497
1972-73	.. .. .	40,270	5,491	712	605
1973-74	.. .. .	50,424	6,220	871	673
1974-75	.. .. .	59,083	7,154	1,000	760
1975-76	.. .. .	61,644	7,005	1,021	730
1976-77	.. .. .	66,885	7,953	1,086	815
1977-78	.. .. .	74,794	9,104	1,189	916
1978-79	.. .. .	80,090	9,420	1,249	930

Source : India-Revised National Accounts Statistics, February, 1980.

## ANNEXURE—III

*Some indicators of inter State Disparities*

Serial no.	States	Percentage share of population	Per Capita income 1973-76 average (Rs.)	Per Capita Plan outlay (1951—79) (Rs.)	Per Capita central assistance (1951—79) (Rs.)	Per Capita market borrowing (1970—79) (Rs.)	Central Under-takings investment (up to 31-3-77) Inter se percentage	Per Capita consumption of electricity (kWh.)	Length surfaced of roads per 100 sq.km. of area (K.M.) (as on 31-3-75)
1	2	3	4	5	6	7	8	9	10
1	Punjab ..	2.63	1,566	1,659	497	73.11	2.2	242	30
2	Haryana ..	1.95	1,399	1,671	529	107.83	1.6	174	34
3	Maharashtra ..	9.80	1,349	997	211	62.68	7.1	199	16
4	Gujrat ..	5.19	1,134	1,032	261	81.66	6.0	192	19
5	Karnataka ..	5.70	1,045	768	293	67.43	3.0	148	30
6	West Bengal ..	8.61	1,033	586	246	77.97	8.6	125	33
7	Kerala ..	4.15	948	709	347	79.86	3.1	93	50
8	Tamil Nadu ..	8.01	942	660	250	66.70	5.2	146	46
9	Andhra Pradesh	8.46	928	669	283	42.67	4.4	77	19
10	Rajasthan ..	5.01	853	695	373	74.45	2.5	83	7
11	Orissa ..	4.27	793	696	385	50.03	7.3	112	9
12	Madhya Pradesh	8.10	776	667	286	39.78	16.7	90	9
13	Uttar Pradesh ..	17.17	715	636	251	35.17	4.2	86	11
14	Bihar ..	10.95	545	479	250	34.50	8.1	89	12
All States ..		100.00	930	734	279	55.35	100.0	121	17

*Some indicators of Inter-regional disparities in U.P.*

Region	Value of agriculture produce per net hectare area sown		Intensity of cropping		Percentage of net irrigated area per net hectare to net area sown		Per capita net output from commodity producing sectors		Per capita gross industrial produce	
	1968-69	1975-76	1968-69	1977-78	1968-69	1975-76	1968-69	1975-76	1968-69	1975-76
1	2	3	4	5	6	7	8	9	10	11
1. Eastern ..	-1.02	-6.62	+1.33	+0.73	-0.26	-6.51	-13.14	-20.81	-34.96	-48.76
2. Bundelkhand	-46.30	-50.30	-15.46	-18.03	-46.84	-51.41	-8.55	-9.21	-88.85	-86.55
3. Hill ..	+10.99	+31.43	-4.42	+19.08	-55.79	-50.33	+24.79	+41.59	-31.81	-22.62
4. Central ..	-2.97	-3.27	-0.90	-3.80	-26.32	-18.22	+0.85	-0.72	+37.94	-49.01
5. Western ..	+15.07	+19.84	+4.49	+4.40	+34.74	+37.09	+11.77	+18.18	+33.92	+40.91
State Average	1402.01 (In Rs.)	2415.68 (In Rs.)	133.25 (Percent)	134.07 (Percent)	38.0	46.1	154.23 (In Rs.)	175.76 (In Rs.)	79.78 (In Rs.)	209.67 (In Rs.)

## IV

*percentage deviations from State average*

Per capita consumption of electricity		Length of Pucca roads per lakh of population		Number of junior basic schools per lakh of population		Number of senior basic schools per lakh of population		Number of beds in allopathic hospital per lakh of population.	
1968-69	1976-77	1968-69	1978-79	1968-69	1977-78	1968-69	1977-78	1968-69	1977-78
12	13	14	15	16	17	18	19	20	21
+35.47	-3.41	-7.68	-13.63	-10.06	-9.66	-14.65	-11.02	-22.10	-13.67
-81.32	-88.33	+63.14	+54.82	+38.31	+38.42	+40.83	+33.25	-14.38	-2.23
-11.32	-81.30	+69.53	+290.57	+96.67	+106.54	+93.08	+104.20	+132.30	+141.48
-19.62	-36.19	-13.43	-19.52	-4.77	-1.60	-7.04	+4.99	+20.2	+29.97
-15.47	+50.76	-0.49	-19.72	-3.85	-7.65	+2.19	-8.75	-0.65	-12.55
53.00 (in kw.)	79.69 (kw.)	32.69 (km.)	50.04 (km.)	71.76	69.24	8.67	11.43	40.19	52.02

ANNEXURE—V  
*Projected structure of U. Ps. economy in 1984-85 on alternative assumptions of  
 5%, 6%, 7% and 8% growth rates*

Broad Sectors	Base Year 1979-80	5%			6%			7%			8%		
		Total income (crore Rs.)	Rate of Growth (%)	Contri- bution (%)	Total income (crore Rs.)	Rate of growth (%)	Contri- bution (%)	Total income (crore Rs.)	Rate of growth (%)	Contri- bution (%)	Total income (crore Rs.)	Rate of growth (%)	Contri- bution (%)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Agriculture and Allied	.. 5,654 (51.4%)	7,046	4.5	50.2	7,216	5.0	49.0	7,390	5.5	47.9	7,742	6.4	47.9
Manufacturing	.. 1,166 (10.6%)	1,743	8.5	12.4	1,926	10.9	13.1	2,222	13.7	14.4	2,326	14.8	14.4
Others	.. 4,180 (38.0%)	5,250	4.7	37.4	5,578	6.0	37.9	5,817	6.8	37.7	6,094	7.8	37.7
All Sectors	.. 11,000	14,039	5.0	100.0	14,720	6.0	100.0	15,429	7.0	100.0	16,162	8.0	100.0
(Rs.) State Per Capita Income	1,070	1,252			1,313			1,376			1,441		
Gap between State per capita income and National income (Rs.)	310	354			293			230			165		
Percentage Gap	.. (-)22.5	(-)22.0			(-)18.2			(-)14.3			(-)10.3		



## ANNEXURE—VI

Sectoral distribution of public sector outlay (1974—79, 1978—83 and 1980—85)  
(In lakh Rs.)

Serial no.	Head of Development	1974—79 Expendi- ture (Rs. 2924 crores)	1978—83 outlay (Rs. 5000 crores)	1980—85 outlay (Rs. 9661 crores)	Percentage increase	
					1980—85 over 1974—79	1980—85 over 1978—83
1	2	3	4	5	6	7
1	Agriculture Production	6283	8750	16341	160.08	86.75
2	Land Reforms	3604	4565	6055	68.01	32.64
3	Minor Irrigation	14350	24762	34374	139.54	38.82
4	Soil and Water Conservation	2604	5610	10006	284.25	78.36
5	Area Development	6943	16212	38660	456.82	138.47
6	Animal Husbandry	870	1723	3200	267.82	85.72
7	Dairy and Milk Supply	557	1293	1900	241.11	46.95
8	Fisheries	82	297	780	851.22	162.63
9	Forests	2217	6258	10682	381.82	70.69
10	Investment in Agriculture Financial Institutions.	1968	2247	3000	52.44	33.51
11	Community Development and Panchayati Raj	1209	2399	17200	1322.66	616.97
I	AGRICULTURE AND ALLIED SERVICES	40687	74116	142198	249.49	91.86
II	CO-OPERATION	3329	5510	7950	138.81	44.28
1	Major and Minor Irrigation	50853	90000	146400	187.89	62.67
2	Flood Control	5745	11000	21800	279.46	98.18
3	Power	111353	182700	313000	181.09	71.32
III	IRRIGATION AND POWER	167951	283700	481200	186.51	69.62
1	Large and Medium Industry	10166	9480	35028	244.56	269.49
2	Sugar Industry	3783	1500	6600	74.46	340.00
3	Village and Small Industry	3717	9803	16000	330.45	63.22
4	Geology and Mining	550	1818	2100	281.82	15.51
IV	INDUSTRIES AND MINING	18216	22601	59728	227.89	164.27
1	Roads and Bridges	20614	34101	94876	360.25	178.22
2	Transport	3433	6296	7935	131.14	26.03
3	Tourism	655	1325	2000	205.34	50.94
V	TRANSPORT AND COMMUNICATION	24702	41722	104811	324.30	151.21
1	General Education	9949	15208	30185	203.40	98.48
2	Technical Education	669	900	1600	139.16	77.78
3	Scientific Services and Research	85	208	500	488.24	140.38
4	Medical and Public Health	3784	10352	30250	699.42	192.21

## ANNEXURE—VI—(Concl'd.)

Sectoral distribution of public outlay sector (1974—79, 1978—83 and 1980—85)

(In lakh Rs.)

Serial no.	Head of Development	1974—79 Expendi- ture (Rs. 2924 crores)	1978—83 Outlay (Rs.5000) crores)	1980—85 Outlay (Rs.9661 crores)	Percentage increase	
					1980—85 over 1974—79	1980—85 over 1978—83
1	2	3	4	5	6	7
5	Water Supply and Sanitation ..	11248	22854	53362	374.41	133.49
6	Housing .. ..	6690	11712	26750	299.85	128.40
7	Urban Development ..	629	2772	10197	1521.14	267.86
8	Information and Publicity ..	73	125	751	928.77	500.80
9	Labour and Labour Welfare ..	284	503	1008	254.93	100.40
10	Welfare of Scheduled Castes, Scheduled Tribes and Backward Classes.	2656	4432	8500	220.03	91.79
11	Social Welfare .. ..	107	634	1600	1395.33	152.37
12	Nutrition .. ..	663	980	1575	137.56	60.71
<b>VI.</b>	<b>Social and Community Services</b>	<b>36837</b>	<b>70680</b>	<b>166278</b>	<b>351.39</b>	<b>135.25</b>
<b>VII.</b>	<b>Economic Services ..</b>	<b>497</b>	<b>1167</b>	<b>2935</b>	<b>490.54</b>	<b>151.50</b>
<b>VIII.</b>	<b>General Services (Printing and Stationery).</b>	<b>227</b>	<b>504</b>	<b>1000</b>	<b>340.53</b>	<b>98.41</b>
	<b>Grand Total ..</b>	<b>292446</b>	<b>500000</b>	<b>966100</b>	<b>230.35</b>	<b>93.22</b>

## ANNEXURE—VII

Percentage shares of sectoral outlays (1974—79, 1978—83, 1980—85)

Serial no.	Head of Development			1974—79 Expenditure (Rs. 2924 crores)	1978—83 Outlay (Rs. 5000 crores)	1980—85 Proposed Outlay (Rs. 9661 crores)	
1	2			3	4	5	
1	Agriculture Production	..	..	..	2.15	1.75	1.69
2	Land Reforms	..	..	..	1.23	0.91	0.63
3	Minor Irrigation	..	..	..	4.91	4.96	3.56
4	Soil and Water Conservation	..	..	..	0.89	1.12	1.04
5	Area Development	..	..	..	2.37	3.24	4.00
6	Animal Husbandry	..	..	..	0.30	0.34	0.33
7	Dairy and Milk Supply	..	..	..	0.19	0.26	0.20
8	Fisheries	..	..	..	0.03	0.06	0.08
9	Forests	..	..	..	0.76	1.25	1.11
10	Investment in Agriculture Financial Institutions	..	..	..	0.67	0.45	0.31
11	Community Development and Panchayati Raj	..	..	..	0.41	0.48	1.78
I.	Agriculture and Allied Services	..	..	..	13.91	14.82	14.73
II.	Co-operation	..	..	..	1.14	1.10	0.82
1	Major and Minor Irrigation	..	..	..	17.39	18.00	15.15
2	Flood Control	..	..	..	1.96	2.20	2.26
3	Power	..	..	..	38.08	36.54	32.40
III.	Irrigation and Power	..	..	..	57.43	56.74	49.89
1	Large and Medium Industry	..	..	..	3.48	1.90	3.62
2	Sugar Industry	..	..	..	1.29	0.30	0.68
3	Village and Small Industry	..	..	..	1.27	1.96	1.66
4	Geology and Mining	..	..	..	0.19	0.36	0.22
IV.	Industries and Mining	..	..	..	6.23	4.52	6.18
1	Roads and Bridges	..	..	..	7.05	6.82	9.82
2	Transport	..	..	..	1.17	1.26	0.82
3	Tourism	..	..	..	0.22	0.27	0.21
V.	Transport and Communication	..	..	..	8.44	8.35	10.85
1	General Education	..	..	..	3.40	3.04	3.12
2	Technical Education	..	..	..	0.23	0.18	0.17
3	Scientific Services and Research	..	..	..	0.03	0.04	0.05
4	Medical and Public Health	..	..	..	1.29	2.07	3.13

ANNEXURE—VII—(Concl.)  
*Percentage shares of sectoral outlays (1974—79, 1978—83 and 1980—85)*

Serial no.	Head of Development	1974—79 Expenditure (Rs. 2924 crores)	1978—83 Outlay (Rs. 5000 crores)	1980—85 Proposed Outlay (Rs. 9661 crores)
1	2	3	4	5
5	Water Supply and Sanitation .. .. .	3.85	4.57	5.52
6	Housing .. .. .	2.29	2.34	2.77
7	Urban Development .. .. .	0.22	0.55	1.06
8	Information and Publicity .. .. .	0.02	0.03	0.08
9	Labour and Labour Welfare .. .. .	0.10	0.10	0.10
10	Welfare of Scheduled Castes, Scheduled Tribes and Backward Classes. .. .. .	0.90	0.89	0.88
11	Social Welfare .. .. .	0.04	0.13	0.17
12	Nutrition .. .. .	0.23	0.20	0.16
VI.	Social and Community Services .. .. .	12.60	14.14	17.21
VII.	Economic Services .. .. .	0.17	0.23	0.30
VIII.	General Services (Printing and Stationery) .. .. .	0.08	0.10	0.10
<b>Grand Total ..</b>		<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

## ANNEXURE—VIII

## Sectoral break-up of Sixth Plan outlay for Hills

(In lakhs Rs.)

Serial no.	Sector	1980—85 outlay	Serial no.	Sector	1980—85 outlay
1	2	3	1	2	3
1	Agriculture Production	.. 2993	IV.	INDUSTRIES AND MINING :	4083
2	Land Reforms	.. .. 25			(4.21)
3	Minor Irrigation	.. .. 5550	1	Roads and Bridges	27243
4	Soil and Water Conservation	.. .. 5706	2	Transport	.. ..
5	Area Development	.. .. 3060	3	Tourism	650
6	Animal Husbandry	.. .. 1250	V.	TRANSPORT AND COMMUNI-	27893
7	Dairy and Milk Supply	.. .. 225		CATION	(28.77)
8	Fisheries	.. .. 30	1	General Education	9630
9	Forests	.. .. 2522	2	Technical Education	410
10	Investment in Agriculture Financial Institutions.	.. ..	3	Scientific Services and Research	.. ..
11	Community Development and Panchayati Raj	1282	4	Medical and Public Health	4162
I	AGRICULTURE AND ALLIED SERVICES :	22643 (23.36)	5	Water Supply and Sanitation	15210
II.	CO-OPERATION :	.. 562 (0.58)	6	Housing	2611
1	Major and Medium Irrigation	.. .. 73	7	Urban Development	50
2	Flood Control	.. .. 360	8	Information and Publicity	15
3	Power	.. .. 7500	9	Labour and Labour Welfare	375
III.	IRRIGATION AND POWER :	7933 (8.18)	10	Welfare of Scheuled Castes, Scheduled Tribes and Backward Classes	750
1	Large and Medium Industry	.. 1400	11	Social Welfare	150
2	Village and Small Industry	.. 1874	12	Nutrition	325
3	Geology and Mining	.. .. 809	VI.	SOCIAL AND COMMUNITY SERVICES.	33688 (34.75)
			VII.	ECONOMIC SERVICES	143 (0.15)
				GRAND TOTAL	96945 (100.00)

## CHAPTER I

### DEVELOPMENT SITUATION OF THE STATE

#### RECENT GROWTH TRENDS

With an estimated number of 1039 lakh inhabitants in Uttar Pradesh in 1980-81, the State accounts for about 16 per cent of the country's population. This makes it the most populous State in the country. The economy of the State is basically agrarian. 51.5 per cent of the State Domestic Product originates from the agriculture and allied sector, and this sector accounts for 78 per cent of the total working force in the State. As against this, in the country as a whole, the agriculture and allied sector contributes 40.7 per cent of the total National Domestic Product and accounts for 72 per cent of working force. Concerted efforts have been made for maximising growth of the State's economy but overall growth has not kept pace\* with national growth. From a position close to the national average per capita income in the year 1950-51 the State had fallen back to a level 25 per cent below the national average by 1978-79. The State occupied the second lowest position in terms of *per capita* level of income among the larger States.

2. This relative lag is basically explained by the inability of the State to attain the requisite momentum in respect of modern\*\*\* industry, decline in its share of power generation† in the country in the 'seventies' as compared to the position at the end of the 'sixties' and uneven agricultural growth\*† in different regions. The picture in the field of agriculture has altered very significantly in the seventies\*† with a step up in the growth rate from 1 per cent in the years 1960-69 to 2.5 per cent in the years 1968-76, mainly as a result of improved spread of irrigation facilities†† @in different regions of the the State and policy interventions. The

same is true for the sector of organised industry which recorded a growth rate of 10.6 per cent in the period 1968-69 to 1975-76 as against 3.3 per cent in the years 1960-61 to 1968-69. There has however, been little expansion of the tertiary\*\* sector.

3. The yields + per hectare in Uttar Pradesh are as yet lower than the national average for all major crops like paddy, wheat, sugarcane etc., and far below those in the neighbouring States of Punjab and Haryana for paddy and wheat. As compared to these States, despite all-out efforts for extension of irrigation facilities \$ U. P. is still behind in coverage and intensity, and agriculture even now is largely rain-fed and consequently liable to severe fluctuations and as a consequence of vagaries of nature. Cropping intensity in U. P. during 1977-78 was only 134.0 per cent as compared to 153.2 per cent in Punjab and 149.1 per cent in Haryana in that year.

4. The industrial structure of the State is heavily weighted in favour of the traditional activities, like agro-processing industries and textiles. Productivity per worker employed in registered factories in the State is also very low partly because of this feature. These industries have badly neglected to modernise and introduce technological improvements. Growth of new industries in a number of regional centres like Gorakhpur, Allahabad, Bareilly, Dehra Dun and Ghaziabad has been a positive feature of the situation and it augurs well for the pattern of State's potential development. Dynamic growth of major industrial centres of modern or traditional industry, like Agra, Moradabad, Kanpur

\*Annexure I and II

\*\*\*Annexure III

†Annexure IV

\*†Annexure V

††@Annexure VI & Annexure VII

\*\*Annexure VIII & IX

†Annexure X

\$Annexure XI & Annexure XII

£Annexure XIII & XIV

βAnnexure I of Chapter 5 on "\$Strategies for Regional Development".

and Varanasi and particularly their new links with the world market are also indicative of areas in which enterprise has been available in the State.

5. Limited growth of the secondary sector is evident from the 1971 Census data according to which only 7.1 per cent of the working force was engaged in U. P. in the household or non-household manufacturing industries as against the corresponding national figure of 9.5 per cent.

6. In taking an over-view of the State's growth, it has to be remembered that vast numbers are involved. What is at stake is the transformation of a significant segment of the country's population which is presently making a simple living. They are heavily dependent on small holdings in agriculture, these too liable to regular ravaging by the fast-flowing Himalayan rivers. Outside agriculture there is basically a low level of infra-structural development, slow industrial development in the large non-organised sector, and a comparatively lower order of public and private investment during the era of planning and of nationalised banking era as compared to several other States. Among the basic reasons for the situation of backwardness in which the State finds itself to-day have been the historic factors of low *per capita* public sector plan outlay and per capita central assistance, and an adverse credit-deposit ratio. Lack of access to basic minimum human needs, especially for the weaker sections of the community and women and children, inevitably produces among such sections a passive acceptance of an unchanging pattern of life. Objective conditions considerably weigh down initiative. This only emphasises urgency of the need to change this situation through planned State action on an extensive scale. Such action is an essential prerequisite for releasing constructive and positive forces which would provide the main-spring for rapid growth.

#### HUMAN RESOURCES

7. The population of the State as per Census data of 1971 was 883 lakhs, spread over a total geographical area of 294 thousand sq. kms. This gives an average den-

sity of 300 persons per sq. km. for the State as against an all-India density of nearly half of this, at 178. Amongst the States of the Indian Union, Kerala (549), West Bengal (504), Bihar (324) and Tamil Nadu (317) had a higher density of population than U. P. The annual growth rate of State population during the decade 1951-61 was 1.55 per cent which increased in 1961-71 to 1.81 per cent. This increase in the rate of growth of State population was in parallel to the change in the rate of increase recorded for the population of the country as a whole, which increased from 1.97 per cent to 2.22 per cent per annum between the same periods. The relatively lower rate of growth of population in the State is, however, not to be viewed with satisfaction since it is the product not so much of a lower birth rate as of a high death rate\*, particularly an unusually high rate of child mortality. In fact, these figures rather cruelly illustrate the significance of lack of the required infra-structure of medical, maternity and child care services especially in the rural areas.

8. Increase in population has a two-dimensional effect on the economy of the State. While it provides human resources to support development, the value of such an increase is off-set if the proportion of non-working population also increases. The alteration in the age-structure of population during the period 1951-71 is given below :

TABLE : *Percentage distribution of population in U. P. by broad age-groups*

Census Year	Age-groups (years)		
	0-14	15-59	60 and above
1	2	3	4
1951	38.5	55.7	5.8
1961	40.5	53.2	6.3
1971	41.8	51.4	6.8

While in 1951, 55.7 per cent of the total population was in the working age-group of 15-59 years, this proportion decreased to 53.2 per cent in 1961 and further to 51.4 per cent in 1971. Estimates so far available from the 32nd round of the

National Sample Survey show that during 1977-78 the proportion of non-working population in the State was higher than in the country as a whole, and at the same time dependency per worker at 2.47 as against 2.21 for the country. Trends in this regard will have to be watched.

9. According to the 1971 census, about 31 per cent of the total population was placed in the category of workers. The total of 2.73 crore workers in the State consisted of 90 per cent males, of whom about 87 per cent lived in the rural areas. By far the largest proportion of workers was engaged in agriculture and allied activities, the percentage being 88 in the rural areas. In urban areas, about 31 per cent of the workers were engaged in trade, transport and communication, 26 per cent in manufacturing, 11 per cent in agriculture and allied activities, and 32 per cent in services.

10. Between the Census figures of 1961 and 1971 change in the concept and definition of "workers" took place. Therefore, for comparisons to be correctly made figures of workers have to be adjusted for 1961 so as to make them comparable with 1971 workers. Adjusted figures\* show that in 1961 a majority of the workers (64.3 per cent) were engaged in agriculture as cultivators and the figure substantially decreased (57.4 per cent) in 1971. At the same time, the proportion of agriculture labourer which was 10.4 per cent in 1961 had risen alarmingly to 20 per cent by 1971, indicating thereby that a large number of persons who were classified as cultivators earlier in 1961 had been reported as agricultural labour in 1971 on the basis of their main activity. Various interpretations have been placed on these figures. It has been suggested that U. P.'s agrarian pattern differs from that in several other States because of significant cultivation by agricultural labour households†; such households remain linked to rural areas by virtue of their ability to find work on other farmer's fields despite low wages.††

#### EMPLOYMENT SITUATION

11. Employment situation has to be kept in view in the process of plan formulation. As a large and populous State, U. P. has a vast human resource and the real issue is that of enabling maximum

possible number of persons not only to work but to work productively.

12. Data thrown up by the 32nd round of the National Sample Survey for July, 1977-June, 1978, reveals that 57.51 per cent of the population in the age-group 15-59 years were participants as members of the labour force, on weekly status basis, with 55.92 per cent being employed and 1.59 per cent unemployed. Unemployment percentages for rural and urban areas were 1.41 and 2.64, respectively, and the sex-composition of the unemployed was for urban areas males 4.40 per cent and females 0.55 per cent. On daily activity basis, including persons who were participants on weekly status basis but were unemployed on any day, a higher proportion of 2.39 per cent of population in the age-group of 15-59 years was without work. This percentage for rural areas was 2.23, for urban areas 3.29 and for males 4.06 and for females 0.62.

#### STATE INCOME

13. The estimate of State Domestic Product (S. D. P.), interchangeably referred to also as State Income, is the most suitable composite economic indicator for measuring the general status of a State's economy. Although such an estimate does not throw any light on the inter-personal distribution of incomes, analysis of trends of inter-sectoral distribution of S.D.P. brings out the productive impact of developmental efforts on the contribution made by the different sectors, viz., agriculture, industry, transport, trade, etc. It is for this reason that sectoral and per capita S. D. P. estimates, despite their limitations, are used for comparing levels of development, at various points of time and in different areas. Objectives of National and State Plans are generally well understood in terms of specific overall and sectoral growth rates.

14. Estimates of total and *per capita* income of Uttar Pradesh and India over the period 1960-61 to 1978-79 at current prices show a four-fold rise for the State as against a five-fold rise at the national level. At constant prices of 1970-71, in the same period the compound annual growth rate of U. P.'s total income was 2.5 per cent as

\*Annexure XVI

†Annexure XVII

††Annexure XVIII

£Annexure XIX



against the national growth rate of 3.6 per cent. Inevitably, this led to a parallel decline in the share of Uttar Pradesh in the total income of the country (at constant prices of 1970-71) from 13.7 per cent in 1960-61 to 11.3 per cent in 1978-79. It must be noted here that at both points of time, separated by two decades, while U. P.'s share in the total population of the country was about 16 per cent, as cited above the share of State income in the total national income was much less than this percentage. A closer study of the annual variations of the total State income (at constant prices) shows that the period 1971-72 to 1974-75 was characterised by low levels of income on account of extreme economic strain due to drought, crop failure, shortages and the international oil crises.

15. Comparing growth rates\* in total income of various States for the period 1970-71 to 1977-78 it is observed that the annual growth rate in U. P. was 2.3 per cent. This was the lowest growth rate, excepting for the States of Kerala and Rajasthan where the annual growth rates were 2.0 per cent and 0.7 per cent, respectively. The maximum growth was in Maharashtra (5.2 per cent), followed by Punjab (4.6 per cent) in Haryana (4.5 per cent).

16. The per capita State income (at constant prices of 1970-71) increased from Rs.453 in 1960-61 to Rs.509 in 1978-79, whereas in the same period the national per capita income had gone up from Rs.559 to Rs.712. Thus, while there was an increase of Rs.56 in the per capita income of Uttar Pradesh between 1960-61 to 1978-79, the rise in per capita national income at constant prices was Rs.153 during the same period. In this way, the gap between per capita income of the State and that of the country widened from Rs.106 in 1960-61 to Rs.203 in 1978-79.

17. Relative growth rates recorded in different sectors of the economy may also be reviewed here. The contribution of agriculture (including animal husbandry) to State income fell from 58.4 per cent in 1970-71 to 49.9 per cent in 1978-79. The decline in contribution of agriculture brought down the overall contribution of

the Primary Sector (consisting of agriculture, animal husbandry, forestry and logging, fishing, mining and quarrying) from 60.2 per cent to 51.7 per cent during the same period. The share of the secondary sector (including manufacturing by registered and unregistered units construction and electricity, gas and water supply) in the total income, increased from 14.9 per cent in 1970-71 to 16.6 per cent in 1978-79. The contribution of the registered manufacturing sector which was 4.4 per cent in 1970-71, went up to 5.6 in 1978-79. The share of the tertiary sector also increased from 24.9 per cent in 1970-71 to 31.7 per cent in 1978-79. Thus, the proportion of the tertiary sector grew in U. P. more than twice as fast as the secondary sector. In national income figures, however, relative growth trends were much more healthy, as the tertiary sector growth was less than that of the secondary sector, relative shares of secondary and tertiary sectors being 19.7 per cent and 30.2 per cent in 1970-71, and 23.6 per cent and 34.2 per cent 1978-79. The above data are indicative of the fact of diversification in the national as well as the State economy in the seventies. They also show the relative lag in U. P.'s secondary sector's growth.

18. Reference was earlier made to susceptibility of Uttar Pradesh's agriculture to the vagaries of nature. Because of these unfavourable natural conditions, the economic situation in the State had deteriorated during the last three years of the Fourth Plan period, so much so that the income level in 1973-74 was lower than the level already achieved in 1970-71, giving an annual rate of decline of 1.6 per cent in the total income of the State. Even for the country the annual growth in the national income during the same period was low, being only 1.7 per cent. In this period, the national economy did not keep pace with the growth in population. However, this adverse situation of the State was off-set to some extent during the period 1974-75 to 1977-78. In this period, the State economy grew at an annual rate of 5.3 per cent, which was higher than the National average of 5.1 per cent for the same period. The annual growth in agricultural and manufacturing sectors of the State's

\*Annexure X

economy during the period 1974-75 to 1977-78 were 6.2 per cent and 6.4 per cent, respectively. Besides, the tertiary sectors also expanded at an average rate of 4.6 per cent per annum during the same period. During 1978-79, State income increased by 3.4 per cent over the previous year.

19. The economy of the State was, however, very badly affected in 1979-80 by the most severe drought ever witnessed. Although deficiency of rains was observed in all the northern States of the country, Uttar Pradesh was the worst affected. Agricultural production is estimated on a preliminary basis, to have fallen by about 26 per cent as compared to 1978-79. Decrease in the national agricultural production was much less at about 10 per cent. This difference shows the degree of vulnerability of the State's economy, and the tremendous dislocations to which the State was subjected in 1979-80. The performance of the manufacturing sector also deteriorated in 1979-80. Industrial production is estimated to have decreased by 1.5 per cent in the country, but in Uttar Pradesh the fall is (on preliminary estimates) around 18 per cent. A major cause of this fall was the short fall in the hydel\* power generation and the severe cut in power supply to industry because due to drought conditions more power was diverted to agriculture sector for irrigation purposes. Thus, instead of acting as a cushion against adversity, the industrial sector itself underwent a severe depression, setting of a cycle of cumulative causation. The overall impact of fall in agricultural and industrial production has been to lower the gross national product by about 3 per cent, and the SPP. of U. P. by as much as about 17 per cent. The year 1979-80 thus represents a severe set-back to U. P.'s economy.

20. Uttar Pradesh's 56 districts represent a situation of wide regional differences. Estimates of district domestic product for commodity-producing sectors may be regarded as a broad basis for a quick comparison of the inter-district variations in productive potential. Among various limitations, however, must be noted cases where production does not represent accrual of income to local residents (as in income

from sale of Government forests in the hills) and thus the district domestic product may not represent the relative level of welfare of the population. Similarly, no account is taken of income transfers from outside, for example through remittances. For the year, 1976-77\*\*, district Ghaziabad in the proximity of Delhi had the highest per capita income (Rs.1,174). Next were Uttar Kashi (Rs.1,011) and Chamoli (Rs.1,003), and quite close thereafter was Naini Tal (Rs.986), all three hill districts. The lowest *per capita* income was observed in district Ballia (Rs.344). A number of districts in the eastern part of the State (for instance, Faizabad, Jaunpur, Azamgarh and Basti) also recorded among the lowest *per capita* incomes on this basis. Balanced regional development has to be an important objective of the policies adopted in the Plan.

#### PRICE TRENDS

21. Prices in the State, as in the rest of the country, have been rising since 1960-61. While State Governments have negligible initiative to determining price trends in the national economy, they are greatly affected by inflationary pressures. Project costs escalation and rising salary bills are direct implications for the budgetary situation of the States. Of-course, revenue receipts may also reflect buoyancy, and central resources buoyancy may be transmitted to States through transfers, the overall effects of inflation on the relative position of the States are difficult to judge. Certainly the weak and the unorganised world suffer. In following paragraphs, price trends are analysed with reference to (i) agricultural and industrial commodities; (ii) urban and rural differences; (iii) wholesale prices over the long and short periods; (iv) consumer's prices. Changes in relative prices therefore, have an impact on the developmental process, and may disturb inter-commodity balance. Further, the real income of different sections of society is affected in varying degrees resulting in redistributive effects of an unforeseen nature. Index numbers of whole-sale prices, which determine the direction of consumer prices also are relatively more

\*Annexure XX

\*\*Annexure XXI

stable than retail prices and provide a good measure of price fluctuations over time.

22. An idea of the extent of increase in

*Indices of Agricultural Wholesale Prices in U. P. (July, 1957 to June, 1958=100)*

Commodity Groups	Financial Year				
	1960-61	1965-66	1968-69	1973-74	1979-80
1	2	3	4	5	6
1.1 Cereals .. .. .	103.2	183.8	194.4	310.2	351.5
1.2 Pulses .. .. .	110.8	223.3	269.0	425.0	772.3
1. Food grains .. .. .	103.6	185.9	198.4	316.4	374.4
2. Oilseeds .. .. .	117.7	188.1	201.8	405.0	506.1
3. Fibres .. .. .	141.2	140.6	171.8	260.4	377.0
4. Cattle Feeds .. .. .	136.0	190.7	172.8	306.2	379.9
5. Others .. .. .	104.7	155.7	347.5	351.4	450.9
General Index .. .. .	108.1	178.9	231.9	330.3	402.9

*Indices of Industrial Wholesale Prices in Uttar Pradesh (1948=100)*

Commodity Groups	Financial Year				
	1960-61	1965-66	1968-69	1973-74	1979-80
1	2	3	4	5	6
1. Manufactured Commodities .. .. .	117.8	137.6	299.8	354.7	405.3
2. Industrial Raw Material .. .. .	139.9	164.8	200.1	366.1	490.2
3. Industrial Fuels .. .. .	128.3	171.5	215.9	311.9	747.4
General Index .. .. .	123.0	145.9	273.1	353.7	453.4

It would be seen from the above tables that the general index of whole-sale prices of agricultural and industrial goods increased almost uniformly, by 273 per cent and 269 per cent respectively, during the period 1960-61 to 1979-80. However, the behaviour of prices of all groups of commodities was not uniform. Price rise was very steep in case of pulses, oil-seeds and industrial fuels, on account of supply shortages.

23. The rate of increase in urban retail prices during the period 1960-61 to 1979-80 had been somewhat lower and that in rural retail prices higher, than that observed in whole-sale prices. While urban middle class consumer price index

prices in recent years in Uttar Pradesh can be had from the movement of agricultural and industrial whole-sale price indices given below :

of Uttar Pradesh had risen in 1979-80 by 254 per cent over the level of 1960-61 and the working class consumer price index at Kanpur by 261 per cent, the rural consumer price index of Uttar Pradesh, however, rose by 279 per cent, indicating perhaps an increased degree of integration of rural markets into the system than was the case in the base year.

24. The combined general index of whole-sale prices in Uttar Pradesh for 1979-80 with 1970-71 as the base year was 208.5, thereby indicating a price rise of 108.5 per cent over 1970-71 and it was somewhat lower than the all-India price rise of 116.8 per cent during the same period.

The price rise in U. P. in the three major groups, *viz.* primary articles, fuel and power and manufactured products was of order of 93.1, 147.4 and 116.4 per cent respectively as against the corresponding higher figure of increase of 105.6 per cent, 181.4 per cent and 115.3 per cent in the country.

25. The current price situation is causing serious anxiety. After two years of remarkable price stability, the economy witnessed a sharp increase in prices during 1979-80, the base year of the Sixth Plan. High inflationary pressures have continued in the first half of 1980-81. The situation since August, 1980 is, however, less tense. Whole-sale prices rose by 22.2 per cent in the period than the March, 1979 to March, 1980. The corresponding price rise in primary articles was 17.0 per cent in fuel and power 8.7 per cent, and in manufactured products as high as 29.1 per cent. The relative national level price rise was lower, being 21.7 per cent in the general index, 18.7 per cent in primary articles, 17.8 per cent in fuel and power, and 25.1 per cent in the manufactured products.

26. Retail prices of essential commodities also, in general, exhibited a rising trend during 1979-80. These prices in the last week of March, 1980 had risen by more than 10 per cent as compared to last week of March, 1979, in the case of wheat (12.4 per cent), rice (18.3 per cent), maize, potato (122.2 per cent), mustard oil (25.3 per cent), meat, fish, gur (107.5 per cent), sugar (86.5 per cent), long cloth, markin, vanaspati (17.8 per cent), soft coke (30.4 per cent), match box, washing soap, toilet soap, tea, baby food, printing paper, bulb, torch cell, cement (18.0 per cent). There were marginal increases in prices of maida, gram, besan, moong dal, urd dal, salt, cotton sari, yarn, kerosene oil, cycle tyre, cycle tube, penicillin tablet, ghee, stainless steel utensils and bread. Stationary or slightly decreased prices were recorded in arhar dal, onion, egg, chillies, anacin, exercise books, turmeric, zeera and black pepper. The overall impact on various classes of consumers differed, with a degree of protection to the working

classes. During the period March, 1979 to March, 1980, the rise in the urban middle class consumer price index of U. P. was 16.1 per cent, the working class consumer price index at Kanpur was 10.4 per cent, and rural consumer price index of U. P. was 17.2 per cent.

27. Although retail prices of almost all the important essential commodities have increased during the period April-September, 1980, these were mostly significantly lower than the increases during the corresponding period of the previous year (April-September, 1979), with important exceptions. Mention may be made here of wheat, rice, dal urd, potato, and kerosene oil for which percentage increases during the period April-September, 1980, were 2.1, 2.7, 0.7, 56.7 and 3.7 respectively as against the corresponding percentage increases of 11.4, 20.0, 4.5, 116.7 and 15.9 during April-September, 1979.\* However, prices of gram, dal arhar, meat, sugar, toilet soap and bread showed relatively higher increases during the period April-September, 1980, the percentage increases being 43.7, 6.6, 5.8, 34.6, 11.0 and 4.8 respectively in comparison to the corresponding lower percentage increases of 10.7, 3.9, 3.0, 12.2, 0.7 and 1.7. The prices of vegetable oil in fact decreased by 3.1 per cent during the first six months of the current financial year, whereas there was an increase of about 11.2 per cent in its price, during the corresponding period of the previous year. In case of mustard oil, gur and white printing paper, the price increases were more or less of the same order as observed in the corresponding period of the previous year.

28. So far as the average prices of the period April-September, 1980, after accounting for the weekly fluctuations are concerned, they were higher in all commodities, excepting pulses (arhar and urd), onion, chillies and masala items, as compared to average prices of the corresponding period of the previous year (April-September, 1979). The prices of potato, gur, and sugar in first six months of the current financial year were more than double being 129 per cent, 105 per cent

\*Annexure XXI

and 113 per cent higher than the average prices which prevailed during the corresponding period of the previous year. The prices of wheat, rice, mustard oil, meat, long cloth, vegetable oil, tea and match box were higher between 10 to 25 per cent than the prices of the previous year. In the case of washing soap, toilet soap and white printing paper, the prices were higher by 28.3 per cent, 33.3 per cent and 29.6 per cent respectively.

29. Effective administration of commodities prices, quality controls and forging of strong and stable distribution arrangements for essential commodities should be specific components of the planning system in order to protect and safeguard the interests of the unorganised community of consumers.

#### BASIC SERVICES

30. The level and quality of basic services\* provided by the State reflects very closely not only its capacity to discharge essential public functions, but also the priority it attaches to building up human capital. General public welfare is greatly dependent on public services supplied. States like U. P. have fallen back in the planning era for sheer lack of resources to simultaneously take care of human as well as real capital needs of the State.

31. There was significant increase in the number of schools and colleges in the State during the past years producing perhaps a situation of over-supply. The number of Junior and Senior basic schools increased from 40,083 and 4,335 in 1960-61 to 69,244 and 11,428 in 1978-79 respectively. Higher secondary schools and degree colleges increased from 1,771 and 128 in 1960-61 to 4,671 and 368 respectively in 1978-79. Although there was an increase of about 73 per cent in the number of Junior Basic schools during the period 1960-61 to 1978-79, the position of the State in this respect is still lower than all-India average and a number of other States. In 1978-79 there were 68 Junior Basic schools per lakh of population in Uttar Pradesh and their number was lower than all-India average of 73 schools and also some States, *viz.* Orissa (124), Himachal Pradesh (110), Madhya Pradesh (105),

Andhra Pradesh (80), Punjab (80), West Bengal (80) and Bihar (77).

32. Enrolment in Junior Basic schools increased from 40.93 lakhs in 1960-61 to 121.61 lakhs in 1978-79 and in Senior Basic schools increased from 8.24 lakhs in 1960-61 to 27.39 lakhs in 1978-79. The enrolment in Junior Basic schools per lakh of population in the State was 11,911 which was more than the all-India average (11,159), but somewhat lower than Gujarat (12,656), Himachal Pradesh (12,368), Kerala (12,871), Maharashtra (13,418), Punjab (13,587) and Tamil Nadu (13,279).

33. In 1971, Uttar Pradesh had 27.70 per cent literacy which was lower than all-India average of 29.45 per cent and lowest among the major States, except Rajasthan (19.07 per cent) and Bihar (19.94 per cent).

34. In the area of public health, progress can be judged with reference to the total number of hospitals set up, including dispensaries and primary health centres. Their number was 1,992 in 1960-61, which rose to 4,140 in 1978-79. The number of beds went up from 19,824 in 1960-61 to 55,730 in 1978-79. Doctors in public employment increased from 2,765 in 1960-61 to 7,280 in 1978-79. It may, however, be mentioned that in spite of substantial increase in the number of hospitals and beds as well as doctors, the fact remains that in 1977-78 only 52 beds per lakh of population were available in allopathic hospitals in U.P. and 128, 198, 125, 102, 101 beds respectively in Himachal Pradesh, Kerala, Maharashtra, Tamil Nadu and West Bengal.

35. By 1960-61, 132 out of 267 towns in the State had been covered through piped drinking water supply schemes. By 1979-80 the number of towns covered under this scheme rose to 409 out of 644 towns. Out of 35,506 scarcity villages, 7,001 villages were covered by 1979-80.

36. Rural electrification programme is crucial for the development of agriculture and rural industries. The position of Uttar Pradesh is very low in this respect in comparison to other States. Out of 1,12,561 villages in the State, only 38,577 villages (i.e. 34.3 per cent) could be electrified by the end of 1979-80. The number

\*Annexure XVIII

of electrified Harijan Basties increased from 5,960 in 1973 to 14,014 in 1979-80. The percentage of electrified villages in the State was 32.2 in 1978-79 as against all-India average of 40.5 per cent. Excepting Bihar, Madhya Pradesh, Orissa and West Bengal the percentage of electrified villages in all the major States were higher than Uttar Pradesh, Punjab and Haryana have saturated all villages with electrification. In Tamil Nadu and Kerala also, electricity has reached to more than 98 per cent villages.

37. Roads are an essential part of infrastructure for socio-economic development. U. P. had a total road length of

24,553 kms. in 1960-61 which increased to 39,058 kms. in 1975-76 and thereafter to 51,039 kms. in 1978-79. In terms of per 100 sq. kms. of area and per lakh of population, the road length only increased from 8 kms. to 17 kms. and 33 kms. to 50 kms., respectively, during the period 1960-61 to 1978-79. In 1975-76, the road length in Uttar Pradesh was 13 kms. per 100 sq. kms. of area. It was below national average of 14 kms. The road length per 100 sq. kms. of area in Haryana, Karnataka, Kerala, Punjab, Tamil Nadu and West Bengal was much higher than Uttar Pradesh being 34 kms., 26 kms., 42 kms., 53 kms., 41 kms. and 27 kms. respectively.

## Annexure I

## Comparison of Per Capita State Income to Per Capita National Income

Year	At Current Prices			At Constant Prices (1970-71)		
	Per Capita Income (Rs.)		U. P.'s percentage to national average	Per Capita Income (Rs.)		U. P.'s percentage to national average
	U.P.	India		U.P.	India	
1	2	3	4	5	6	7
1950-51	259	267	97.4	260*	248*	104.8*
1955-56	213	255	83.5	266*	268*	99.3
1960-61	252	306	82.4	453	559	81.0
1965-66	373	426	87.6	450	559	80.5
1968-69	453	552	82.1	429	589	72.8
1970-71	486	633	76.8	486	633	76.8
1971-72	497	660	75.3	451	627	71.9
1972-73	605	712	85.0	469	604	77.6
1973-74	673	871	77.3	439	621	70.7
1974-75	760	1000	76.0	450	616	73.1
1975-76	730	1021	71.5	481	662	72.7
1976-77	815	1086	75.0	479	658	72.8
1977-78	916	1189	77.0	501	697	71.9
1978-79	930	1249	74.5	509	712	71.5

\*At Constant (1948-49) Prices.

Sources : 1. State Income Estimates of U. P. Bulletin No. 168 and 175.

2. National Accounts Statistics, Government of India, 1976—1980.

**Annexure II**  
*Per Capita Income Estimates of various States and Country (At current Prices)*

			(Rs.)					
State			1960-61	1965-66	1968-69	1970-71	1973-74	1977-78
1			2	3	4	5	6	7
1. Andhra Pradesh	..	..	275	387	495	584 P	829 P	1002+
2. Assam	..	..	315	399	514	538	644	932*
3. Bihar	..	..	215	332	376	402	575	735+
4. Gujarat	..	..	362	498	605	829*	1121*	1452*
5. Haryana	..	..	327	450	635	845*	1174†	1600
6. Kerala	..	..	259	380	496	584	800	987
7. Madhya Pradesh	..	..	260	305	430	489*	725*	950*
8. Maharashtra	..	..	409	534	700	809*	1125*	1637*
9. Karnataka	..	..	296	448	588	685	973	1129 P
10. Orissa	..	..	216	329	464	482	697	799*
11. Punjab	..	..	366	562	903	1030	1438	1991*
12. Rajasthan	..	..	284	373	414	623*	824*	964*
13. Tamil Nadu	..	..	334	403	499	595	830	1036 R
14. Uttar Pradesh	..	..	252	373	453	486	673	916*
15. West Bengal	..	..	390	532	660	735*	946*	1268@
India	..	..	306	426	552	633	871	1189
Rank of U.P.	..	..	14	12	13	14	14	13

Sources : 1. State-wise, Estimates of State Domestic Products.

2. National Accounts Statistics, Government of India, 1976, 1980.

+Quick Estimates

\*Provisional Estimates

@Preliminary Estimates

P—Partially Revised Estimates

R—Revised Estimates.



**Annexure III**  
*Industrial Production Index of U. P. and India for 1979*

Industry	U.P.		India	
	Percentage Weight	Industrial Production Index (1970-71=100)	Percentage Weight	Industrial Production Index (1970=100)
1	2	3	4	5
20-21 Food Manufacturing .. ..	24.99	113.6	9.55	131.0
22 Beverages, Tobacco and Products ..	6.54	139.7	3.58	162.0
23 Cotton Textiles .. ..	11.55	74.9	14.37	109.3
24 Wool, Silk and Synthetic Textiles ..	2.08	82.9	3.79	115.5
25 Jute and mesta .. ..	1.25	123.9	3.34	109.3
26 & 29 Leather, Textile products and fur production ..	2.28	120.6	0.81	74.8
27 Wood and Wood Products .. ..	0.28	113.8	0.60	122.7
28 Paper Printing and Publishing .. ..	3.24	256.3	2.76	123.9
30 Rubber Products, Plastic Petroleum and Coal ..	0.30	336.5	4.74	146.9
31 Chemicals (except Product of Petroleum and Coal)	11.90	115.4	13.44	187.4
32 Non-metallic Mineral Products .. ..	3.94	146.8	4.11	158.2
33 Basic metal alloy industries .. ..	10.91	164.4	10.90	140.5
34 Metal Products( except machinery and transport equipments)	2.93	119.1	3.42	162.9
35 Machinery (except electrical machinery) ..	3.78	169.1	6.84	205.3
36 Electrical machinery .. ..	3.36	178.9	6.54	163.2
37 Transport equipment and parts .. ..	10.03	164.1	9.11	125.4
38 Miscellaneous manufacturing industries ..	0.64	185.1	2.10	120.0
General Index .. ..	100.00	132.8	100.00	145.0
Industry Group 30 to 37 (Modern Industry) ..	47.15	150.2	59.10	161.9

Sources : 1. Industrial Production Indices of U. P., December, 1979.  
2. R. B. I. Bulletin, April 1980.

## Annexure IV

*Electricity Generated in U. P. (Lakh Kw)*

Year	India	U.P.	Percentage Share of U.P.
1	2	3	4
1960-61 .. .. .	169370	12523	7.4
1965-66 .. .. .	329901	30327	9.2
1968-69 .. .. .	474336	53262	11.2
1970-71 .. .. .	558276	57248	10.3
1971-72 .. .. .	609256	61784	10.1
1972-73 .. .. .	645460	67822	10.5
1973-74 .. .. .	666890	58892	8.8
1974-75 .. .. .	701905	62037	8.8
1975-76 .. .. .	792309	80198	10.1
1976-77 .. .. .	883333	96397	10.9
1977-78 .. .. .	913690	92990	10.2
1978-79 .. .. .	1033580	101290	9.8
1979-80 .. .. .	1054252E	101240*	9.6

*Sources* : 1. Year-wise General Review of Public Electricity Supply—All-India. (for 1960-61 to 1977-78).

2. U.P., S.E.B., Statistics at a Glance—March 1980 (1978-79).

3. E=Estimated on the basis of information given in All-India. Economic Survey 1979.

4. \*Working group Report on Power for State VI Plan.

Annexure V  
Growth Rate of Agriculture Sector by Region in U. P.

Region	Growth Rate (Percent)	
	1968-69 over 1960-61	1975-76 over 1968-69
1	2	3
Western .. .. .	1.2	3.5
Central .. .. .	0.8	1.7
Bundelkhand .. .. .	(—)1.3	1.4
Eastern .. .. .	1.3	1.7
Hill .. .. .	1.3	4.7
U. P. .. .. .	1.0	2.5

Sources : 1. Bulletin No. 166. Net District Domestic Products in U. P. (1960-61) to 1973-74.  
2. Supplement to Bulletin No. 166 (1974-75 to 1975-76).

## Annexure VI

*Percentage of Net Irrigated Area to Net area sown*

Year	Regions					U.P.			
	Western	Central	Bundel- Khand	Eastern	Hill				
1	2	3	4	5	6	7			
1960-61	..	..	..	34.5	21.7	15.9	35.5	10.7	30.1
1965-66	..	..	..	43.7	25.4	17.2	36.5	11.4	33.9
1968-69	..	..	..	51.2	28.0	20.2	37.9	16.8	38.0
1969-70	..	..	..	53.3	28.7	20.9	39.1	19.2	39.4
1970-71	..	..	..	56.2	31.7	22.2	40.8	20.1	41.7
1971-72	..	..	..	N. A.	N. A.	N. A.	N. A.	N. A.	40.4
1972-73	..	..	..	59.1	32.7	21.1	39.7	20.5	42.4
1973-74	..	..	..	N. A.	N. A.	N. A.	N. A.	N. A.	42.2
1974-75	..	..	..	62.6	36.4	22.0	42.3	20.4	45.3
1975-76	..	..	..	63.2	37.7	22.4	43.1	22.9	46.1
1976-77	..	..	..	66.0	38.6	22.5	43.8	24.2	47.5
1977-78	..	..	..	66.8	40.9	23.3	44.9	25.3	48.8
1978-79	..	..	..	68.0	43.0	24.5	48.3	25.5	50.9

*Source*—1. Community Development Block-wise Indicators—1980.  
 2. Statistical Abstract of U. P. (1970-71 to 1976-77).  
 3. Directorate of Agriculture, U.P.

## Annexure VII

*Net Irrigated Area in different regions of U. P.*

('000 Hect.)

Year	West	Central	Bundelkhand	East	Hill	Total
1	2	3	4	5	6	7
1960-61 .. ..	2053	647	274	2011	89	5074
1969-70 .. ..	3213	861	386	2246	141	6847
1978-79 .. ..	4149	1338	454	2773	178	8892
Increase in 1969-70 over 1960-61 (Percentage) .. ..	1160 (56.5)	214 (33.1)	112 (40.9)	235 (11.7)	52 (58.4)	1773 (34.9)
Increase in 1978-79 over 1969-70 (Percentage) .. ..	936 (29.1)	477 (55.4)	68 (17.6)	527 (23.5)	37 (26.2)	2045 (29.9)

Source: Uttar Pradesh ke Pramukh Krishi Ankare—1950-51 to 1977-78 and Uttar Pradesh ke Chhetrawar Ankare.

## Annexure VIII

*Estimates of Net Domestic Products (At Constant Price 1970-71)*

(In Crore Rupees)

Year	Secondary		Tertiary		Indices 1960-61=100				
	U.P.	India	U.P.	India	Secondary		Tertiary		
					U.P.	India	U.P.	India	
1	2	3	4	5	6	7	8	9	
1960-61	..	352	4138	788	6425	100.0	100.0	100.0	100.0
1965-66	..	545	5737	896	8444	154.8	138.6	113.7	131.4
1968-69	..	485	6259	947	9480	137.8	151.3	120.2	147.5
1970-71	..	636	6790	1056	10422	180.7	164.1	134.0	162.2
1971-72	..	621	6961	1073	10868	176.4	168.2	136.2	169.2
1972-73	..	669	7212	1113	11161	190.1	174.3	141.2	173.7
1973-74	..	669	7362	1095	11524	190.1	177.9	139.0	179.4
1974-75	..	641	7582	1131	11935	182.1	183.2	143.5	185.8
1975-76	..	710	8042	1203	12863	201.7	194.3	152.7	200.2
1976-77	..	777	8878	1243	13559	220.7	214.5	157.7	211.0
1977-78	..	789	9425	1310	14385	224.1	227.8	166.2	223.9
1978-79	..	847	10032	1358	15210	240.6	242.4	172.3	236.7

*Source*—State Income Estimates in U. P. Bulletin no. 175.  
National Accounts Statistics, 1979 and 1980.

## Annexure IX

*Percentage Distribution of total income at current prices*

Years	India				U.P.				Percentage share of U.P. to India		
	Primary	Sec- ondary	Tertiary	Total	Primary	Sec- ondary	Tertiary	Total	Sec- ondary	Tertiary	
1	2	3	4	5	6	7	8	9	10	11	
1960-61	..	52.2	19.1	28.7	100.0	60.2	11.1	28.7	100.0	8.0	13.9
1965-66	..	49.0	20.3	30.7	100.0	61.2	12.5	26.3	100.0	8.9	12.3
1968-69	..	50.7	19.2	30.1	100.0	59.3	11.8	28.9	100.0	8.1	12.8
1970-71	..	50.1	19.7	30.2	100.0	60.2	14.9	24.9	100.0	9.4	10.1
1971-72	..	48.7	20.2	31.1	100.0	58.9	14.8	26.3	100.0	8.8	10.2
1972-73	..	48.7	20.3	31.0	100.0	62.6	14.3	23.1	100.0	9.6	10.1
1973-74	..	52.4	18.7	28.9	100.0	62.7	14.1	23.2	100.0	9.3	9.8
1974-75	..	48.8	20.3	30.9	100.0	60.0	14.1	25.9	100.0	8.4	10.1
1975-76	..	45.1	21.5	33.4	100.0	54.0	16.3	29.7	100.0	8.6	10.1
1976-77	..	43.2	22.8	34.0	100.0	54.1	16.3	29.6	100.0	8.5	10.3
1977-78	..	43.7	22.6	33.7	100.0	53.5	16.0	30.5	100.0	8.6	11.0
1978-79	..	42.2	23.6	34.2	100.0	51.7	16.6	31.7	100.0	8.2	10.9

*Source*—State Income Estimates in U. P. Bulletin nos. 168, 175  
National Accounts Statistics, 1976 and 1980.

**Annexure X**  
*Economic and Social Indicators of some Major States*

Serial no.	State	Density per sq. kms. 1971	Literacy percentage 1971	Per Capita State Domestic Product at current Prices (Rs.) 1977-78	Percentage shares in State Domestic Products at current prices, 1977-78		
					Primary Sector	Secondary Sector	Tertiary Sector
1	2	3	4	5	6	7	8
1	Andhra Pradesh .. ..	157	24.57	1002 Q	49.6	18.2	32.2
2	Bihar .. ..	324	19.94	735	56.3	20.6	23.1
3	Gujarat .. ..	136	35.79	1452	36.6	27.3	36.1
4	Haryana .. ..	227	26.89	1600 PR	54.9	18.2	26.9
5	Himachal Pradesh .. ..	62	31.96	1178 P	51.6	21.4	27.0
6	Karnataka .. ..	153	31.52	1129 P	51.3	21.0	27.7
7	Kerala .. ..	549	60.42	987	45.5	18.7	35.8
8	Madhya Pradesh .. ..	94	22.14	905	58.6	17.8	23.6
9	Maharashtra .. ..	164	39.18	1637 P	31.1	32.2	36.7
10	Orissa .. ..	141	26.18	799 P	66.2	12.9	20.9
11	Punjab .. ..	269	33.67	1962 Q	55.6	16.7	27.7
12	Rajasthan .. ..	75	19.07	964 Q	59.5	16.3	24.2
13	Tamil Nadu .. ..	317	39.46	1036 RE	31.4	32.3	36.3
14	Uttar Pradesh .. ..	300	21.70	916	53.5	16.0	30.5
15	West Bengal .. ..	504	33.20	1268 PR	43.1	24.3	32.6
	India .. ..	178	29.45	1189 P	43.7	22.6	33.7

Q—Quick Estimates.

P—Provisional Estimates.

PR—Preliminary Estimates.

RE—Revised Estimates.



## Annexure X (Contd.)

Serial no.	State	Rate of growth of State economy 1977-78 over 1970-71	Average yield of wheat per hectare (in kg.) 1977-78	Average yield of rice per hectare (in kg.) 1977-78	Average yield of sugar cane per hectare (in Qntl.) 1977-78 in terms of Gur	Average percentage of gross irrigated area to total gross cultivated area 1977-78	Cropping intensity 1977-78 Percent	
1	2	9	10	11	12	13	14	
1	Andhra Pradesh	..	2.8	686	1491	8604	34.9	114.8
2	Bihar	..	2.9	1261	987	3580	N. A.	N. A.
3	Gujarat	..	2.4	1784	1384	5642	N.A.	N. A.
4	Haryana	..	4.5	2099	2605	4553	51.1	149.1
5	Himachal Pradesh	..	3.2	818	1292	N. A.	N. A.	N. A.
6	Karnataka	..	2.8	672	2082	7335	14.9	107.2
7	Kerala	..	2.0	N. A.	1514	N. A.	N. A.	132.8
8	Madhya Pradesh	..	2.8	909	938	3004	N. A.	N. A.
9	Maharashtra	..	5.2	792	1563	10499	11.2	107.9
10	Orissa	..	2.4	1735	981	6047	N. A.	132.3
11	Punjab	..	4.6	2537	3362	5621	81.3	153.2
12	Rajasthan	..	0.7	1424	1286	4616	20.4	112.2
13	Tamil Nadu	..	2.7	N. A.	2210	11863	N. A.	N. A.
14	Uttar Pradesh	..	2.3	1462	1069	4694	42.9	134.0
15	West Bengal	..	3.2	2040	1387	6142	N. A.	N. A.
	India	..	3.5	1477	1317	5832	N. A.	N. A.

## Annexure X (Contd.)

Serial no.	State	Consumption of Fertilizers per hectare of Gross cultivated area (in kg.hec.) 1978-79			Average daily no. of workers in regd. working factories per lakh of population 1976-77	Per capita consumption of Electricity (KWH) 1978-79	Surfaced road length per hundred sq. km. of area 1975-76
		Nitrogen	Phosphate	Potash			
1	2	15	16	17	18	19	20
1	Andhra Pradesh .. ..	34.9	12.4	3.6	959	91	16
2	Bihar .. ..	13.7	2.3	1.2	421	88	12
3	Gujarat .. ..	18.8	9.1	3.5	1601	230	12
4	Haryana .. ..	30.7	6.0	2.0	861	212	3
5	Himachal Pradesh .. ..	9.1	2.0	1.7	356	56	5
6	Karnataka .. ..	20.7	18.3	7.6	773	151	26
7	Kerala .. ..	15.6	8.0	10.5	920	101	42
8	Madhya Pradesh .. ..	5.8	2.8	0.6	426	96	9
9	Maharashtra .. ..	11.4	4.1	3.6	1639	228	14
10	Orissa .. ..	6.9	1.9	1.1	333	118	7
11	Punjab .. ..	65.3	24.6	4.6	1044	308	53
12	Rajasthan .. ..	6.2	1.3	0.3	386	93	7
13	Tamil Nadu .. ..	42.8	11.9	14.2	1210	185	41
14	Uttar Pradesh .. ..	33.3	8.9	3.4	519	89	13
15	West Bengal .. ..	19.2	6.9	5.8	1467	122	27
	India .. ..	20.5	6.6	3.5	856	131	14

## Annexure X--(Concl.d.)

Serial no.	State	No. of recognised Primary Junior Basic Schools per lakh of population 1978-79	No. of Allopathic hospitals dispensaries per lakh of population 1977-78	Beds available in Allopathic Hospitals per lakh of population 1977-78	Electrified villages as percentage of the total villages at the end of the year 1978-79	Per Capita Plan Outlay 1974-79
1	2	21	22	23	24	25
1	Andhra Pradesh .. .. .	80	3	75	56.9	324
2	Bihar .. .. .	77	1	38	28.1	214
3	Gujarat .. .. .	33	3	72	51.8	483
4	Haryana .. .. .	45	3	70	100.0	661
5	Himachal Pradesh.. .. .	110	6	128	49.2	471*
6	Karnataka .. .. .	65	4	94	58.7	349
7	Kerala .. .. .	28	6	198	98.4	288
8	Madhya Pradesh .. .. .	105	2	39	27.3	328
9	Maharashtra .. .. .	56	5	125	65.4	498
10	Orissa .. .. .	124	2	48	30.8	231
11	Punjab .. .. .	80	6	87	100.0	696
12	Rajasthan .. .. .	66	3	63	37.0	317
13	Tamil Nadu .. .. .	60	3	102	98.7	263
14	Uttar Pradesh .. .. .	68	3	52	32.2	314
15	West Bengal .. .. .	80	2	101	31.9	270
	India .. .. .	73	3	80	40.5	353

\*Relates to the period 1974—78.

## Annexure XI

## Statewise Irrigation Coverage and Irrigation Intensity (1976-77)

State						Irrigation Coverage (a)	Irrigation intensity (b)
1						2	3
1. Andhra Pradesh ..	..	..	..	..	..	32.4	121.0
2. Bihar ..	..	..	..	..	..	34.5	125.2
3. Gujarat ..	..	..	..	..	..	12.8	111.4
4. Haryana ..	..	..	..	..	..	49.3	150.1
5. Himachal Pradesh ..	..	..	..	..	..	16.3	172.2
6. Karnataka ..	..	..	..	..	..	13.2	120.7
7. Kerala ..	..	..	..	..	..	10.0	176.8
8. Madhya Pradesh ..	..	..	..	..	..	10.7	103.4
9. Maharashtra ..	..	..	..	..	..	8.3	118.6
10. Orissa ..	..	..	..	..	..	17.8	131.8
11. Punjab ..	..	..	..	..	..	76.6	159.0
12. Rajasthan ..	..	..	..	..	..	17.3	114.1
13. Tamil Nadu ..	..	..	..	..	..	38.8	128.8
14. Uttar Pradesh ..	..	..	..	..	..	47.5	117.9
15. West Bengal ..	..	..	..	..	..	23.3	107.1
India ..	..	..	..	..	..	24.6	123.8

(a) Percentage of net area irrigated to net area sown.

(b) Percentage of gross area irrigated to net area irrigated.

Source : Fertilizer Statistics, 1978-79.

Annexure XII  
Indices of Agricultural Production in Uttar Pradesh

Year	Production (Lakh M.T.)			Indices 1950-51=100		
	Food-grains	Potato	Sugarcane	Food-grains	Potato	Sugar-cane
1	2	3	4	5	6	7
1950-51	117.75	6.41	294.98	100.0	100.0	100.0
1955-56	120.58	6.87	298.71	102.4	107.2	101.3
1960-61	144.86	8.00	545.16	123.0	124.8	184.8
1965-66	132.91	13.42	566.60	112.9	209.4	192.1
1968-69	160.41	16.32	505.43	136.2	254.6	171.3
1969-70	174.13	12.49	606.79	147.9	194.9	205.7
1970-71	194.67	14.86	546.72	165.3	231.8	185.3
1971-72	176.73	16.80	493.54	150.1	262.1	167.3
1972-73	181.33	16.03	567.27	154.0	250.1	192.3
1973-74	155.63	17.21	607.73	132.2	268.5	206.0
1974-75	163.28	21.39	614.79	138.7	333.7	208.4
1975-76	194.56	25.07	583.59	165.2	391.1	197.8
1976-77	199.09	23.29	652.16	169.1	363.3	221.1
1977-78	212.35	30.25	768.19	180.3	471.9	260.4
1978-79	231.08	42.96	623.24	196.2	670.2	211.3
1979-80	186.16*	31.65*	477.54*	158.1	493.8	161.9

\*Provisional.

Source : Cols. 2, 3 तथा 4 के आंकड़े उत्तर प्रदेश के कृषि के प्रमुख आंकड़ों की पुस्तिका ।

## Annexure XIII

*Percentage share of value added to all Industries in U. P.*

Year	Value added (Crore Rs. 0.00)			Percentage share in total value added					
	Agro based Industries	Cotton Textiles	All Industries	Agro based Industries	Cotton Textile				
1	2	3	4	5	6				
1967	..	..	..	..	25.30	20.20	108.11	23.40	18.68
1968	..	..	..	..	38.06	25.01	148.80	25.58	16.81
1969	..	..	..	..	65.51	24.88	195.97	33.43	12.70
1970	..	..	..	..	57.81	27.99	207.86	27.81	13.47
1971	..	..	..	..	43.45	20.85	208.88	20.80	9.98
1973-74	..	..	..	..	93.42	33.84	305.21	30.61	11.09
1974-75	..	..	..	..	53.67	36.74	370.73	14.48	9.91
1975-76	..	..	..	..	60.70	31.58	385.23	15.76	8.20
1976-77	..	..	..	..	88.51	25.05	446.53	19.82	5.61

*Source—Annual Survey of Industries 1967 to 1976-77.*

Annexure XIV  
Percentage share of output to all Industries in U.P.

Year	Value of output (Crore Rs.)			Percentage share in total output	
	Agro based Industries	Cotton Textile	All Industries	Agro based Industries	Cotton Textile
1	2	3	4	5	6
1967	236.27	80.08	584.67	40.41	13.70
1968	305.96	103.28	724.80	42.21	14.25
1969	393.94	99.88	882.55	44.64	11.32
1970	411.57	117.75	973.06	42.30	12.10
1971	382.18	107.81	1039.15	36.78	10.37
1973-74	497.81	107.74	1399.62	35.57	7.70
1974-75	558.53	129.98	1763.83	31.67	7.37
1975-76	624.97	138.75	1893.96	31.50	6.99
1976-77	640.90	165.46	2273.20	28.19	7.28

Source—Annual Survey of Industries 1967 to 1976-77.

Annexure XV  
Crude Birth, Death and Infant Death Rates (based on sample Registration Scheme)

Years	India			Uttar Pradesh		
	Birth rate	Death rate	Infant Death rate	Birth rate	Death rate	Infant Death rate
1	2	3	4	5	6	7
1970 .. ..	36.8	15.7	129	45.4	21.6	N.A.
1971 .. ..	36.9	14.9	129	44.9	20.1	N.A.
1972 .. ..	36.6	16.9	139	43.2	25.6	202
1973 .. ..	34.6	15.5	134	41.7	19.4	176
1974 .. ..	34.5	14.5	126	42.1	19.7	172
1975 .. ..	35.2	15.9	140	43.1	22.6	198
1976 .. ..	34.4	15.0	129	40.0	20.5	178
1977 .. ..	33.0	14.7	N.A.	40.3	19.1	N.A.
1978 .. ..	33.2	14.1	N.A.	40.4	20.2	N.A.

Source :— Sample Registration Bulletin, Registrar General of India, Ministry of Home Affairs, (October 1976 and December 1979).





## Annexure XVII

*Average size of Land cultivated and percentage distribution of Estimated number of Agricultural Labour Households with Cultivated Land by size of Land Cultivated 1974-75.*

State	Average size of land cultivated (Acres)	Percentage of estimated number of household with size of land cultivated (Acres)								All classes
		0.01 to 0.49	0.50 to 0.99	1.00 to 1.49	1.50 to 1.99	2.00 to 2.49	2.50 to 4.99	5.00 and above		
1	2	3	4	5	6	7	8	9	10	
1. Andhra Pradesh ..	1.19	27.5	22.4	21.2	6.5	9.8	9.8	2.8	100.0	
2. Bihar ..	0.65	56.2	18.7	12.8	3.5	5.1	3.3	0.4	100.0	
3. Gujarat ..	1.77	21.5	14.0	19.9	7.2	13.7	17.8	5.9	100.0	
4. Haryana ..	1.14	45.5	15.9	18.2	..	6.8	4.5	9.1	100.0	
5. Himachal Pradesh ..	0.65	62.2	13.6	12.1	7.5	1.5	1.5	1.5	100.0	
6. Karnataka ..	2.15	16.5	9.6	19.0	5.4	19.5	20.8	9.2	100.0	
7. Kerala ..	0.46	68.5	71.1	7.4	3.6	1.1	2.3	..	100.0	
8. Madhya Pradesh ..	1.73	29.3	12.0	15.5	7.1	12.1	16.6	7.4	100.0	
9. Maharashtra ..	2.29	26.0	9.4	11.8	7.0	10.4	22.0	13.4	100.0	
10. Orissa ..	1.00	33.5	21.6	20.3	7.3	8.1	7.7	1.5	100.0	
11. Punjab ..	1.43	38.1	8.2	21.6	5.2	8.3	11.3	7.3	100.0	
12. Rajasthan ..	2.49	10.6	10.1	21.0	7.9	19.8	20.2	10.4	100.0	
13. Tamilnadu ..	0.99	33.5	26.1	20.1	6.6	5.6	6.4	1.7	100.0	
14. Uttar Pradesh ..	0.79	38.6	31.8	16.2	5.3	4.7	2.9	0.5	100.0	
15. West Bengal ..	0.52	60.1	21.4	12.2	1.8	3.1	1.4	..	100.0	
16. Assam ..	0.81	40.7	25.2	21.5	4.7	4.7	3.0	0.2	100.0	
India ..	1.11	40.1	19.9	15.7	5.3	7.4	8.4	3.2	100.0	

Source—Rural Labour Enquiry, 1974-75, P. 34.

Annexure XVIII  
Average Daily Wage Rates of other Agricultural Labour

(Rs. '0.00)

Year	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	
Name of States	1	2	3	4	5	6	7	8	9	10
1. Andhra Pradesh ..	2.88	3.12	2.80	2.82	3.64	4.13	4.58	4.65	5.09	
2. Bihar ..	N.A.	2.91	3.44	N.A.	3.83	4.69	N.A.	6.23	5.89	
3. Gujarat ..	2.94	2.61	2.93	3.00	3.15	4.50	5.50	5.50	5.50	
4. Haryana ..	5.91	7.00	6.00	5.50	7.18	7.67	8.00	8.00	8.89	
5. Himachal Pradesh ..	N.A.	N.A.	N.A.	N.A.	4.70	4.25	4.25	4.64	5.25	
6. Karnataka ..	2.30	2.84	2.25	2.88	2.86	3.79	4.70	4.28	4.43	
7. Kerala ..	4.04	5.13	4.49	6.25	7.72	8.20	8.07	8.19	10.00	
8. Madhya Pradesh ..	2.20	2.17	2.12	2.67	3.73	3.76	3.61	5.45	3.68	
9. Maharashtra ..	2.45	2.61	2.30	2.75	3.90	4.14	3.00	3.00	N.A.	
10. Orissa ..	2.16	2.27	2.49	2.97	3.32	3.63	4.67	4.00	4.25	
1. Punjab ..	6.46	7.46	8.83	8.25	9.55	11.11	10.28	10.00	10.00	
12. Tamilnadu ..	2.29	2.33	2.81	3.16	3.98	4.75	5.00	4.75	4.77	
13. Uttar Pradesh ..	2.31	2.44	2.76	3.19	4.05	4.20	5.69	5.07	4.46	

Source—Based on Agricultural Situation in India.

N.A.—Denotes —Not available.

## Annexure XIX

Estimates of National/State Income at Current and Constant (1970-71) Prices

Year	Current Price Estimates				Constant Price (1970-71) Estimates			
	U.P.		India		U.P.		India	
	Total Rs.) crore)	Per capita (Rs.)	Total (Rs.) crore)	Per capita (Rs.)	Total (Rs.) crore)	Per capita (Rs.)	Total (Rs.) crore)	Per capita (Rs.)
1	2	3	4	5	6	7	8	9
1960-61	1 843	252	13 263	306	3 321	453	24 250	559
1961-62	1 926	280	13 987	315	3 3 65	452	25 039	564
1962-63	2 001	264	14 795	526	3 317	437	25 416	560
1963-64	2 221	288	16 977	366	3 233	419	26 746	576
1964-65	2 882	367	20 001	422	3 728	474	28 808	608
1965-66	2 986	373	20 637	426	3 601	450	27 103	559
1966-67	3 509	431	23 848	482	3340	398	27 298	532
1967-68	4 073	491	28 054	554	3647	440	29 715	587
1968-69	3 829	453	28 607	552	3628	429	30 513	589
1969-70	4 186	487	31 006	598	3988	464	32 408	613
1970-71	4 256	486	34 235	633	4 256	486	34 235	633
1971-72	4 434	497	36 573	660	4 017	451	34 715	627
1972-73	5 491	605	40 270	712	4 254	469	34 191	604
1973-74	6 220	673	50 424	871	4 059	439	35 967	621
1974-75	7 154	760	59 083	1 000	4 237	450	36 411	616
1975-76	7 005	730	61 644	1 021	4 611	481	40 111	66.2
1976-77*	7 953	815	66 885	1 086	4 678	479	40 534	65.8
1977-78*	9 104	916	74 794	1 189	4 989	501	43 857	69.7
1978-79**	9 420	930	80 090	1 249	5 159	509	45 637	71.2

\*Provisional estimates.

\*\*Quick estimates.

Source : —1. National Account Statistics Government of India 1979 and 1980.  
2. State Income Estimates of U. P. 1970-71 to 1978-79 Bulletin No. 175.

**Annexure XX**  
*Hydro Thermal Electric Generated in U. P.*

(Million Unit)

Years	Hydel		Thermal	
	Total	Index	Total	Index
	Generation 1960-61=100		Generation 1960-61=100	
1	2	3	4	5
1960-61 .. .. .	414.4	100.0	492.0	100.0
1965-66 .. .. .	1533.6	370.1	1293.0	262.8
1968-69 .. .. .	1599.6	386.0	2765.2	562.1
1970-71 .. .. .	1954.6	471.7	3572.2	726.1
1971-72 .. .. .	227.7	549.6	3706.1	753.3
1972-73 .. .. .	2708.7	653.6	3847.3	782.0
1973-74 .. .. .	1974.0	476.4	3749.5	762.1
1974-75 .. .. .	1578.6	380.9	4560.6	927.0
1975-76 .. .. .	2655.4	640.8	5355.7	1088.6
1976-77 .. .. .	3832.0	924.7	5796.3	1178.1
1977-78 .. .. .	3175.0	766.2	6111.9	1242.3
1978-79 .. .. .	3682.6	888.7	6441.7	1309.3
1979-80 .. .. .	3266.0	788.1	6858.0	1393.9

\*Tentative

NOTES—Does not include generation of Micro/Diesel stations in Hill districts.

Source—U. P. S. E. B. Statistics at a Glance March 1980.

## Annexure XXI

Estimates of District Domestic Output—1976-77 (at current prices)

Serial no.	District	Total output (crore Rs.)	Per capita output (Rs.)
1	2	3	4
1	Agra .. .. .	116.29	447.44
2	Aligarh .. .. .	129.60	555.51
3	Budaun .. .. .	97.06	541.63
4	Bareilly .. .. .	115.40	585.79
5	Bijnor .. .. .	106.99	633.83
6	Bulandshahr .. .. .	117.36	525.10
7	Eatah .. .. .	88.38	506.48
8	Etawah .. .. .	71.18	539.11
9	Farrukhabad .. .. .	86.55	502.61
10	Mainpuri .. .. .	88.64	547.84
11	Mathura .. .. .	74.29	519.15
12	Meerut .. .. .	156.82	597.41
13	Moradabad .. .. .	144.93	532.05
14	Muzaffarnagar .. .. .	161.89	795.14
15	Pilibhit .. .. .	70.85	843.45
16	Rampur .. .. .	55.99	540.44
17	Saharanpur .. .. .	205.71	876.48
18	Shahajahanpur .. .. .	88.07	638.19
19	Ghaziabad .. .. .	143.12	1174.08
	Western Region .. .. .	2119.12	606.14
1	Bara Banki .. .. .	98.15	553.58
2	Fatehpur .. .. .	73.00	518.74
3	Hardoi .. .. .	98.33	486.06
4	Kanpur .. .. .	197.13	579.62
5	Kheri .. .. .	106.93	656.01
6	Lucknow .. .. .	72.54	404.12
7	Rae Bareli .. .. .	84.10	514.69
8	Sitapur .. .. .	103.65	503.89
9	Unnao .. .. .	77.36	469.13
	Central Region .. .. .	911.28	524.60

## Annexure XXI—(Contd.)

Serial no.	District	Total output (crore Rs.)	Per capita output (Rs.)
1	2	3	4
1	Banda .. .. .	74.84	561.86
2	Hamirpur .. .. .	65.16	583.87
3	Jalaun .. .. .	51.13	560.64
4	Jhansi .. .. .	47.91	496.99
5	Lalitpur .. .. .	27.85	575.41
Bundel Khand Region		266.89	555.10
1	Allahabad .. .. .	169.89	521.78
2	Azamgarh .. .. .	114.12	363.32
3	Bahraich .. .. .	72.92	390.57
4	Ballia .. .. .	60.16	343.97
5	Basti .. .. .	117.49	367.50
6	Deoria .. .. .	122.41	396.28
7	Faizabad .. .. .	73.78	349.17
8	Ghazipur .. .. .	70.05	420.97
9	Gonda .. .. .	91.16	373.45
10	Gorakhpur .. .. .	135.86	407.13
11	Jaunpur .. .. .	79.17	363.17
12	Mirzapur .. .. .	108.68	627.85
13	Pratapgarh .. .. .	61.65	403.20
14	Sultanpur .. .. .	67.89	379.70
15	Varanasi .. .. .	134.34	424.59
Eastern Region		1479.57	408.20
1	Almora .. .. .	43.30	528.05
2	Pithoragarh .. .. .	28.79	827.30
3	Dehra Dun .. .. .	41.04	604.42
4	Garhwal .. .. .	29.08	488.74
5	Chamoli .. .. .	31.88	1002.52
6	Naini Tal .. .. .	92.42	986.34
7	Tehri Garhwal .. .. .	20.59	482.20
8	Uttar Kashi .. .. .	16.68	1010.91
Hill Region		303.78	708.28
Uttar Pradesh		5080.64	520.16

Source : District Domestic Net Output (Commodity Producing Sectors) 1976-77 at current prices.

## Annexure XXII

*Trend of Retail Prices of Essential Commodities during the period April—September.*

Commodities	Percentage increase in last week prices of		Percentage increase in last week prices of		Percentage increase in average prices of		% increase in average prices during the period						
	April '79 over April '78	April '80 over April '79	Sept. '79 over Sept. '78	Sept. '80 over Sept. '79	Sept. '78 over April '78	Sept. '79 over April '79	Sept. '80 over April '80	April— Sept. 1979 over April- Sept. 1978	April— Sept. 1980 over April- Sept. 1979				
	1	2	3	4	5	6	7	8	9	10			
1. Wheat .. .. .	..	..	..	..	-2.4	+10.4	+12.3	+2.7	-4.4	+11.4	+2.1	+1.6	+12.4
2. Maida .. .. .	..	..	..	..	+3.7	+6.6	+7.9	+5.5	+5.2	+6.0	+7.6	+3.6	+7.9
3. Gram .. .. .	..	..	..	..	0.0	+25.4	-1.2	+51.9	+7.9	+10.7	+43.7	+2.4	+41.2
4. Besan .. .. .	..	..	..	..	-0.3	+11.1	-3.8	+48.7	+10.0	+5.8	+43.9	+1.7	+32.0
5. Rice .. .. .	..	..	..	..	-6.5	+18.6	+13.4	-0.8	+1.7	+20.0	+2.7	-4.23	+15.0
6. Maize .. .. .	..	..	..	..	-4.0	+22.7	+10.1	+13.0	-5.5	+8.2	+5.5	0.0	+24.0
7. Pulse Arhar .. .. .	..	..	..	..	+3.1	-6.0	-10.2	-1.6	+9.5	+3.9	+6.6	-2.5	-3.9
8. Pulse Moong :—													
I. Chhilkedar .. .. .	..	..	..	..	+24.0	+4.8	+17.7	+3.4	+5.4	+1.3	-3.7	+18.7	+5.2
II. Dhuli .. .. .	..	..	..	..	+23.8	+6.1	+11.2	+3.8	+11.7	+1.7	-1.3	+17.0	+5.2
9. Pulse Urd :													
I. Chhilkedar .. .. .	..	..	..	..	+18.9	-1.7	+17.8	-10.4	+8.5	+11.8	-0.2	+17.6	-5.9
II. Dhuli .. .. .	..	..	..	..	+19.0	-5.5	+6.1	-6.5	+14.4	+4.5	+0.7	+11.4	-6.4
10. Onion .. .. .	..	..	..	..	+32.8	0.0	+37.2	-53.7	+92.4	+6.6	-7.5	+27.2	-30.8
11. Potato .. .. .	..	..	..	..	-47.5	+210.0	-21.1	+110.0	+46.8	+116.7	+56.7	-33.3	+129.4
12. Mustard oil .. .. .	..	..	..	..	+0.9	+24.3	+4.9	+23.7	+10.6	+15.2	+14.4	+1.3	+25.3
13. Meat—Goat .. .. .	..	..	..	..	+9.1	+19.4	+11.0	+21.9	0.0	+3.0	+5.8	+10.2	+19.6



14. Fish :

I. Rohu .. .. .	..	..	..	..	+9.5	+18.6	-0.4	+33.0	+1.3	-2.1	+5.5	+5.1	+24.4
II. Padhin .. .. .	..	..	..	..	+11.2	+24.5	-0.2	+40.0	+5.9	-1.1	+9.0	+5.7	+29.6
15. Egg .. .. .	..	..	..	..	+2.2	-2.2	-4.2	+4.3	+2.1	-4.2	+6.5	0.0	+2.2
16. Gur .. .. .	..	..	..	..	+27.6	+120.3	+78.0	+116.1	+24.0	+81.8	+79.2	+53.1	+104.5
17. Sugar .. .. .	..	..	..	..	-14.1	+98.6	+18.4	+127.5	-22.2	+12.2	+34.6	-6.9	+112.8
18. Salt .. .. .	..	..	..	..	+35.5	+4.8	+35.3	0.0	+13.3	+9.5	+4.5	+37.5	+2.3
19. Chilli .. .. .	..	..	..	..	+0.8	-9.7	-2.0	-14.6	+4.2	+0.5	-3.3	-1.4	-10.5
20. Dhoti .. .. .	..	..	..	..	+10.8	+4.7	+8.4	+4.2	+7.0	+4.0	+3.6	+7.4	+5.8
21. Latha .. .. .	..	..	..	..	+6.4	+13.9	+10.8	+10.7	+2.7	+4.6	+3.8	+6.4	+14.0
22. Markin .. .. .	..	..	..	..	+8.1	+15.9	+11.6	+15.2	+1.4	+4.6	+3.3	+6.4	+16.3
23. Cotton .. .. .	..	..	..	..	-0.7	+0.5	-0.6	-1.0	+3.7	+4.7	+1.1	-1.8	+0.3
24. Yarn .. .. .	..	..	..	..	+1.6	+8.9	+9.1	+3.7	-0.5	+4.4	+1.6	+3.1	+8.4
25. Vegetable oil .. .. .	..	..	..	..	+10.5	+18.6	+21.7	+1.4	+2.0	+11.2	-3.1	+13.4	+12.5
26. Coke .. .. .	..	..	..	..	+38.9	+27.8	+34.8	+9.4	+23.3	+19.2	+2.3	+38.7	+19.6
27. Kerosene oil .. .. .	..	..	..	..	+8.6	+7.2	+21.8	-2.3	+1.4	+15.9	+3.7	+11.3	+4.5
28. Match Box .. .. .	..	..	..	..	+25.0	+20.0	+30.8	+5.9	+8.3	+13.3	+5.9	+23.1	+12.5
29. Washing Soap .. .. .	..	..	..	..	+10.8	+25.0	+14.3	+27.6	+2.3	+6.3	+8.4	+9.8	+28.3
30. Bathing Soap. (Toilet) .. .. .	..	..	..	..	+7.8	+27.5	+4.5	+38.1	+3.9	+0.7	+11.0	+5.3	+33.3
31. Tea .. .. .	..	..	..	..	-1.8	+13.4	-1.4	+13.4	-0.9	-0.9	+0.4	-1.4	+13.4
32. Cycle Tyre .. .. .	..	..	..	..	+10.6	+6.0	+6.3	+4.2	+5.5	+1.8	-0.2	+8.0	+5.4
33. Cycle tube .. .. .	..	..	..	..	+13.4	+7.2	+7.7	+7.4	+6.4	+0.4	+0.3	+10.3	+7.0
34. Baby Food .. .. .	..	..	..	..	+17.2	+15.3	+9.0	+10.9	+12.6	+5.6	+1.9	+14.5	+12.7

Annexure XXII—(Contd.)

Commodities	Percentage increase in last week prices of		Percentage increase in last week prices of		Percentage in crease in average prices of			% increase in average prices during the period		
	April '79 over April '78	April '80 over April '79	Sept. '79 over Setpr. '78	Sept. '80 over Sept. '79	Sept. '78 over April '78	Sept. '79 over April '79	Sept. '80 over April '80	April-Sept. 1979 over April-Sept. 1978	April-Sept. 1980 over April-Sept. 1979	
	1	2	3	4	5	6	7	8	9	10
35. Medicine :—										
I. Oracine .. ..	..	+3.3	+0.4	+1.2	—0.8	+2.9	+0.8	—0.4	+2.0	—0.4
II. Anacine .. ..	..	+8.6	0.0	+2.7	+1.3	+5.7	0.0	+1.3	+5.6	0.0
36. Copy (White Printing paper)	..	0.0	+16.7	0.0	+73.3	0.0	0.0	+48.6	0.0	+40.0
37. Paper .. ..	..	+21.1	+30.8	+24.5	+29.8	+6.3	+8.8	+8.9	+21.8	+29.6
38. Electric bulb .. ..	..	+16.1	+16.0	+17.4	+12.5	+4.7	+6.8	+3.8	+27.5	+14.6
39. Torch Cell .. ..	..	+8.0	+11.4	+8.2	+11.4	+7.4	+5.4	+5.4	+7.0	+10.5
40. Cement .. ..	..	+26.2	+14.9	+44.1	—2.9	+4.9	+18.8	+1.3	+32.8	+5.5
41. Ghee .. ..	..	+5.9	+2.4	+14.0	+1.9	+5.0	+4.3	+3.8	+4.8	+2.9
42. Utencils of Stainless Steel—										
I. Utencils .. ..	..	—6.1	+1.0	—1.5	—1.4	—4.2	+1.0	—1.4	—3.8	0.0
II. Bhagona. .. ..	..	—7.3	+1.3	—0.6	—2.3	—4.9	+2.0	—1.6	—4.9	0.0
43. Coriandar .. ..	..	—28.9	+40.2	—14.8	+60.9	—8.9	+16.1	+38.4	—25.6	+61.6
44. Turameric .. ..	..	—10.8	—31.4	—31.1	—23.2	+14.1	—15.0	—5.8	—25.1	—23.8
45. Zeera .. ..	..	—29.2	—11.8	—31.0	—7.2	—4.8	—8.7	—4.8	—32.7	—6.1
46. Black Pepper .. ..	..	—4.1	—4.3	—2.1	—7.2	+2.3	+2.0	—0.7	—4.8	—4.2
47. Bread .. ..	..	+0.9	+8.6	+2.6	+10.9	+0.9	+1.7	+4.8	+1.7	+9.4

Annexure XXIII  
Selected Indicators of development of Uttar Pradesh

Item	1960-61	1965-66	1968-69	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79
1	2	3	4	5	6	7	8	9	10
<b>1. Structure of economy</b>									
1.1—Constant Price (1970-71) estimate Per cent.									
(a) Primary sector.	65.7	60.0	60.5	56.5	58.2	58.5	(P) 56.8 (P)	(P) 57.9 (P)	(Q) 57.3 (P)
(b) Secondary sector.	10.6	15.1	13.4	16.5	15.1	15.4	(P) 16.6 (P)	(P) 15.8 (P)	(P) 16.4 (P)
(c) Tertiary sector.	23.7	24.9	26.1	27.0	26.7	26.1	26.6	26.3	26.3
1.2—Sectoral contribution at current prices (percentage).									
(a) Primary sector.	60.2	61.2	59.3	62.7	60.0	54.0	(P) 54.1 (P)	(P) 53.5 (P)	(P) 51.7 (P)
(b) Secondary sector.	11.1	12.5	11.8	14.1	14.1	16.3	(P) 16.3 (P)	(P) 16.0 (P)	(P) 16.6 (P)
(c) Tertiary sector.	28.7	26.3	28.9	23.2	25.9	29.7	29.6	30.5	31.7
<b>2. Price Indices</b>									
2.1—Agriculture sale Price Index (base 1957-58=100).	108.1	178.9	231.9	330.3	421.8	321.5	328.0	358.5	347.3
2.2—Industrial wholesale Price Index (base 1948=100).	123.0	145.9	273.1	353.7	431.7	412.0	426.7	439.8	391.6
<b>3. Agriculture</b>									
3.1—Average Yield in Qtls./Hect.									
(a) Wheat	10.01	9.12	12.01	9.78	11.66	13.59	13.50	14.62	15.50
(b) Rice ..	7.53	5.57	6.44	8.63	7.80	9.29	9.22	10.69	11.59
(c) Pulses ..	8.41	7.28	8.19	5.32	6.94	8.42	8.62	8.10	7.62
(d) Sugarcane	410.21	380.28	420.19	412.65	412.19	405.08	447.94	469.41	381.41
(e) Potato ..	70.37	91.33	93.84	92.04	104.43	131.29	127.58	149.86	155.10
(f) Oil seeds ..	3.94	4.07	3.95	4.32	5.09	4.95	3.96	3.90	4.04
3.2—Production of foodgrains (Lakh M.T.).	144.86	132.91	160.41	155.63	163.28	194.56	199.09	212.35	231.08
3.3—Intensity of cropping.	126.43	127.28	129.53	134.01	132.79	134.28	133.25	134.03	139.01
3.4—Gross irrigated area as percentage to gross cropped area.	25.58	29.93	33.75	36.91	40.33	39.96	42.07	42.87	43.52
3.5—Consumption of fertilizer (kg. per Hect.)	1.38	4.21	15.09	20.13	17.94	21.08	31.42	36.83	45.60

P-Provisional

Q-Quick estimates.

## Annexure XXXIII—(Conold.)

Item	1960-61	1965-66	1968-69	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79
1	2	3	4	5	6	7	8	9	10
<b>4. Industries</b>									
4.1—Industrial production Index (at base 1970-71=100.)									
(a) Total .. ..	..	..	..	111.4	109.6	119.5	136.0	138.7	160.3
(b) Sugar .. ..	..	..	..	82.4	79.7	88.4	71.7	90.5	114.6
(c) Cotton Spinning and weaving in mills.	..	..	..	75.7	81.0	77.4	79.5	77.2	85.6
4.2—Value added per worker (Rs.)	N.A.	3174	5552	8545	9129	7915	9098	10755	N.A
<b>5. Power</b>									
5.1—Electrified villages (No.)	1082	5855	12926	29765	30798	31862	33098	35026	36298
5.2—Electrified Harijan Basties (No.)	..	..	..	5960	6311	7701	9005	10996	12453
5.3 Per capita power consumption (KWH).	13	29	49	58	61	73	86	80	90
5.4—Power consumption by categories (%)									
(a) Industry ..	51.65	69.12	67.81	58.88	54.10	47.10	56.50	50.95	49.89
(b) Irrigation	20.50	13.32	15.33	4.02	26.35	28.73	26.23	30.37	30.26
(c) Domestic use	12.58	8.03	6.65	9.73	9.35	9.79	9.52	10.17	10.17
(d) Others ..	15.27	9.53	10.21	27.37	10.20	14.38	7.75	8.51	9.68
<b>6. Roads</b>									
Length of Metalled roads per 100 sq. kms. of area.	8.3	11.6	12.4	12.1	13.0	13.3	13.8	14.9	17.3
<b>7. Medical</b>									
7.1—No. of Hospital/dispensaries per lakh of population.	3	3	3	3	3	3	3	3	3
7.2—No. of beds in Hospitals/dispensaries, per lakh of population.	23	42	45	49	52	52	52	52	52
<b>8. Education</b>									
8.1—Enrolment in Junior Basic schools (000 No.)	4093	9018	10171	11799	11518	11964	11965	12086	12161
8.2—Enroiment in Secnior Basic Schools, (000 No.)	824	1514	1912	2428	2458	2487	2511	2675	2739

## CHAPTER 2

### PERSPECTIVE OF DEVELOPMENT IN THE EIGHTIES

Planning as a process aims at accelerated economic growth, equitable and balanced distribution, determination of priorities and objectives in the short period against a long term perspective. Indeed without a larger perspective, it is difficult to take current decisions with confidence and certainty. A long-term perspective, worked out in detail, brings out the interdependence between different sectors of the economy and helps in better identification of possible obstacles to the achievement of the desired pace and pattern of growth of the economy. Within the sectors, it provides a framework in which consistent and timely decisions can be taken regarding optimum allocation of limited resources.

2. An attempt has been made here to present a general framework of the perspective of development for the period 1980-90. The perspective period has been bifurcated in two quinquennia, viz. 1980-85 and 1985-90. In order to achieve realism, the exercise of drawing up a perspective of the State's development, problems, potentialities and constraints of development have been taken into consideration.

3. Note has also been taken of the prevailing institutional arrangements within which the planning system functions in the national federal structure.

4. The historical background and the way in which the economy of the State has grown since the dawn of planning provides a starting-point for the present exercise.

#### PAST TRENDS OF GROWTH

5. During the planning era U. P. has made progress over a broad front. State income growth trends in aggregate and in their sectoral composition, provide an overall quantitative measure of development in different sectors of the economy. It is true that this measure by itself does not throw any light on the distribution of personal income or on overall welfare, but it continues to remain invaluable in spite of this limitation. Comparative figures of

U. P. and national growth trends are indicative of U. P.'s present status and deterioration in its relative situation, for which urgent steps have to be taken now.

*Growth rates observed in different sectors of the economy during 1960-61 to 1978-79*

(Per cent per annum)

Sectors	U.P.	India
1. Agriculture and allied ..	1.7	2.2
2. Manufacturing ..	4.7	4.9
3. Rest of the sectors ..	3.5	4.9
4. Total Income ..	2.5	3.6

6. It would be seen that net domestic product in U. P. observed an annual compound growth rate of 2.5 per cent against the country's corresponding growth rate of 3.6 per cent during the long period 1960-61 to 1978-79. In case of individual sectors also, India's growth rates were higher than that of U. P.

7. Plan periodwise growth rates of total incomes for U. P. and India from the First Plan onwards, presented in the following table, give an idea of the comparative position in each five year period.

*Rates of growth in india and U.P.*

(Per cent per annum)

Period	U.P.	India
First Plan .. ..	1.9	3.4
Second Plan .. ..	1.8	4.0
Third Plan .. ..	1.6	2.2
Fourth Plan .. ..	2.3	3.3
1974-79 .. ..	4.9	4.9

8. The above table shows that growth rates of State income remained almost stagnant from the First to the Third Plan,

being around 2 per cent. However, the rate of growth in the State income has been successively improving after the Third Plan, with a remarkable achievement during the period 1974-79, when the economy witnessed an annual growth rate of 4.9 per cent. Further, the difference between the growth rates of U. P. and India, which was comparatively larger upto the Second Plan period, sharply narrowed down during subsequent plans, and during the period 1974-79, U. P.'s growth rate was the same as that for the country. For the first time, U. P. was not slipping progressively behind. This fact provides very important insight into the prospects of improving the performance of the State's economy in the forecast period, 1980-90.

9. Figures of U. P.'s share in the total and *per capita* income of India, presented below show the past situation in another aspect. The gulf between the level of development in U. P. and the country instead of narrowing had, in fact, been widening over the years. In 1960-61, U. P.'s share in total all-India income was 14.4 per cent, which, with minor fluctuations, showed a steady downward trend so much so that by 1978-79, U. P.'s share was as low as 11.3 per cent. An almost similar trend was observed in respect of U. P.'s share in country's total and *per capita* income.

Year	U.P.'s total income as percentage of India	U.P.'s per capita income as percentage of the All-India average
1	2	3
(At 1960-61 prices)		
1960-61	14.4	85.0
1965-66	14.0	84.6
1968-69	12.4	76.0
(At 1970-71 prices)		
1970-71	12.4	76.5
1973-74	11.2	70.4
1978-79	11.3	71.5

10. The table given below reveals that in absolute terms *per capita* income of the country, at constant prices of 1970-

71, rose during the period 1970-71 to 1978-79 from Rs.635 to Rs.712, i.e. by Rs.77, whereas the State *per capita* income during the same period increased by only Rs.23, from Rs.486 to Rs.509. The gap between the *per capita* income of India and U. P., which was Rs.149 in 1970-71, increased to Rs.196 in 1977-78 and further to Rs.203 in 1978-79.

*Per capita income of India and U.P.*

Year	Per capita income at constant prices of 1970-71 Rs.		Gap between the per capita income of India and U.P. (Rs.)
	India	U.P.	
1	2	3	4
1970-71	635	486	149
1971-72	629	451	178
1972-73	607	469	138
1973-74	624	439	185
1974-75	618	450	168
1975-76	660	481	179
1976-77	658	479	179
1977-78	697	501	196
1978-79	712	509	203

**NATIONAL AND STATE DEVELOPMENT OBJECTIVES**

11. The main objectives of the nation's Sixth Plan, as incorporated in the Draft Sixth Five Year Plan 1980-85 — "A Framework" are :

(i) a significant step-up in the rate of growth of the economy, and

(ii) a progressive reduction in the incidence of poverty, unemployment and regional inequalities.

12. Consistency with these objectives should be fully ensured in the strategy and objectives of the State Plan. Past deterioration in the State's relative status in the national context thus becomes a major policy objective for the national as well as the State Planning authorities. For giving concrete shape to the national objective

of progressively reducing regional imbalances, poverty and unemployment, the economy of backward States like U. P. has necessarily to be given a strong push. In other words, to catch up with the rest of the country, U. P.'s growth rate during the Sixth and subsequent plans must at a minimum be higher than the national growth rate.

13. In this background, the main objectives of the State's Perspective Plan for the decade 1980-90 may broadly be spelt out as follows:

(a) to achieve an absolute level of *per capita* income close to the all-India level, by the end of the Seventh Plan;

(b) an appreciable rise in the standard of living and welfare of the poorest sections of population;

(c) removal of unemployment and significant reduction of under-employment; and

(d) reduction of regional imbalances.

#### QUANTIFICATION OF GOALS SET FOR 1980-90

14. In the base year 1979-80, the *per capita* income of U. P. is estimated to be Rs. 1,070\* as against Rs. 1,380 all-India average at 1979-80 prices. Thus, the gap between the State and national *per capita* incomes in the base year 1979-80 was Rs. 310. The national *per capita* income by the end of the Sixth Plan, i.e. by 1984-85 with the national targetted 5 per cent rate of growth† would be Rs. 1,606. To attain the same level as the national *per capita* income by the end of the Sixth Plan, the State economy would have to achieve a growth rate of 10 per cent. Keeping in view the relatively low level of development and constraints on State resources, it is inconceivable that U. P. should aim at attaining the all-India *per capita* income level by the end of the Sixth Plan.

15. It follows, therefore, that the planning goal for the State, in consonance with the nationally accepted policy of reducing

regional inequalities, should fairly be more modest, that of bringing the State's *per capita* income at par with that of the nation over a longer period, i.e. at the end of the Seventh Plan, 1985-90. The extent to which the gap could be narrowed would again depend upon the overall national rate of growth that is envisaged for the Seventh Plan period, and what the State economy could seek to aim with any degree of realism. As indicated‡ by the Planning Commission, the national economy will be able to grow at an annual rate of about 6 per cent during the Seventh Plan. With this growth rate, the average national *per capita* income at the end of 1989-90 works out as Rs. 1,974 at 1979-80 prices. To achieve an equal level of *per capita* income, in 1989-90, U. P.'s economy will have to grow at a compound average annual rate of 8 per cent during the decade covered by the Sixth and Seventh Five Year Plans. It has to be seen whether this would be feasible.

16. As already noted above the highest growth rate that the economy of U. P. witnessed during a five-year period was close to 5 per cent during 1974-79. Thus, to envisage a continued trend of growth of 5 per cent during the Sixth Plan is well within the State's present capacity. However, this growth rate would hardly make any dent on inter-State disparities and the State *per capita* income would remain substantially lower than the national *per capita* income.

17. In the process of examining as to what growth rate the State's economy should reasonably adopt during the Sixth Plan, it was observed that if the State were to aim for *per capita* income level at the end of the Sixth Plan of the same order as the country had in 1979-80, the economy should be targetted to grow at 7 per cent per annum. But considering the fact that in 1978-79 the State *per capita* income (at Rs. 509) was lower than the national *per capita* income of as far back as 1956-57 (Rs. 525), it would appear to be doubtful

\*A preliminary Note on the Strategy and Approach to U.P.'s Sixth Plan (1980-85), August 19, 1980 Planning Department, U.P.

†Draft Sixth Five Year Plan 1980-85—A Framework, Planning Commission.

‡Draft Sixth Five Year Plan 1980-85—A Framework.

that a lag of 22 years could be reduced to a lag of 5 years within a five-year period.

18. A more realistic target would, therefore, be that by the end of the Sixth Plan the State *per capita* income should not lag behind by more than two Plan periods. In order to achieve this target the State's economy will have to be enabled to grow at the rate of 6 per cent per annum over the years 1980-85. With a view to assessing the feasibility of adopting a 6 per cent growth rate during the Sixth Plan, detailed exercise\* for finding out limits of growth in agriculture, irrigation, industry, and other sectors were carried by the Planning

Department. It was found that keeping in view identifiable projects, existing or new capacities, and quantifiable concrete possibilities of growth in various sectors, it would be feasible to make an all-out bid to Plan so that the State's economy develops at an annual growth rate of 6 per cent during the Sixth Plan.

19. With a State growth rate of 6 per cent per annum and a national growth rate of 5 per cent, the gap in the State and national *per capita* incomes at the end of the Sixth Plan will be of the order of Rs.293, i. e. (-)18.2 per cent, as would be seen from the following figures :

Item	U.P.		India	
	1979-80	1984-85	1979-80	1984-85
1. Total income (Rs. crores) .. .. .	11000††	14720	90117	115016
2. Per capita income (Rs.) .. .. .	1070	1313	1380	1606
3. Gap between State's per capita income and national per capita income (Rs.)	310	293	..	..
4. Percentage gap .. .. .	(-)22.5	(-)18.2	..	..

\*Mimeographs prepared in the State Planning Institute on (1) performance and potential of crop production in U.P., (2) A note on determination of limits of growth for industrial production that can possibly be achieved during the Sixth Plan, (3) Projections for Irrigation Potential and Utilization during the Period 1980-85.

††Adjusted for unusualness of drought.

20. In the Planning Commission's approach paper entitled "National Sixth Five Year Plan 1980-85 : A Framework", it has been mentioned that the national economy is likely to grow at an annual rate of 6 per cent during the Seventh Plan period. In the context of an objective of reaching the all-India level, the State's economy would have to target a growth rate of 10 per cent during the Seventh Plan period. This target would be too ambitious. Thus, bringing the State's *per capita* income to all-India level by the end of 1990 may not, on present arrangements, be possible. The best that may reasonably be envisaged is to reach a level by the end of the Seventh Plan which the country may have achieved a little earlier that is to further reduce the lag for U. P. from 10

years aimed at for 1984-85. With this end in view, exercises were done at different alternative growth rates for the Seventh Plan period, which are summarised below :

*Projections of total and per capita income of U.P. and India at 1979-80 prices during the Seventh Plan period*

A. Income by end of 1984-85 at 1979-80 prices		
	U.P.	India
(i) Total Income (Rs. in crores)	14720	115016
(ii) Per capita income (Rs.)	1313	1606



Rate of growth	U. P.		Year	India's total and per capita income (at 6% rate of growth)	
	Total Income (Rs. crores)	Per capita Income (Rs.)		Total Income (Rs. crores)	Per Capita Income (Rs.)
1	2	3	4	5	6
<i>B. Income by the end of 1989-90 at 1979-80 prices</i>					
(i) 6.5%	20,168	1678	1985-86	121917	1673
(ii) 7.0%	20,646	1718	1986-87	129232	1743
(iii) 7.5%	21,132	1758	1987-88	136986	1816
(iv) 8.0%	21,629	1799	1988-89	145205	1893
(v) 8.5%	22,134	1841	1989-90	153917	1974

21. It would be seen from the above table that by the end of 1989-90, national *per capita* income computed on an annual growth rate of 6 per cent during the Seventh Plan, would be Rs.1,974 at 1979-80 prices. If the State's economy develops at a growth rate of 6.5 per cent during the Seventh Plan period, it would achieve a *per capita* income of Rs.1,678 at the end of 1989-90, a level which the country would have already achieved in the very first year of the Seventh Plan giving a lag of 4 years. In case, a growth rate of 7.5 per cent is targetted, the State's *per capita* income (Rs.1,758) at the end of the Seventh Plan would reach a level which the country would attain in 1986-87 (Rs.1,743) i.e. a lag of three years. Even a high growth rate of 8.5 per cent per annum would leave the State two years behind the national average. Considering the constraints of resources and the State's target of growth during the Sixth Plan period, a choice of growth rate during the Seventh Plan beyond 7.5 per cent does not appear reasonable. With an unprecedented 7.5 per cent rate of growth, the State would be three years behind the national *per capita* income and the gap between the *per capita* income of U. P. and India at the end of the Seventh Plan would be Rs.216 at 1979-80 prices, as against Rs.310 in 1979-80.

#### SECTORAL GROWTH RATES

22. The growth rate of a particular sector can be determined either on the basis of past trends or by breaking down over-all growth rate of the economy into different sectors on certain objective criteria. The growth rates of the economy of the State for the Sixth and Seventh Plan period have been aimed at 6.0 per cent and 7.5 per cent respectively. In order to decide the sectoral growth rates in conformity with these aggregate growth rates, the economy has been divided into the following sectors :

- (i) Agriculture and allied.
- (ii) Manufacturing.
- (iii) Others.

23. Sectoral growth rates for the Sixth Plan period have been worked out using elasticity between sectoral income and State income on the basis of income originated in these sectors from 1970-71 to 1978-79, at 1970-71 prices. Sectoral growth rates for the Seventh Plan period were further projected on the basis of elasticities used in the estimation of sectoral growth rates for the Sixth Plan. However, minor adjustments were made keeping in view that some diversification would take place in the economy in future years.

24. The structure of the economy of the State that may be expected to emerge at the end of the Sixth and Seventh Plan is presented below :

*Projected Structure of U.P.'s economy, 1984-85 and in 1989-90*

(Rupees in Crores)

Sector	At the end of Sixth Plan		At the end of Seventh Plan		
	Income in the base year 1979-80	Total income	Rates of growth (per cent)	Total income	Rates of growth (per cent)
1	2	3	4	5	6
1. Agriculture and allied .. ..	5654 (51.4)	7216 (49.0)	5.0	9656 (45.7)	6.0
2. Manufacturing .. ..	1166 (10.6)	1926 (13.1)	10.9	3275 (15.5)	11.2
3. Others .. ..	4180 (38.0)	5578 (37.9)	6.0	8201 (38.8)	8.0
4. All the sectors .. ..	11,000 (100.00)	14720 (100.00)	6.0	21132 (100.00)	7.5
5. State per capita income (Rs.) .. ..	1070	1313	..	1758	..

N.B. Figures in parenthesis denote percentage contribution of the sectors towards total income.

25. It would be seen from the above table that during the Sixth Plan period, the agriculture sector will have to grow at 5 per cent while production in the industrial sector will have to expand at the rate of 10.9 per cent, and the rest of the sectors at 6.0 per cent. In the Seventh Plan, growth rates in the agricultural and industrial sectors will have to be stepped-up by 6.0 per cent and 11.2 per cent respectively. The growth rate of the remaining sectors will be 8.0 per cent per annum. It is obvious that the sectoral rates of growth envisaged during the Sixth and Seventh Plan periods are much higher than what the economy has witnessed during the recent past, particularly in case of Industry and Others Sectors. It may also be mentioned here that the growth rates assumed for Others Sector incorporate a very high growth rate for constructional activities, primarily based on the need to create capital assets required for future growth and to provide wage em-

ployment to a substantial number of people living below the poverty line.

26. The stipulated rates of growth incorporate diversification of the economy to some extent, the combined share of agriculture, animal husbandry, forestry and fishing falling from 51.4 per cent to 49.0 per cent at the end of the Sixth Plan, and to 45.7 per cent at the end of the Seventh Plan. The contribution of 'Manufacturing' sector at the end of the Sixth and Seventh Plan periods would increase to 13.1 per cent and 15.5 per cent respectively, as against 10.6 per cent in 1979-80. The reason for not attempting to reduce the contribution of agriculture sector more sharply is that it has considerable potential for growth, and also because relative capital investment required is lower per unit of income generated in this sector. Most of the population would also continue to remain engaged in agriculture and

maximum welfare consideration will thus be satisfied in this strategy.

#### INVESTMENT REQUIREMENTS

27. An attempt was made by the State Planning Institute to work out the sectoral incremental capital-output ratios (ICOR)\* on the basis of the performance of the economy during the period 1969-70 to 1976-77. It is to be expected that the State's economy would not be subject to significant technological changes in the perspective period and as such the sectoral ICOR's referred to above, would not undergo material changes. However, if concerted efforts are made to maximise the capacities already created or some minor changes are introduced in the technological mix of products of industrial commodities, these ICOR's may reflect some change. Keeping in view these facts, as also the objective of giving substantial push to the development of small scale and cottage industries, lower ICOR's in Agriculture and Industry Sectors have been adopted to work out the investment requirements during the Sixth and Seventh Plan periods. The requirements of total investment, public and private thus worked out are given below :

#### *Requirements of investment for the Sixth and Seventh Plans*

(Rupees in crores)

Sectors	Investment required at the growth rate of	
	6%	7.5%
	VI Plan	VII Plan
1. Agriculture and allied.	5545.10	8662.00
2. Manufacturing mining and quarrying.	3958.93	6918.75
3. Others ..	10228.02	19372.57
Total investment ..	19732.05	34953.32

28. Studies†† conducted by the State Planning Institute revealed that share of State's Plan outlay in total investment.

excluding the power sector, was 29 per cent. Considering the percentage share of power sector in the previous Plans, the outlay of power sector during the perspective period is not likely to be less than 30 per cent of the total State Plan outlay. It has also been observed that during the Fourth and Fifth Plan periods, current expenditure was, on an average, 15 per cent of the total plan expenditure. Keeping in view employment generation and distribution objectives, the prospects of change in the mix of projects in favour of those which are labour-intensive and with a lower capital content, an increase in the proportion of current expenditure from 15 to 20 per cent has been assumed to arrive at an estimate of current outlay component. The State Plan outlay on the basis of the above assumptions works out as follows :

#### *Estimated State Plan outlay for the Sixth and Seventh Plan periods*

Plan	Total State Plan outlay (Rupees in crores)
VI Plan	9661
VII Plan	17376

#### EMPLOYMENT GENERATION

29. Various aspects of employment generation during the Sixth Plan have been discussed in detail in a separate chapter entitled "Employment and Manpower." The estimates of employment generation during the Seventh Plan period have been prepared using the same methodology as that adopted for the Sixth Plan. The estimates thus worked out, are given below :

#### *Estimates of employment generation during the Sixth and Seventh Plan periods*

(Lakh persons)

Plan	Backlog of unemployment	Estimated whole time employment opportunities	Backlog left uncovered
Sixth Plan	61.44	37.20	24.24
Seventh Plan	52.65	46.61	6.04

\*Incremental Capital Output Ratio of Uttar Pradesh Economy : Perspective Planning Division, State Planning Institute, June, 1978.

†† Capital Formation in the Economy of Uttar Pradesh: A study of Development, Headwise Estimates, 1969-70 to 1978-79 ; Perspective Planning Division, State Planning Institute, January, 1978.

## REDUCTION IN POVERTY

30. Besides reducing differences in income levels between all-India and U. P., the other basic objective of the perspective plan would be to reduce poverty proportions to a significant extent. With this end in view, an attempt has been made to examine the impact of 6 per cent growth rate of the economy in the Sixth Plan and 7.5 per cent in the Seventh Plan on poverty. In other words, an assessment has been made about the extent to which additional incomes accruing on the basis of these growth rates would enable poverty to be reduced during the perspective period.

31. It would be worthwhile here to discuss briefly the measurement of poverty and its magnitude in the State. The norm of poverty, as laid down in the Draft National Plan 1978-83, is based on minimum nutritional requirements of 2400 calories per day per person in rural areas and 2100 calories in urban areas. Applying these norms to the data on consumer expenditure collected in the 32nd round of the NSS (1977-78), the cut-off points in respect of per capita monthly expenditure get determined at Rs.63.30 for rural areas and Rs.74.76 (both at 1979-80 prices) for urban areas in the base year 1979-80. In other words, all households with per capita monthly expenditure in 1979-80 below these limits constitute the population which could be described as living below the poverty line.

32. On the above basis, 47.85 per cent of the rural population and 43.53 per cent of the urban population is estimated to be living below the poverty line in the base year 1979-80. Applying the 1977-78 ratios to the estimated population of 1979-80 (10.29 crores), the number of persons below the poverty line, is estimated to be as follows :—

Area	1979-80	
	Percentage of population below poverty line	Persons below poverty line (in lakhs)
1	2	3
Rural ..	47.85	416.80
Urban ..	43.53	68.55
State ..	47.18	485.35

33. It has been estimated that there would be a net addition of 43.5 lakhs in the number of poor in the State during the Sixth Plan period, raising the total number of poor to 529 lakhs, unless deliberate efforts are made to reduce the proportion of people living below the poverty line.

34. The average per capita monthly expenditure of those below and above the poverty line in the base year 1979-80 are given below :

Area	(Rupees)		
	Below poverty line	Above poverty line	Total
Rural ..	44.34	94.86	70.68
Urban ..	53.78	116.73	89.81
State ..	45.77	98.45	73.53

35. This shows that the per capita monthly expenditure in urban areas is 1.27 times more than in the rural areas, indicating that there is a visible disparity between consumption levels of rural and urban areas.

36. In order to mitigate the problem of poverty completely, the step-up required in the average per capita monthly expenditure will be Rs.18.96 in rural areas and Rs.20.98 in urban areas, so that all the poor could attain the minimum level of per capita monthly expenditure of Rs.63.30 in the rural areas, and Rs.74.76 in the urban areas. While proposing a step-up in the per capita monthly expenditure of those below poverty line, it is not possible to keep per capita monthly expenditure of those above the poverty line at a constant level. In fact, unless concerted efforts are made, per capita expenditure of those above the poverty line may increase rather sharply. Therefore, increase in per capita monthly expenditure of those above the poverty line will also have to be taken into account. Considering these requirements, it would not be feasible to wipe out poverty in the Sixth Plan period itself.

37. Thus, an attempt was made to examine the possibility as to what extent the problem of poverty could be handled in

the whole perspective period. In the Sixth Plan, a target of bringing the bottom 20 per cent of the population above the poverty line has been considered feasible. During the Seventh Plan period, again bottom 25 per cent of the population in rural areas and bottom 20 per cent of the population in urban areas living below poverty line are proposed to cross the poverty line.

38. The population below the poverty line is thus, proposed to be reduced to 27 per cent by the year 1984-85, which will be further brought down by 3 per cent by the

year 1989-90. Thus, the problem of poverty would almost be mitigated by the decade ending 1990. However, it would require an appropriate mechanism which would enable transfer of the required income in favour of the poor. Features of such a mechanism need to be determined at the earliest.

39. The position of the percentage of population along with the persons below poverty line in the base year i.e., 1979-80 and in the terminal years of the Sixth and Seventh Plan is summarised below :

*Persons Below Poverty Line*

Serial no.	Area	Percentage of population below poverty line at the end of			Persons below poverty line at the end of (in lakh)		
		1979-80	1984-85	1989-90	1979-80	1984-85	1989-90
1	2	3	4	5	6	7	8
1	Rural .. ..	47.85	27.85 (20.0%)	2.87 (25.0%)	416.80	279.01	28.55
2	Urban .. ..	43.53	23.53 (20.0%)	3.53 (20.0%)	68.55	47.08	7.71
3	State .. ..	47.18	27.22	3.01	485.35	326.09	36.26

NOTE—Figures in paranthesis denote the proposed population crossing the poverty line.

40. The average per capita expenditure of those below and above poverty line at the end of the Sixth and Seventh Plan after

the aforesaid levels of poverty removal, are given below :

*Average per capita expenditure in 1979- 80, 84-85, and 89-90*

(Rupees)

Year	Area	Below poverty line	Above poverty line	Total
1	2	3	4	5
1979-80	Rural .. ..	44.34	94.86	70.68
	Urban .. ..	53.78	116.73	89.81
	State .. ..	45.77	98.45	73.53
1984-85	Rural .. ..	63.30	102.19	83.13
	Urban .. ..	74.76	125.75	103.84
	State .. ..	65.14	106.25	86.46
1989-90	Rural .. ..	63.30	104.94	88.69
	Urban .. ..	74.76	128.42	108.78
	State .. ..	64.88	109.02	92.03

41. Besides consistently increasing the per capita expenditure of the people below poverty line during the Sixth and Seventh Plan periods, the disparity in consumption levels of rural and urban areas is proposed to be brought down from 1.27 in 1979-80 to 1.25 in 1984-85 and to 1.23 in 1989-90.

42. In the absence of any data on distribution of incomes between rural and urban areas, the break-up of additional incomes that would be generated during the Sixth and Seventh Plans could at best be done by using the proportion of total consumer

expenditure in rural and urban areas. According to data thrown up by the 32nd round of the NSS, the percentage shares of rural and urban areas in total consumer expenditure work out to 83 and 17, respectively. Using these percentages and assuming further that about 35 per cent of the additional income may be ploughed back into the economy through savings, the disposable income that may be available to the people in rural and urban area, during the Sixth and Seventh Plans are given below :

*Additional and disposable income in the Sixth and Seventh Plan periods*

(Rupees in crores)

Plan	Rate of growth	Total income in the terminal year	Total income in the base year	Additional income	Disposable income (65% of previous Col.)	Estimated break-up of disposable income	
						Rural	Urban
Sixth Plan	.. 6%	14720	11000	3720	2418	2009	409
Seventh Plan	.. 7.5%	21132	14720	6412	4168	3474	694

43. As already mentioned, besides the increase in per capita expenditure of people living below the poverty line, increase in expenditure of those above poverty line has also to be taken into account. In any exercise of redistribution of income, increase in per capita monthly expenditure of those above the poverty line should necessarily be taken into consideration. Keeping in view the increase in population and the marginal rate of savings, it has been estimated that during the Sixth Plan (with the economy growing at the rate of 6 per cent per annum), additional income equivalent to the growth rate of 2.20 per cent may be available for increased consumption by the entire population. Giving relatively more consideration in favour of those above the poverty line, increase in per capita monthly expenditure in case of the people above poverty line may be assumed at 1.5 per cent during the Sixth Plan. For the Seventh Plan, the same proportion may be adopted.

44. Working out on the above assumptions, the amounts that should be available for consumption to the people respectively below and above poverty line, in the Sixth

and Seventh Plan, are estimated to be as follows :

*Amount available for consumption to the people above and below poverty line during the Sixth and the Seventh Plan*

(Rupees in crores)

Plan	Below Poverty line		Above poverty line	
	Rural	Urban	Rural	Urban
Sixth Plan	.. 974	193	432	110
Seventh Plan	.. 1313	284	1193	244

45. The additional purchasing power which is required to be made available to the bottom 20 per cent of the population to cross the poverty line comes to Rs.787 crores for rural and Rs.162 crores for the urban areas during the Sixth Plan. The corresponding figures during the Seventh Plan come to Rs.837 crores and Rs.179 crores respectively. For the balance of population remaining below the poverty line, Rs.187 crores for the rural poor and Rs.31 crores for urban poor would be available during the Sixth Plan. The corresponding amounts during the Seventh Plan would be Rs.476 crores and Rs.105 crores respectively. The percentage increase in

per capita expenditure of the population below and above the poverty line during the Sixth and the Seventh Plan are estimated as follows :

*Percentage increase in per capita expenditure*

Plan	Below the poverty line		Above poverty line	
	Rural	Urban	Rural	Urban
1	2	3	4	5
Sixth Plan ..	40.69	38.34	7.71	7.73
Seventh Plan ..	20.71	17.94	2.90	2.29

46. The details of population below and above poverty line together with the step-up in average per capita expenditure at the end of the Sixth and Seventh Plan periods are summarised in Annexures I and II.

#### REGIONAL DEVELOPMENT

47. The strategies and programmes of accelerated development of the different regions of the State have been discussed in detail in a separate chapter entitled "Strategies for Regional Development".

## Annexure—I

## Extent of removal of poverty during the Sixth Plan period

(Minimum per capita monthly expenditure to cross the poverty line (i) Rural Rs.63.30 (ii) Urban Rs.74.76)

Category	Average per capita monthly expenditure in the base year 1979-80		1984-85							
			At the growth rate of 6 per cent per annum							
			Population (In crore)		Additional purchasing power required (Rs. crore)		Increase in per capita monthly expenditure (Rs.)		Percentage increase in per capita monthly expenditure(%)	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
1	2	3	4	5	6	7	8	9	10	11
Below Poverty line.	44.34	53.78	4.50	0.78	974	193	18.04	20.62	40.69	38.34
*Bottom	33.50	42.02	1.88	0.36	787	162	29.80	32.74	89.0	77.9
Rest	52.13	63.78	2.62	0.42	187	31	5.95	6.15	11.47	9.6
Above Poverty line.	94.86	116.73	4.90	1.02	432	110	7.33	9.02	7.7	7.7
Total	70.68	89.81	9.40	1.80	1406	303	12.45	14.03	17.61	15.62

\*N. B.—In the Sixth Plan, bottom 20% of the population (both in rural as well as in urban areas) is envisaged to cross the poverty line.



## Annexure—II

Extent of removal of poverty during the Seventh Plan period

(Minimum per capita monthly expenditure to cross the poverty line (i) Rural Rs.63.30 (ii) Urban Rs. 74.76)

Category	1989-90							
	Population (In crore)		Additional purchasing power required (Rs. crores)		Increase in per capita monthly expenditure (Rs.)		Percentage increase in per capita monthly expenditure (%)	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
1	2	3	4	5	6	7	8	9
Below Poverty Line.	2.79	0.48	1313	284	12.85	12.11	20.71	17.94
Bottom*	2.50	0.40	837	179	11.17	10.98	17.65	14.69
Rest	0.29	0.08	476	105	27.35	21.87	47.09	34.21
Above Poverty Line.	7.23	1.52	1193	244	2.75	2.67	2.90	2.29
Total	10.02	2.00	2506	528	5.56	4.94	7.86	6.05

\*N.B.—In the Seventh Plan, bottom 25% of the rural and 20% of the urban are proposed to cross the poverty line.

## CHAPTER 3 EMPLOYMENT AND MANPOWER

Uttar Pradesh accounts for 15.76 per cent of the country's population in the year 1980 and is the most populous State in the Country. The Expert Committee on Population Projections\* set up by the Registrar General has projected the State's population at 1038.99 lakhs for 1980, which is anticipated to reach the level of 1130.43 lakhs by 1985. This would give an overall growth rate of population of 1.7 per cent per annum as against a national projected growth rate of 1.9 per cent for the period.

2. Since 1901\*\*, the State's growth rate of population has always been less than the national average. In the 'Framework' for the Sixth Five Year Plan endorsed by the National Development Council in August, 1980, the objective of population policy has been spelled out as that of reducing the net reproduction rate to 1 per cent by 1995. Population projections for the period up to 1990-91, indicate that the State should nearly achieve this rate by 1991 when its growth rate is expected to decline to 1.02 per cent as against 1.64 per cent in the country. On these trends, U. P. will soon have the lowest growth rate among the major States of the country. If further measures are initiated in the light of the plan objective to reduce the national growth rate of population to 1 per cent, the State's population growth rate could decline further.

3. A perusal of the age structure† of population shows that the proportion of population in the working age group of 15-59 years had been declining till 1971. Population projections now indicate that the percentage of this group would improve after 1971 as the proportion of population in the age group 0-14 years declines. This phenomenon is anticipated due to the adoption of family planning measures.

4. *Labour force: size and composition*—The results of the National Sample Survey (32 round, central sample) which relate to the age group 15-59 years, show that only 57.50 per cent of the population in this age group (which contributed 54.05 per cent of the population in 1980) comprised the labour force, the corresponding rural and urban percentages being 58.60 and 51.60, respectively. Based on these percentages, the labour force projections for the years 1980 and 1985 work out to be 323.00 lakhs and 371.00 lakhs respectively. Thus, during the Sixth Plan period, 48 lakh persons are likely to be added to the labour force, of whom 38.93 lakhs would be in rural areas and 9.07 lakh in the Urban + areas.

5. The labour force includes both the workers and the unemployed persons. As per the NSS data on weekly status basis, workers include all persons who were employed on any day during the reference week. On this definition, the percentage of workers in the labour force was 97.23 per cent (i.e. equivalent to 55.92 per cent of the total population in the age group of 15-59 years), while the remaining 2.77 per cent were unemployed persons. Besides, 5.43 per cent of the labour force remained inadequately employed. The overall percentage of wholly or partially unemployed, therefore, was 8.20.

6. *Trends and pattern of employment*—Different Censuses provide dis-aggregation of the working force but no uniform concepts have been used in them. Although, the information of these Censuses cannot be compared, figures available broadly reveal\$ that even after 30 years of planned efforts, agriculture continues to play a dominant role. For example, in 1951, it accounted for as much as 77 per cent of the self-supporting and dependent earners; in

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\*Census of India, 1971, Series-1 of 1979.

\*\*Annexure—I

†Annexure—II

+Annexure—III

\$Annexure—IV

1961, the proportion of workers in this sector (along with mining and quarrying) accounted for 76 per cent while 1971 it stood at about 78 per cent. Since in almost all countries, economic development is associated with a significant decrease in this share, it is evident that employment growth in non-agricultural sectors has not been sufficient to absorb an increasing proportion of the labour force.

7. Based on the figures of NSS 32nd round, the sectoral distribution revealed\* that about 75 per cent of the workers were self-employed persons, about 14 per cent were casual workers and about 11 per cent were regular salaried and wage employees. The proportion of the self-employed component appears to be more marked in the rural sector where it accounted for as much as 78 per cent of the total workers. These self-employed persons again are concentrated in the agriculture sector. This factor perhaps contributes to the increased incidence of under-employment in the rural sector, as about 70 per cent of the cultivating households fall in the holding groups of less than one hectare. Agricultural Censuses of 1970-71 and 1976-77 indicate that the holdings below one hectare have increased by 13 per cent over this period. A rise of 3.44 per cent has also been recorded in the holding group of 1-2 hectares. This trend would further increase the intensity of under-employment in the rural areas.

8. Before proceeding any further, it would be worthwhile to examine certain labour force characteristics as they obtain in U. P. and other States. A comparison\*\* in this regard gives an impression that since this State has a lower rate of unemployment and under-employment its performance in respect of labour utilization is better. However, the low per capita income in the State belies this impression and goes to indicate that a high degree of disguised unemployment exists in the State. Those below the subsistence

level are forced to take up any type of job even if it fetches a nominal return. This pinch increases further as, in this State, the earner has to support a larger family due to a high dependency ratio which works out to be 2.23 in the State as against the counter's average of 2.04† as is given below :

		Unit	U P	India
1	Total Population in 1971	Lakhs	883.41	5481.60
2	No. of workers	„	273.34	1804.85
3	No. of Non-workers	„	610.07	3676.75
4	Dependency ratio { Item—3 } ----- { Item—2 }	„	2.23	2.04

Source : Census of India 1971, Series-I-India, Part-II-B(i) General Economic Tables, pages 18—21 and 62—65

9. *Organised sector employment*—Although regular information on employment and its structure is not forthcoming, some data are available from Employment Market Information reports (EMI) which cover all establishments in the public sector and non-agricultural establishments employing 10 or more persons in the private sector. In U. P., organised employment constituted only 7 per cent of the total workers in 1971. As indicated by the EMI reports‡ the annual growth rate of organised sector employment during the period 1971—79 has been 2.1 per cent per annum which corresponds to about 0.44 lakh persons per year. But Statewise comparison†† shows that the percentage share of this State in the total organised sector employment in the country declined from 10.44 per cent to 10.25 per cent during the period 1967—79. This was mainly due to a comparatively lower growth rate of employment in the State.

\*Annexure—V

\*\*Annexure—VI

†If 32nd round NSS data are examined for workers, in age-group 15—59 years, dependency ratios in U.P. and India respectively come to 2.47 and 2.21.

‡Annexure—VII

††Source : Employment Review, Directorate General of Employment and Training, Ministry of Labour New Delhi, 1967-68 and July—September, 1979.

10. *Unorganised sector employment*—Non-availability or regular data about the unorganised sector makes it difficult to assess its employment trends correctly. By subtracting figures of organised sector employment from those of the total employment, the proportion of unorganised sector employment comes to about 93 per cent in 1971. Similar figures are thrown up by NSS 32nd round data. This would broadly show that there has been practically no change in the distribution of employment between organised and unorganised sectors during these years.

11. When viewed in an occupational frame, it is clear that employment in agriculture accounts for most (76 per cent) of employment in the unorganised sector. Here, we find a large proportion of the 'working poor'. Self-employment of marginal and small land-holders, landless agricultural labourers etc. is in fact another name for a socially un-aided way of life, and is a reservoir for all those who do not find any other occupation. As traditional rural occupations died down increasing number of workers have returned to agriculture. This is apparent from the fact that the proportion of workers in household industries has declined. The census of 1971 shows that about 20 per cent workers engaged in agriculture, were agricultural labourers. The Rural Labour Enquiries 1964-65 and 1974-75 suggest that besides agricultural labourers, there are also other rural labour households whose numbers have recorded significant increases. About 46 per cent of the rural labour households had no land. These studies further suggest that there has been increase in average working days in the case of women and child labour. At constant prices (1957-58) daily earnings of agricultural labour were Rs.0.86 in 1966-67 which increased to Rs.1.20 in 1978-79\*.

12. *Women employment*—Women labour force has all along been treated as a secondary partner in running a household. Loss of traditional occupations due

to increasing use of machines and social restrictions is continuously relegating women to the background. Censuses and studies made elsewhere also reveal that although women are significant contributors to the working force in farm operations and household occupations, they are not always recognized as workers. Results of the 1981 Census will be awaited with interest on this point.

13. It has also been observed that the proportion of workers among the female population had declined progressively. From 27 per cent in 1951, it came down to 19 per cent in 1972-73. Census figures for 1971 show that agriculture sector accounted for the largest proportion (87 per cent) of female workers, majority of whom were working as agricultural labour. The result of NSS 32nd round (1977-78) showed that about 83 per cent of the female working population in the age-group 15-59 years was self-employed in the rural areas; 73 per cent in agricultural and 10 per cent in non-agricultural operations\*\* and about 15 per cent as casual labour. Regular wage and salaried employees were only 2 per cent in the rural sector.

14. In the urban areas, the picture was naturally entirely different. Here about 65 per cent of female workers were self-employed: 48 per cent in non-agricultural activities, including trades and services, and 17 per cent in agriculture. Regular salaried and wage employees constituted more than 25 per cent of female working population.

15. Employment Market Information provides year-wise data on females working in the organised sector. Their number increased from 1.06 lakh in 1969 to 1.44 lakh in 1979. As a proportion of total employment in the organised sector, working females in U. P. remained steady around 6 per cent. As against this, women constituted 11 per cent of the working force in the organised sector up to 1974-75 and about 12 per cent in later years, at the national level†. In the State sector, the

\*Annexure—VIII

\*\*See Annexure—V

†Employment Review : Directorate General Training and Employment, Government of India, July—September, 1979 and data of Directorate of Training and Employment, U.P.

proportion of women workers showed an improvement rising from 4 per cent in 1969 to 6 per cent in 1979, but in the corporate sector the proportion declined from 13 per cent to 9 per cent during the above period. Reasons for this decline are not very clear. Central Government offices employed a very negligible proportion of female workers. Most females (88 per cent in 1979) were in the services sector.

#### UNEMPLOYMENT SITUATION

16. *Structure, pattern and size of unemployment / under-employment*—Although, precise and regular data about unemployment are not available, some general trends in the employment market of the State can be discerned from the live register statistics of the Employment Exchanges and data of National Sample Surveys, notwithstanding their conceptual and coverage limitations.

17. Live Register figures show\* that intensity of unemployment has increased sharply in the seventies. A steady growth of registrants from 4.25 lakh in 1971 to 14.36 lakh in 1979 is a clear indication of the fact that, at the current level of economic activity, demand for labour has fallen short of supply. Unemployment also continued to grow among the educated. During the period 1975–79, the number of registrants has doubled in almost all categories of registrants with general education. Of the total educated registrants on June 30, 1979, high school and intermediate pass students together accounted for 76.14 per cent, while the proportion of graduates and post graduates was 20.47 and 3.39 per cent respectively. In absolute numbers, the figures were 6.03 lakh, 1.62 lakh and 0.27 lakh respectively. Amongst technical persons except for the category of post-graduate in agriculture and University teachers, all others showed an increasing trend in unemployment\*\*. During the same period, however, EMI reports indicate that shortages continued for certain specific categories like-nurses, pharmacists, stenographers.

18. NSS data throw light on rates of unemployment and under-employment in rural and urban areas. The percentage of persons in the age-group 15–59 years who were returned as unemployed in the 27th round (1972-73) and the 32nd round (1977-78) of the NSS, is summarised below :

#### *Unemployed as percentage of population*

Round	Rural	Urban	Total
27th Round (1972-73)@	1.24	1.68	1.30
32nd Round (1977-78)	1.41	2.64	1.59

@27th Round results have been adjusted so as to make them comprable with those of the 32nd Round.

19. Above data are clearly indicative of the situation that unemployment is increasing in the State, both in the rural and urban areas, the deterioration in the picture within 5 years being comparatively more disquieting in urban areas.

20. *Characteristics and spatial distribution of the job seekers*—For adopting a viable employment policy, characteristics of the target groups have also to be studied. Information about educational characteristics of unemployed persons is not yet available from the 32nd round. The results of the 27th round, however, showed that about 57 per cent of the unemployed persons in the rural and 22 per cent in the urban areas were illiterates. The next category was of semi-literates (below middle school level) which contributed 33 per cent in the rural and 49 per cent in the urban areas. Among the under-employed persons, also illiterates again formed the predominant group in both rural (88 per cent) and urban (68 per cent) areas.

21. NSS results of the 27th round showed that educated job seekers had a longer duration of unemployment (i.e. a

\*Annexure—IX

\*\*Annexure—X

longer waiting period) than illiterates, particularly in the urban areas. Examination of rural-urban distribution of educated workers in 1976 shows that educated job seekers in the urban areas remained unemployed for a longer period (24 months) than the rural job seekers (22 months). A survey of employment exchange registrants conducted by the Directorate General of Employment and Training in 1973, showed that about 61 per cent of the graduate registrants remained unemployed for more than one year. In some cases, even high level manpower, such as engineers, agricultural graduates, post graduates had also to wait for as long as four years\* or more.

22. NSS results of the 27th round\*\* also provide an idea of the regional structure of unemployment in the State. These show wide variation in unemployment rates between the regions. The unemployment rate (on daily status basis) was estimated to be 3.68 per cent in the State. As against this the regional rates\*\*\* varied between 1.18 per cent in the Himalayan region and 4.56 per cent in the Eastern region. The Southern region had recorded a rate of 3.28 per cent while in the other two regions, viz. the western and the central, unemployment rates were 2.76 and 2.28 per cent, respectively. These differences call for a regional approach in formulating appropriate employment strategies.

23. *Job opportunities during the Sixth Plan 1980-85*—There was an estimated backlog of unemployment of 15.44 lakh Plan taking into account the wholly unemployed as well as the partially unemployed. Besides, about 48.00 lakh persons would be added as new entrants to the labour force during the Plan period. Thus during the Sixth Plan period, the job requirements would be of the order of 61.44 lakhs. For total removal of unemployment, the State would need an annual growth rate of employment of 3.6 per cent and a very high

annual growth rate of income of 9.5 per cent. The Sixth Plan is based on a growth rate of 6 per cent per annum on the assumption of an outlay of Rs.9,661 crore in the State Public Sector. Using as a rough measure, the overall labour† output coefficients and incremental capital‡ value added ratios, it is estimated that even with this investment, job opportunities of the order of 37.20 lakh person-years would be generated in the economy, thus leaving a large backlog of 24.24 lakh person years to be taken care of during the Seventh Plan. This would mean an annual growth rate of employment of 2.3 per cent during the Plan period.

24. Provisional estimates††† of demand and supply of important categories of manpower for the Sixth Plan period 1980-85 show that among technical and professional manpower shortages are likely to arise for civil engineers with degree or diploma, mechanical engineers with degree certificates, doctors, nurses, auxiliary nurse-cum-midwives agriculture diploma holders, stockmen, and trained primary and middle school teachers. As against this, significant surpluses are estimated in the categories of mechanical and electrical diploma engineers agricultural graduates and higher secondary school teachers.

25. Impact of plan programmes on employment generation is a subject of the highest significance. With this end in view instructions on preparation of Plans usually call for efforts to be made to quantify employment content of the development schemes. It will be noted in the sectoral chapters that whereas some departments such as Agriculture, Industries, Irrigation, Co-operatives, State Road Transport, etc., have furnished information on employment, many others have not been able to provide requisite information on the subject. Even the sectoral estimates of employment are not based on any definite, explicit, or proven methodology. While

\*Annexure—II.

\*\*Draft Sixth Five Year Plan 1978-83 (Revised) Planning Commission, page—149, Annexure—4.

\*\*\**Ibid.* page—42, Table—2.12.

†It is estimated that Rs. 1 crore would generate employment of 1000 person (—) years at 1979-80 prices.

††5.6 : 1 based on the suggestion of Perspective Planning Division of the State Planning Institute.

†††Annexure XI I

some departments have provided information on the basis of the anticipated manpower requirements of the programmes, others have based their estimates on their past experience. Some departments have included beneficiaries also along with persons likely to be benefited indirectly. Efforts have to be continued to correctly quantify the employment contents by developing appropriate methodology for estimation of sectoral norms, inter-sectoral

dependencies and multipliers and aggregative estimates of employment.

26. As already indicated, the estimates of employment given earlier are based on an aggregative approach and relate to the entire economy of the State. This is based on estimates of overall labour-output coefficients. More work remains to be done for measurement and quantification of employment generation aspects of plans and programmes formulated.

Annexure—I  
Decennial Growth Rate of Population, 1901—1971

Serial no.	India/State/Union Territory and Other Area	Decennial variation of population						
		1901-1911	1911-1921	1921-1931	1931-1941	1941-1951	1951-1961	1961-1971
1	2	3	4	5	6	7	8	9
	INDIA ..	+5.75	-0.31	+11.00	+14.22	+13.31	+21.51	24.80
	STATES							
1	Andhra Pradesh	+12.49	-0.13	+12.99	+12.75	+14.02	+15.65	20.90
2	Assam	+16.84	+20.19	+20.05	+20.45	+20.12	+34.99	34.71
3	Bihar	+3.67	-0.66	+11.45	+12.20	+10.27	+19.76	21.33
4	Gujrat	+7.79	+3.79	+12.92	19.25	+18.69	+26.88	29.39
5	Haryana	-9.70	+1.95	+7.14	+15.63	+7.60	+33.79	32.23
6	Himachal Pradesh	-1.22	+1.65	+5.23	+11.54	+5.42	+17.87	23.04
7	Jammu and Kashmir	+7.16	+5.75	+10.14	+10.36	+10.42	+9.44	29.65
8	Kerala	+11.75	+9.16	+21.85	+16.04	+22.82	+24.76	26.29
9	Madhya Pradesh	+15.30	-1.38	+11.39	+12.34	+8.67	+24.17	28.67
10	Maharashtra	+10.74	-2.91	+14.91	+11.99	+19.27	+23.60	27.45
11	Karnataka	+3.60	-1.09	+9.38	+11.09	+19.36	+21.57	24.22
12	Nagaland	+46.76	+6.55	+12.62	+6.04	+8.60	+14.07	39.88
13	Orissa	+10.44	-1.94	+11.94	+10.22	+6.38	+19.82	25.05
14	Punjab	-10.78	+6.26	+12.02	+19.82	-4.58	+21.56	21.70
15	Rajasthan	+6.70	-6.29	+14.14	+18.01	+15.20	+26.20	27.83
16	Tamil Nadu	+8.57	+3.47	+8.52	+11.91	+14.66	+11.85	22.30
17	Uttar Pradesh	-0.97	-3.08	+6.66	+13.57	+11.82	+16.66	19.78
18	West Bengal	+6.25	-2.91	+8.14	22.93	+13.22	+32.80	26.87
	<i>Union Territories and Other Areas</i>							
1	Andaman and Nicobar Islands	+7.34	+2.37	+8.78	+14.61	-8.28	+105.19	81.17
2	Chandigarh	-16.07	-1.65	+9.10	+14.11	+7.47	+394.13	114.59
3	Dadra and Nagar Haveli	+19.52	+6.99	+23.23	+5.70	+2.70	+39.56	27.96
4	Delhi	+1.98	+18.03	+20.26	+44.27	+90.00	+52.44	52.93
5	Goa, Daman and Diu	2.31	-3.53	+8.15	+7.76	+2.11	+5.14	36.88
6	L.M. and Islands	+4.85	-6.31	+17.62	+14.43	+14.60	+14.61	31.95
7	Manipur	+21.71	+10.92	+16.04	+14.92	+12.80	+35.04	37.53
8	Meghalaya	+15.71	+7.21	+13.83	+15.59	+8.97	+27.03	31.50
9	North East Frontier Agency.	..	..	..	..	..	..	..
10	Pondicherry	+4.39	-5.06	+5.93	+10.20	+11.31	+16.34	27.81
11	Tripura	+32.48	+32.59	+25.63	+34.14	+24.56	+78.71	36.28
12	Sikkim	+48.98	-7.05	+34.37	+10.67	+13.34	+17.76	29.38
13	Arunachal Pradesh	..	..	..	..	..	..	39.8 <sup>1</sup>

Source : Statistical Abstract India—1977.



## Annexure—II

*Distribution of population in U.P. by broad age groups***(Population figures are in thousands)**

Census Year	Age Groups (Year)		
	0—14	15—59	60 and above
1.	2	3	4
1931	19363 (38.90)	28423 (57.10)	1991 (4.00)
1951	24177 (38.50)	33325 (53.08)B	5284@R (8.41)
1961	29850 (40.48)	39228 (53.19)	4668@ (6.33)
1971	36965 (41.84)	45392 (51.38)	5984@ (6.78)
1981	41839 (39.57)	57498 (54.38)	6392 (6.05)
1991	45410 (37.19)	69151 (56.63)	7553 (6.18)

@—Includes age not stated also.

B—Refer to age group 15—54.

R—Refer to age group 55 and above.

Sources: (1) Draft Fifth Five Year Plan, U.P., Vol.—1, Page—33.

(2) Census of India, 1961, Vol.-I, U.P. Part II-B, (i) General economic tables.

(3) Census of India 1971, B Series Economic Table Part, II, B-I.

(4) Report of the Expert Committee on Population Projections paper I of 1979, Series I Census of India—1971.

## Annexure—III

*Projected size of rural and urban labour force, male and female during the period 1980—85***(In lakhs)**

Year (as on March 1)	Size of Labour force								
	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7	8	9	10
1980	219.51	58.85	278.36	39.84	4.80	44.64	259.35	63.65	323.00
1981	224.54	60.14	284.68	41.07	4.94	46.01	265.61	65.08	330.69
1982	230.00	61.71	291.71	42.35	5.11	47.46	272.35	66.82	339.17
1983	235.54	63.28	298.82	43.69	5.28	48.97	279.23	68.56	347.79
1984	241.11	64.86	305.97	45.05	5.47	50.52	286.16	70.33	356.49
1985	249.94	67.35	317.29	47.88	5.83	53.71	297.82	73.18	371.00
Additions during the period 1980— 85	30.43	8.50	38.93	8.04	1.03	9.07	38.47	9.53	48.00

**Annexure—IV**  
**Occupational Structure**

Occupation	1971			1961			1951		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
1	2	3	4	5	6	7	8	9	10
1 Cultivators .. .. .	15697866 (57.42)	14515674 (59.10)	1182192 (42.64)	18428376 (63.88)	14302062 (63.62)	4126314 (64.78)	20571618 (76.65)	14427568 (73.88)	6144050 (84.06)
2 Agricultural Labourers .. .. .	5453829 (19.95)	4220484 (17.18)	1233345 (44.49)	3261178 (11.30)	2035588 (9.06)	1225590 (19.24)			
3 Livestock, forestry, fishing, hunting and plantations orchards and allied activities	167575 (0.60)	154706 (0.63)	12869 (0.46)	171859 (0.60)	147427 (0.66)	24432 (0.38)			
4 Mining and Quarrying .. .. .	11178 (0.05)	9756 (0.04)	1422 (0.05)						
5. Manufacturing— Processing services and repairs							2071629 (7.72)	1692438 (8.61)	379191 (5.19)
(a) Household Industries. .. .. .	1001605 (3.66)	892861 (3.64)	108744 (3.92)	1801746 (6.25)	1319180 (5.87)	482566 (7.58)			
(b) Other than household Industries	989815 (3.62)	961167 (3.91)	28648 (1.03)	800835 (2.78)	771059 (3.43)	29776 (0.47)			
6. Construction .. .. .	166561 (0.60)	163888 (0.67)	2673 (0.10)	213919 (0.74)	209914 (0.93)	4005 (0.06)			
7. Trade and Commerce .. .. .	1111546 (4.00)	1086807 (4.42)	24739 (0.89)	1062882 (3.68)	996260 (4.43)	66622 (1.05)	1044725 (3.89)	926218 (4.74)	118507 (1.62)
8. Transport, Storage and Communication .. .. .	473668 (1.73)	468486 (1.91)	5182 (0.19)	399265 (1.38)	396530 (1.76)	2735 (0.04)	296553 (1.10)	273111 (1.40)	23442 (0.32)
9. Other Services.. .. .	2260812 (8.27)	2088229 (8.50)	172533 (6.23)	2710081 (9.39)	2302340 (10.24)	407741 (6.40)	2854791 (10.64)	2211064 (11.30)	643727 (8.81)
Uttar Pradesh .. .. .	27334455 (100.00)	24562058 (100.00)	2772397 (100.00)	28851141 (100.00)	22480360 (100.00)	6369781 (100.00)	26839316 (100.00)	19530399 (100.00)	7308917 (100.00)

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## Annexure--V

Distribution of estimated workers (person weeks) in 1980 in age-group 15-59 according to 32nd round of N. S. S.

(in lakhs)

Serial no	Category of workers	Rural			Urban			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7	8	9	10	11
1	Bonded labour ..	0.32 (0.15)	0.03 (0.05)	0.35 (0.13)	0.03 (0.04)	.. (0.00)	0.03 (0.04)	0.35 (0.13)	0.03 (0.04)	0.38 (0.12)
2	Self-employed									
	Agriculture ..	135.76 (64.38)	44.53 (73.25)	180.29 (66.36)	2.72 (6.51)	0.95 (16.45)	3.67 (7.69)	138.48 (55.81)	45.48 (68.98)	183.96 (58.58)
	Non-Agriculture	27.24 (12.91)	5.71 (9.41)	32.95 (12.13)	15.99 (43.40)	2.38 (48.21)	18.37 (43.97)	43.23 (17.43)	8.09 (12.33)	51.32 (16.34)
	Total ..	163.00 (77.29)	50.24 (82.66)	213.24 (78.49)	18.71 (49.91)	3.33 (64.66)	22.04 (51.66)	181.71 (73.24)	53.57 (81.31)	235.28 (74.92)
3	Regular Salaried/wage employee									
	Agriculture ..	4.91 (2.33)	0.44 (0.75)	5.35 (1.97)	0.25 (0.64)	0.02 (0.30)	0.27 (0.60)	5.16 (2.08)	0.46 (0.72)	5.62 (1.79)
	Non-Agriculture	11.99 (5.69)	0.97 (1.56)	12.96 (4.77)	14.43 (39.21)	1.28 (25.92)	15.71 (37.63)	26.42 (10.65)	2.25 (3.39)	28.67 (9.13)
	Total ..	16.90 (8.02)	1.41 (2.31)	18.31 (6.74)	14.68 (39.85)	1.30 (26.22)	15.98 (38.23)	31.58 (12.73)	2.71 (4.11)	34.29 (10.92)
4	Casual labour in Public Works ..	0.97 (0.46)	0.09 (0.14)	1.06 (0.39)	0.18 (0.47)	0.02 (0.39)	0.20 (0.46)	1.15 (0.46)	0.11 (0.16)	1.26 (0.40)
5	Casual labour in other types of work									
	Agriculture ..	23.27 (11.03)	8.52 (14.00)	31.79 (11.70)	0.61 (1.49)	0.13 (2.30)	0.74 (1.59)	23.88 (9.62)	8.65 (13.12)	32.53 (10.36)
	Non-Agriculture	6.43 (3.05)	0.50 (0.84)	6.93 (2.55)	3.04 (18.24)	0.33 (6.43)	3.37 (8.02)	9.47 (3.82)	0.83 (1.26)	10.30 (3.28)
	Total ..	29.70 (14.08)	9.02 (14.84)	38.72 (14.25)	3.65 (9.73)	0.46 (8.73)	4.11 (9.61)	33.35 (13.44)	9.48 (14.38)	42.83 (13.64)
	Total Workers	210.89 (100.00)	60.79 (100.00)	271.68 (100.00)	37.25 (100.00)	5.11 (100.00)	42.36 (100.00)	248.14 (100.00)	65.90 (100.00)	314.04 (100.00)

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NB—Figures in brackets show the percentages as obtained in the total workers of the sample population.

## Annexure—VI

*Statewise Comparision of certain labour force characteristics of the Age Group 15—59 years (32nd round : NSS)*

State	Percentage of labour force to population	Percentage of working force to population	Percentage of unemployed to labour force	Percentage of under utilization of work-ing persons (rates of under utilization)	Net State Domestic product at Factor cost (Per Capita) 1975-76 (at current prices) in rupees
1	2	3	4	5	6
1. All India	62.94	59.90	4.84	8.54	1020
2. A.P.	72.03	67.40	6.42	9.03	897
3. Assam	52.40	51.45	1.82	7.11	848
4. Bihar	56.85	54.10	4.83	6.09	669
5. Gujarat	65.72	63.53	3.33	10.03	1236
6. Haryana	57.19	54.59	4.55	9.46	1514
7. H.P.	73.06	71.99	1.46	11.08	1165
8. J and K	57.78	55.37	4.16	7.06	825
9. Karnataka	66.86	63.89	4.45	10.38	1038
10. Kerala	58.17	50.28	13.57	22.77	1000
11. M.P.	69.64	68.25	1.99	5.47	790
12. Maharashtra	59.48	56.45	5.11	7.63	1455
13. Orissa	59.58	56.78	4.70	8.69	834
14. Punjab	57.87	56.18	2.92	10.08	1688
15. Rajasthan	68.55	66.90	2.40	8.38	873
16. Tamilnadu	69.19	64.17	7.26	14.54	997
17. U.P.	57.52	55.92	2.77	5.58	872
18. West Bengal	55.00	51.54	6.29	6.48	727

## Annexure—VII

*Employment trends in the Organised Sector during 1971—79*

Year	Employment as on March 31, (In lakhs)	Index no.
1	2	3
1971	19.30	100.00
1975	20.92	108.39
1977	21.34	110.57
1979	22.81	118.19

## Annexure—VIII

*Average Daily Wage rates, Consumer price indices and Real Wage Rates of Agricultural Labourers in U.P.*

Serial no.	Year	Money Wage Rates (Rs.)	Consumer Price indices	Real Wage rates (Rs.)
1	2	3	4	5
1.	1957-58 ..	0.92	100.0	0.92
2.	1964-65	2.35	176.6	1.33
3.	1966-67	2.02	233.9	0.86
4.	1972-73	2.98	267.4	1.11
5.	1978-79	4.78	399.4	1.20

Source : Economics and Statistics Division, State Planning Institute, U.P.

## Annexure—IX]

*Trends of unemployment according to the Live Register Statistics during 1971—79*

Year	Registrants on Live Registers as on June 30 (in lakhs)	Index no.
1	2	3
1971	4.25	100.00
1975	7.22	169.88
1977	12.29	289.18
1979	14.36	337.88

## Annexure—X

Unemployment among technical/professional manpower  
(Live Register Statistics 1975—79)

Category	Registrants on Live Register as on June 30, of the year	
	1975	1979
1	2	3
<i>Engineering :</i>		
1. Degree Holder .. .. .	1346	1392
2. Diploma Holders.. .. .	4250	15191*
<i>Agriculture:</i>		
1. Graduate .. .. .	1881	2782
2. Post-Graduate .. .. .	457	207
<i>Medicine :</i>		
1. Medical Graduate and Post Graduate .. .. .	268	690
2. Para-Medical personnel .. .. .	635**	1569**
<i>Teaching :</i>		
1. Primary school teacher .. .. .	10685	11986
2. Middle School teacher .. .. .	326	19688
3. Higher Secondary teacher .. .. .	7161	16385
4. University teacher .. .. .	326	201

\*As on December 31.

\*\*Nurses, Pharmacists, X-Ray technicians, Laboratory Assistants, A.N.Ms and Sanitary Inspectors.

## Annexure—XI

Classification of job-seekers by Education level and Length of stay on the live register  
(All India)

(Percentage)

Education Level	Length of stay (months)								Total
	Not more than 6	More than 6 not more than 12	More than 12 not more than 18	More than 18 not more than 24	More than 24 not more than 36	More than 36 not more than 48	More than 48	Not classified	
1	2	3	4	5	6	7	8	9	10
1. Illiterate	16.3	30.8	20.4	12.3	8.0	4.1	7.8	0.3	100.00
2 Literate below matric	14.1	26.2	20.8	11.4	11.4	6.0	9.4	0.7	100.00
3 Matric but below graduate	15.1	26.1	19.3	12.4	10.8	7.4	8.4	0.5	100.00
4. Graduate and above	14.5	24.9	18.9	13.0	12.8	7.3	7.6	1.0	100.00
(a) Engineering	22.1	26.0	21.8	14.8	7.3	3.5	3.3	1.2	100.00
(b) Medicine	23.0	25.6	27.9	5.6	7.8	8.4	..	1.7	100.00
(c) Agriculture	22.3	30.5	20.6	6.9	12.3	5.0	2.3	0.1	100.00
(d) Teaching	20.1	27.3	16.6	11.2	11.9	5.8	6.5	0.6	100.00
(e) Post-graduate (Science)	13.4	21.4	22.5	18.6	15.2	4.7	3.4	0.8	100.00
(f) Post-graduate (Art and Science)	16.1	25.1	19.4	14.1	14.6	5.0	4.5	1.2	100.00
(g) Other graduates	13.6	24.5	18.8	12.9	13.0	7.9	8.3	1.0	100.00
5 Unclassified	21.6	8.2	7.6	3.9	15.0	7.5	..	36.2	100.00
Total ..	14.8	26.3	19.9	12.0	11.1	6.6	8.7	0.6	100.00

Source : Report on The survey of employed persons among the employment exchange registrants, Directorate General of employment and Training, Ministry of labour, Government of India, New Delhi, Appendix. 10.



## Annexure—XII

*Demand and supply estimates of important categories of trained manpower during 1980—85*

Serial no.	Category of personnel	Estimated requirements	Likely availability	Surplus(+) Short-ages (—)
1	2	3	4	5
<i>I—Engineering Personnel</i>				
1. Degree Holders				
	(a) Civil .. .. .	5438	1559	(—)3879
	(b) Mechanical .. .. .	3315	2047	(—)1268
	(c) Electrical .. .. .	1900	2098	(+)198
2. Diploma Holders				
	(a) Civil .. .. .	13116	6875	(—)6241
	(b) Mechanical .. .. .	7327	11077	(+)3750
	(c) Electrical .. .. .	5920	11649	(+)5729
<i>II—Medical and Para-medical</i>				
1.	Doctor .. .. .	4721	3808	(—)913
2.	Nurses .. .. .	4267	2005	(—)2262
3.	A.N.Ms .. .. .	9149	5114	(—)4035
4.	Sanitary Inspector .. .. .	129	1158	(+)1029
5.	Pharmacists .. .. .	2371	2929	(—)558
6.	Lab Assistants .. .. .	399	974	(+)575
<i>III—Agricultural Personnel</i>				
1.	Agricultural Post graduates .. .. .	2253	2542	(+)289
2.	Agricultural graduates .. .. .	7316	10375	(+)3059
3.	Agricultural Diploma Holders .. .. .	10760	1560	(—)9200
<i>IV—Veterinary Personnel</i>				
1.	Veterinary graduates .. .. .	373	393	(+)20
2.	Stockman .. .. .	1645	250	(—)1395
<i>V—Teachers</i>				
1.	Primary and Middle School Teachers .. .. .	78208	48766	(—)29442
2.	Higher Secondary School Teachers .. .. .	16814	59208	(+)42394
<i>VI—Dairying Personnel</i>				
	B.Sc. (Ag.) (Dairying)/I.D.D. (D.T. and D.H.) .. .. .	523	445	(—)78

## CHAPTER 4 MINIMUM NEEDS PROGRAMME

The Sixth Plan envisages creation of extensive employment opportunities especially in rural areas, encouragement of subsidiary occupations and efforts to raise standards of living of those who are below poverty line. At the same time supplemental social inputs are to be provided in the form of the national norms under a Minimum Needs Programme components ; which include education, health, nutrition, drinking water, housing, communication, environmental sanitation and rural electrification. In Uttar Pradesh it has not been possible to mobilise adequate funds to cope with the requirements of the situation. If about ten crore people inhabiting the state are to be given a feeling that they are equal partners in national development, minimum social consumption needs have to be provided to them. It is absolutely necessary that funds required for establishing facilities according to time bound national programme are provided to the State during 1980-85 Plan period.

2. The adoption of the national Minimum Needs Programme is an important step towards improving the quality of life and ensuring a balanced and integrated development of rural urban inhabitants. The programme seeks to provide a minimum level of social consumption by establishing a net work of certain essential services. The programme, based on upgraded norms, provides for :—

(i) Elementary education to hundred per cent of children in the age group 6-14 years, and half of the additional enrolment in the non-formal system ;

(ii) Coverage of all adults in the age group 15-35 years under the adult literacy programme ;

(iii) One community health worker in each village, to fully cover and provide services for sanitation immunisation, simple remedies and referral services under the Rural Health Programme and the establishment of one primary health centre for every 50,000

population and a sub-centre for every 5,000 population ;

(iv) Assured supply of safe potable water to all left over problem villages ;

(v) Linking up villages with a population of 1,000 or more with the rural roads on a larger scale ;

(vi) Electricity supply to at least 50 per cent of the villages of the State ;

(vii) Financial assistance for construction of rural dwellings to all the landless rural households ;

(viii) Environmental improvement of urban slums by expansion of water supply, sewerage, paving of streets and provision of community latrines, as well as improvement of areas inhabited by Scheduled Castes, particularly scavengers ;

(ix) Mid-day meals for one-third of the children in the age group 6-11 years and supplementary feeding programme for under-nourished children in the age group 0-6 years, also for pregnant women and nursing mothers, specially in blocks with high concentration of scheduled castes and scheduled tribes population.

3. The programme is intended to fulfil the promise of providing essential infrastructure and social services which the public sector alone can offer to the weaker sections of the population, particularly in the rural areas. Because of its large construction component, it will also generate substantial additional employment for unskilled labour. In the proposed MNP, elementary education, adult education and nutrition programmes relate to urban as well as rural areas. The programmes for environmental improvement for slums relate to urban areas only. All other programmes are designed to cater to the needs of the rural areas. Urban needs in these sectors are proposed to be covered under the general sectoral plans.

4. For attainment of the norms of Fifth Five Year Plan the estimated outlay was kept at Rs.771 crores, but against this outlay the State Government could provide only Rs. 148 crores in view of constraints of

resources and more pressing needs of productive sectors like power, irrigation and agriculture. This has already resulted in a big backlog in respect of the norms expected to be fulfilled within the Fifth Five Year Plan. Keeping in view the im-

portance attached to Minimum Needs Programme in 1980-85 Plan also, an outlay of Rs.1,372.73 crores is being provided for these programmes\* in State Plan for 1980-85. Broad details of this outlay are given below :—

(In crores Rs.)

Sl. no.	Sector	Plan outlay (1980-85)
1	2	3
1	Education .. .. .	167.72
2	Medical and Public Health .. .. .	105.00
3	Water Supply .. .. .	325.00
4	Roads and Bridges .. .. .	618.51
5	Electricity .. .. .	78.00
6	Urban/Rural housing Development .. .. .	28.00
7	Environmental improvement .. .. .	36.50
8	Nutrition .. .. .	14.00
Total ..		1372.73

5. The process of planning at the local level already initiated in the past is likely to be accelerated in coming few years. Larger amounts of financial resources are likely to flow to the district level during 1980-85 under integrated area development and other similar programmes. These programmes cannot be segregated from the individual departmental programmes. Integrated area development programmes or local level plans at the district level will have to be formulated with reference to different departmental programmes. The productive sectors may pave the way for economic development, but the minimum needs of a common man have their own importance. As the levels of economic development are stepped up, shortfalls in social facilities like education, health, etc. will become more prominent. Thus it is necessary that while formulating the plans of integrated area development, the Minimum Needs Programme is also properly co-ordinated with these plans. The programme-wise details are briefly discussed in subsequent paragraph.

6. *Education—Primary education*—This is an important input for social awareness and receptivity to modern ideas, improvement in the quality of life, widening of mental outlook and preparation of manpower for rapid economic growth. Thus to bring about qualitative and quantitative

improvement in the field of elementary education the programme seeks to reduce the inter-district disparities and provide certain identified facilities up to a certain minimum level to all the districts of the State. Although it was proposed to provide facilities for universalisation of elementary education and to minimise the percentage of drop outs, during 1974-78 only 5,736 junior basic and 859 senior basic schools were opened against the requirements of 13,380 junior basic and 6,000 senior basic schools. The other aspect of universalisation of elementary education, pertaining to the attainment of cent per cent enrolment and retention of children in the schools also remained unrealised. Incentives to scheduled castes, scheduled tribes and other weaker sections of the society in the form of free text books, stipends, freeships and mid-day meals have failed to achieve this objective. Accordingly an analysis of causes is being made and environmental improvement is proposed in the Plan. The general strategy adopted for the universalisation of elementary education during the Sixth Five Year Plan (1980-85) is as follows :

(i) Universal coverage, for children of age group 6 to 11, is proposed to be attained by opening new primary schools in all the unserved rural areas within a walking distance of 1.5 km. in plains and 1 km. in hills. New senior

basic schools are to be established within a radius of 3 km. of all areas with an over 800 population.

(ii) Universal enrolment of children in the age group of 6—11 years and 50 per cent in the 11—14 years age group.

(iii) Maintenance of regular attendance in school through the provision of incentives like free text books, uniforms, stipends and scholarships, mid-day meals and buildings (with hand pumps), specially for the children of weaker sections of society. Keeping the above norms and the requirements of educational facilities for all the enrolled boys and girls which is estimated to be 111.17 lakhs in class I to V (age group 6—11) and 36.72 lakhs in classes VI to VIII by the end of 1980—85, a target of opening 11.335 additional junior basic schools and 800 additional senior basic schools in rural and urban areas has been fixed for 1980—85 Plan period.

Regarding enrolment 89.89 lakh boys and girls in classes I—V (age group 6—11 years) were going to school at the end of 1978—79 in the junior basic schools of the State. It is expected that the enrolment in the above age group would have increased by 93.17 lakhs at the end of 1979-80 and is estimated to be 111.17 lakhs at the end of 1984-85. The total enrolment of children in classes VI to VIII (age group 11—14 years) is also likely to rise from 25.93 lakhs at the end of 1978-79 to 27.92 lakhs at the end of 1979-80 and is estimated to be 36.72 lakhs at the end of 1984-85.

7. *Adult Education*—Along with the universalisation of elementary education, it is essential to cover the uneducated adult population to enable it to develop their full potentialities and play an active role in economic, social and cultural development. A target of opening 24,500 centres for educating 32.52 lakhs adults (15—35 years) has been fixed for the 1980—85 Plan period against which 7,925 centres for educating 4.58 lakhs adults (15—35 years) have already been opened in the year 1978-79.

An outlay of Rs.167.72 crores has been proposed during Five Year Plan, 1980—85

period under this programme against which Rs.9.33 crores have been utilised by the end of 1979-80. During the year 1980-81, an expenditure of Rs.11.01 crores is likely to be incurred against the approved outlay of Rs.10.11 crores.

8. *Rural Health*—For the Sixth plan period, one fully equipped P. H. C. is proposed for a population of 50,000 and a sub-centre for every 5,000 population. One health worker in each village will attend to all the common ailments of the local population and will also provide referral services to those needing immediate attention of specialised doctors. The main emphasis in the Sixth Plan is on strengthening PHCs to 30 bedded full-fledged hospitals. The plan includes the construction and extension of buildings of PHC's and sub-centres.

9. *Rural Water Supply*—The State has about 30,503 scarcity villages which are yet to be provided with piped water supply. These include 4676 villages of the drought prone district of Mirzapur, Allahabad, Jhansi, Banda, Jaunpur, Ghazipur, Varanasi, Hamirpur and Jalaun, 300 villages of Dehra Dun, Chamoli and Uttarakashi and 105 villages of the Bhabar area of Saharanpur and Bijnor districts, which are extremely deficient in the matter of potable water. The only means of uncontaminated drinking water so far provided in villages is through piped water supply but this is a very costly and slow-developing arrangement. Therefore alternatives have to be found. The provision of water supply to all the remaining villages in rural areas has been accepted as an item under MNP. In order to achieve the desired objective and to secure an appreciable impact (at the same time keeping in view administrative and material constraints) it has been proposed to allocate an amount of Rs.325 crores, under the MNP in the Sixth plan period, out of a total proposed outlay of Rs. 533.62 crores for the sector of water supply and sanitation. This also includes the amount required for completing the remaining work on the on-going schemes. In the Annual Plan 1979-80, a provision of Rs.36.53 crores was made to cover 1171 problem villages. The likely expenditure for 1980-81 is Rs.27.38 crores

and it is expected that 1200 problem villages will be covered.

10. In addition, the programme also aims at providing wells and diggiss to the scheduled castes/population in plains and diggiss in hills (other than those covered by the Jal Nigam) through the Rural Development Department. It has been decided to provide at least one drinking water-well in each settlement. Therefore, a massive programme for construction of wells in plains and diggiss in hills has been taken by Rural Development Department. During the year 1979-80, 14,130 wells, 196 diggiss and 2,652 hand pumps were constructed. About 1669 wells, 208 diggiss and 2,000 hand pumps are likely to be constructed during 1980-81. A target of constructing 19,598 wells, 1,250 diggiss and 10,000 hand pumps has been proposed for 1980-85.

11. *Rural Roads*—In view of the financial constraints, plan outlays for roads and bridges are extremely inadequate. A large majority of villages do not have the facility of all weather roads and wide regional disparities exist in the level of availability of communication facilities. Therefore, it is proposed to link all the villages having a population of 1,500 and above and 50 per cent of the villages having a population between 1,000 and 1,500 with main roads in this Plan period. On this basis 13,304 villages of this State need to be connected with pucca roads. It has also been decided that spill-over works in rural areas and reconstruction of rural roads that are rapidly deteriorating due to increase in traffic should also be accommodated in the MNP. An outlay of Rs.618.51 crores has been provided for these programmes. The road programme under MNP includes the construction of missing links and missing bridges, in order to promote thorough traffic and maximum benefits from the existing road net work.

12. The total cost of construction of new village link roads in order to connect all the villages of 1,500 population and above and 50 per cent of villages of 1,000 to 1,500 population is estimated to be Rs. 343.84 crores, but in view of constraints of resources, only Rs.85.21 crores would

be provided for the plains and, an amount of Rs.161.83 crores for the hills.

13. As far as rural roads are concerned 19,900 km. roads will be constructed during 1980-85, 2,224 km. rural roads have already been constructed during 1979-80 and 2,830 km. are likely to be constructed during 1980-81. A target of constructing 1,760 km. roads has been fixed for 1981-82.

14. *Rural Electrification*—The Minimum Needs Programme aims at providing electricity to at least fifty per cent of the villages in the State. An outlay of Rs.78 crores has been proposed for rural electrification works, with a view to electrifying larger number of villages during the Sixth Five Year Plan as compared to earlier plans. Besides, the electrification of villages, provision of electric connections to Harijan bastis and energisation of private tube-wells/pumping sets has been assigned a high priority.

15. As far as physical achievement are concerned 1,652 villages and Harijan bastis have been electrified during the year 1979-80 and 1,350 are expected to be electrified during 1980-81. Further, a target of electrifying 1,512 villages and Harijan bastis has been fixed for the year 1981-82. A target of electrification of 10,180 villages has been proposed for 1980-85 Plan.

16. *Housing for Rural Poor*—Under this programme, housing needs of only the poorest sections of the rural population (consisting of scheduled castes, scheduled tribes, landless agricultural labourer and other backward classes) will be covered. According to an initial survey 12.12 lakhs households were found eligible for allotment of house sites and have been allotted house sites. It has also been decided to take up development of sites on priority basis wherever the allottees are interested in taking up house construction in the immediate future. A target of development of at least 1,60,500 house sites has been proposed for 1980-85. An outlay of Rs.28 crores has been proposed for the 1980-85 Plan period under this programme. So far as the physical programme is concerned, a target of constructing of

1,60,000 houses has been proposed for the 1980-85 Plan. Against this target, 23,000 houses are likely to be constructed during 1980-81 and a target of constructing 22,500 rural houses has been fixed for the year 1981-82.

17. *Environmental Improvement of Slums*—A slum is defined as a chaotically occupied; unsystematically developed and generally neglected area which is overcrowded and with unrepaired and decaying structures, lacking drains, piped water and street light. With the increase of population in the urban areas, slums are growing also on account of inadequate provision of housing facilities. In view of the magnitude of the slum problems, rapid increase in value of land and scarce resources, it is necessary that along with the construction of houses the condition of existing slums is also improved in order to benefit the poorer sections.

18. The scheme for environmental improvement of slums was operated under the Central sector till the end of Fourth Plan. Thereafter it was transferred to the State sector and all the KAVAL towns, *viz.* Kanpur, Allahabad, Varanasi, Agra and Lucknow and the two towns of Meerut and Bareilly having a population of 3 lakhs or more were covered. Of the urban population, nearly one-fourth estimated to constitute the slum population in all the 22 class I cities of the State. Thus the estimated slum population in 1980-81 was 25 lakhs out of which 6.78 lakhs of slum population has been benefited by March, 1980. An outlay of Rs.36.50 crores has been proposed for the Plan period to cover 18.22 lakh persons living in slums.

19. *Nutrition*—In order to attack the problem of mal-nutrition at its root, it is necessary to take care of pregnant women, lactating mothers and primary school children, particularly of weaker sections. The problem of providing nutritious food to the above sections of society, is all the more acute in the State because of very low economic levels. It is no doubt a gigantic problem requiring colossal resources. It is recognised that nutritional improvement has a dual relationship with economic and social development of any geographical entity. In a State like Uttar Pradesh a very large section of population

consumes less than the minimum required calories per day, constituted of very poor (near starvation) diets and neglecting special dietary needs particularly of the children in poorer families.

20. Nutrition schemes are being implemented by the Education, Rural Development and Harijan and Social Welfare Departments. The Rural Development Department implements the Supplementary Feeding Programme (SNP) and the applied nutrition programme in the rural areas. The education department takes care of the school-going children in the rural areas as well as in the slums. The Harijan and Social Welfare Department has taken up the supplementary feeding programme as part of the Integrated Child Development Service Programme in selected area of the State. These arrangements are described below :

(a) *Activities of the Education Department*—The Education Department has been implementing the mid-day meals programmes in many of the districts alongwith S.N.P. in some districts of the State. The mid-day meals programme has been launched in 51 districts and the S. N. P. in 24 districts. Mid-day meal programme is basically meant for children of classes I-V (age group 6-11 years) in both the rural and urban areas. Only selected primary schools under this programme are being supplied food from the CARE, supplemented by State Government resources.

The S. N. P. covers 24 districts of the State. Of these, the 4 districts of Lucknow, Varanasi, Kanpur and Allahabad are provided food inputs by CARE, the eight district of Agra, Moradabad, Saharanpur, Meerut, Ghaziabad, Bulandshahr, Ghazipur and Jaunpur receive inputs from the WFP and the remaining 12 districts of Jhansi, Lalitpur, Hamirpur, Banda, Jalaun, Nainital, Dehradun, Pauri, Almora, Gorakhpur, Azamgarh and Faizabad are supplied food by the State Government through authorised agencies.

An outlay of Rs.720.00 lakhs has been kept in the Sixth Plan for the nutritional programme run by the Education Department. Out of this Rs.50.00 lakhs is likely to be spent during 1980-81. An outlay

of Rs. 80.00 lakhs is being proposed for the year 1981-82.

(b) *Programme of the Rural Development Department*—At present, this programme is being implemented in 13 districts of the State. An outlay of Rs.480.00 lakhs has been proposed for the Sixth Plan period. Against the above outlay Rs.39.00 lakhs is likely to be spent during 1980-81 covering 46,000 villages of the State. An outlay of 45.00 lakhs is being proposed for the year 1981-82 to cover 1.33 lakhs beneficiaries.

(c) *Activities of the Social Welfare Department*—Supplementary nutrition is required for children below 6 years of age

and nursing an expectant mothers from low income families, for 300 days in the year. The average cost of food provided per beneficiary has been estimated at a flat rate of 25 paise per day. For children who are found on medical check-up to be suffering from mal-nutrition, based on the recommendation of the doctor, average cost per beneficiary would come to 60 paise per day. Under this programme, the number of beneficiaries estimated during the Plan period 1980-85 will be 2.22 lakhs. The total outlay for the Plan period 1980-85 is Rs.200.00 lakhs of which Rs.40.00 lakhs is likely to be spent during 1980-81. An outlay of Rs.35.00 lakhs is being proposed for the year 1981-82.

## CHAPTER 5

### STRATEGIES FOR REGIONAL DEVELOPMENT

#### INTER-REGIONAL VARIATIONS :

For planning purposes, the State has been divided into five regions, viz. western, central, eastern, Bundelkhand, and hills on the basis of contiguity, cropping pattern, geographic and economic factors.

2. The western region comprises 19 districts including the whole of Agra, Meerut, Bareilly and Moradabad Divisions and Etawah and Farrukhabad districts of Allahabad Division. Of the nine districts comprising the central region, Kanpur and Fatehpur districts are in the Allahabad Division; Barabanki in the Faizabad Division and the remaining six districts comprise the whole of the Lucknow Division. As regards the eastern region, its 15 districts constitute the whole of Gorakhpur and Varanasi Divisions, a major part of Faizabad Division and Allahabad district of Allahabad Division. All the five districts of Jhansi Division form the Bundelkhand region, while all the five districts of Garhwal Division and three districts of Kumaon Division comprise the Hill region. The salient features of these regions are described in the following paragraphs.

#### PHYSIO-GEOGRAPHICAL VARIATIONS

3. *Western region*—This region comprises the western part of the Gangetic plain and a small strip of the Sub-Himalayas. Ganga and Yamuna, the two mighty rivers of the northern India, flow through it. The other important rivers of the region are Ramganga, Hindon and Kali. The region has very fertile land. The soils are largely alluvial interspersed with saline and alkaline soils, and also to some extent the Tarai soil. The climatic conditions of the western region are generally favourable to agriculture and it has a tropical climate.

4. *Central region*—The central region covers the central Gangetic plain. Its

northern part comprises the area between Sarda and Gomati rivers. The land of this region is generally fertile. Like the western region, it has alluvial soils, interspersed with saline and alkaline lands. The climate of this region is also favourable for cultivation and it has a tropical monsoon climate.

5. *Eastern region*—This region covers 15 districts of the State and extends over the eastern part of the Gangetic plain. It is traversed by the Ganga, Ghaghra, Gandak and Gomati rivers and by their tributaries. These rivers often create a broad flood plain in several districts of this region during the rainy season. The region has mainly alluvial soil which is fertile although there are chunks of alkaline and saline lands as well. The land is, on the whole, fertile and the climate is favourable for agricultural production. The region has a tropical monsoon climate.

6. *Bundelkhand region*—This region comprises the southern hills and part of central Indian plateau south of the Yamuna. The region is drained by Betwa and Yamuna rivers. The main soils of the region are black and mixed red. The water table is deep and the annual rainfall is comparatively low. The land is not very fit for agriculture.

7. *Hill region*—As the name suggests, the region is hilly except for a few valleys between the ridges and the sub-mountainous plateaus in Dehra Dun and Nainital districts. It lies mainly in the greater and lesser Himalayas, and partly in the sub-Himalayas. It has a rugged topography and some areas at high altitude are inaccessible. The altitude of the region between 300 and 7,800 metres above the mean sea level. Due to highly undulating topography of the region, uniformity of conditions is not found and great variations in altitude, rainfall, vegetation, soil



structures density of population, etc. exist. The soils of this region are, by and large, shallow and immature, and vary in texture and depth, except in the plains of Dehra Dun and Naini Tal districts where the land is very fertile and weather conditions are excellent for agriculture.

8. There are wide variations in the availability of natural resources, levels of economic development, infra-structural facilities and availability of social services not only between different regions of the State but also between different districts of the same region. Relevant data on demographic, economic, social, infra-structural status for all districts and regions has been compiled and presented in Annexure I at the end of this Chapter. Brief analysis of some important indicators is made to provide a general picture of inter-regional variations.

#### VARIATIONS IN NATURAL RESOURCES :

9. Land is the most important natural resource of the State and from that point of view the eastern region has the largest resource. But as compared to the western and central regions where 73.41 and 66.04 per cent respectively of total reporting area was cultivated, the corresponding percentage of the eastern region was 66.08 while that of Bundelkhand was even lower (61.08). It was the lowest (13.52) in the hill region.

10. As a result of the various irrigation schemes implemented in the past, the percentage of gross irrigated area to gross area sown in the State was 42.87 in 1977-78. The highest percentage (57.91) was in the western region and in the western region and the lowest 22.40) was in Bundelkhand.

11. As regards irrigation facilities, it is seen that in 1979-80 as much as 56 per cent of the total irrigation potential in the State came from private minor irrigation works and canals accounted for 33.09 per cent. As regards the State tube-wells, they provided 13.86 per cent of the total potential in the eastern region as compared to 12.52 per cent in the western region, 5.21 per cent in the central region, 1.26 per cent in Bundelkhand and 3.78 per cent in the hills. The percentage contribution of private minor irrigation works to total irrigation potential was almost the same in all regions (around 55) except in the case of

the hill region where it was only 44.45 per cent.

12. It is noticed that the western region utilized the highest percentage (49.32) of its underground water in April 1979 and large amounts of water were available in the other regions of the State which remained untapped. The percentage of balance underground water to total safe yield was 83.13 in Bundelkhand where the water table is very low and cost of boring is very high due to rocky strata. It was the highest (83.99 per cent) in eastern region.

#### VARIATIONS IN LEVELS OF ECONOMIC DEVELOPMENT

13. The western region had the highest (Rs.3314) gross value of agricultural produce per hectare of net area sown in 1976-77. The intensity of cropping was highest in the hill region and lowest in the Bundelkhand region. The *per capita* consumption of electricity in 1977-78 was the highest (91.7 KWH) in the eastern region and lowest (23.1 KWH) in Bundelkhand as compared to 163 KWH in Haryana and 226 KWH in Punjab. The highest per capita consumption of electricity in the eastern region was due to location of an aluminium plant and some cement factories in the region.

14. In 1977-78, per hectare consumption of electricity in agriculture was the highest (135.8 KWH) in the western region and the lowest (13.4 KWH) in Bundelkhand region.

15. The hill region recorded the highest (Rs.17,389) and Bundelkhand region the lowest (Rs.7,302) value added per industrial worker in 1976-77. Industries contributed 17.86 per cent to total net output in 1976-77 at current prices in the western region but only 6.38 per cent in Bundelkhand.

16. The credit-deposit ratio at the end of December 1978 was 45.13 in the State as a whole. The central region with 52.79 per cent was at the top and Bundelkhand at the bottom with 29.12 per cent.

#### VARIATIONS IN LEVELS OF INFRA-STRUCTURAL DEVELOPMENT

17. 44.64 per cent villages of the western region had been electrified by March 1979 which is the highest in comparison to other regions and the State as a whole.

In Punjab and Haryana all villages have been electrified. The central region with 30.93 per cent villages electrified and the eastern region with 29.95 per cent villages electrified were close to the State average of 32.25 per cent. However, Bundelkhand and the hill region with 21.76 and 21.05 per cent villages electrified respectively were much below the State average.

18. The length of pucca roads per thousand sq. km. of area in March 1979 was 211 km. in the hill region and 137 km. in Bundelkhand region which were the highest and lowest respectively. The corresponding figures for Haryana and Punjab are 360 and 530 km. respectively. In respect of length of pucca roads per lakh of population, the hill region (238.6 km.) was far ahead of other regions and the State average (55.6 km.). The western region with 42.2 km. trailed behind all the region.

19. In 1978-79, 67.89 junior basic schools were available per lakh of population in the State as a whole. The corresponding figure for the hill region was 139.75 which was the highest among all the regions, while the eastern region (61.47) was at the lowest position. In respect of senior basic schools per lakh of population, the hill region (22.80) was again on the top and the eastern (9.99) on the bottom. In March 1978, 12.5 per cent villages in the State had allopathic hospitals within 3 km. The corresponding figure for eastern region, which was the highest, was 14.8 per cent while that for Bundelkhand (5.2 per cent) was lowest. There were 130.04 beds per lakh of population in allopathic hospitals in the hill region which was at the top and the eastern region with 42.49 beds per lakh of population was at the lowest position among all the regions. The corresponding figures for Haryana and Punjab were 70 and 87 beds respectively.

#### STRATEGY FOR DEVELOPMENT

20. As some of the existing regions are very large and also suffer from intra-regional disparities, the Area Planning Division of the State Planning Institute

undertook a study for identifying small composite planning regions based on homogeneity, eco-system cohesion, complementarity and viability which would have been ideal for optimising economic growth of each district in its regional setting. This study\* resulted in identification of 12 composite regions but the major bottleneck likely to be confronted in the proposed arrangement of regions would be the implementability of plans to be prepared at these levels since the proposed regions cut across the boundaries of the existing administrative divisions. In this context, it would be desirable to accept the present administrative divisions as planning regions also where already exists a fairly superior and specialised administrative organisation. An added advantage would be that the Government will not have to raise any substantial additional administrative structure as some mechanism already exists both for planning and implementation of programmes at this level. Besides, the division as a planning region should be preferable from the viewpoint of development manageability as it is big enough to contain a range of resources, conditions and attributes to attain the desired degree of economic viability and at the same time, geographically speaking, it is not so large as to make the integrated planning a difficult proposition.

21. The western region is the most developed region of the State both in regard to agriculture and industry. There is, however, enough scope for diversification of crops so as to bring larger areas under cash crops, medicinal crops, spices, oilseeds and pulses which would raise the incomes of the people in general. Agro-based industrial units as also milk powder plants would be established in this part of the State. During the Sixth Plan, emphasis is being laid on diversification of agriculture and setting up of agro-industries which would be essential to absorb the higher agricultural production of this region. While the progress in agriculture would generate some employment in the villages, it is unlikely to absorb the total labour force. Similarly, small and marginal farmers and those belonging to the scheduled

castes and weaker sections would benefit from the general programmes and the increase in production. To ensure the adequate spread of benefits to these sections stress would be laid on special programmes designed to help these groups. A number of large industrial units have been established and some more are speedily coming up in this region which, therefore, offers good scope for promotion of ancillary industrial units. Areas of the region like Moradabad, Saharanpur, Agra, are internationally famous for production of handicrafts and leather goods. These provide extensive employment to rural artisans. It is proposed to strengthen and introduce new facilities for these artisans to enable them to increase production and improve quality.

22. The central region has large tracts of culturable waste and usar land which can be brought under the plough after the necessary treatment. The intensity of cropping in this region is far below the State average and would be increased by adopting suitable cropping patterns and creation of more irrigation potential mainly through minor irrigation works. The area under cash crops like pulses and oil-seeds also would be extended. Dairy development and poultry programmes, as also fisheries, would be taken up to augment the incomes of weaker sections of the society. To help these sections market their produce, the agro-marketing system would be strengthened. At present, medium and large industries are mainly concentrated in Kanpur and Lucknow. Further establishment of such industrial units would be spread over other districts of the region. Rural electrification on a large scale is being undertaken which apart from encouraging construction of minor irrigation works would promote household, cottage and village industries in the region.

23. In the eastern region, although the intensity of cropping is higher than the State average, the value of agricultural produce per net hectare of area sown is less. This can be increased by taking steps to popularise cultivation of cash crops like oil seeds, pulses, spices, etc. There is plenty of underground water which should be tapped for irrigation purposes by construction of minor irrigation works. Areas

under fruits and vegetables should be extended and stress should be laid on the establishment of agro-based industries. There is scope in this region for development for poultry and dairy industry through upgrading of cattle breeds. Inland and riverine fisheries would be developed and marketing infra-structure for export of fish and vegetables to Calcutta created. In the field of industries, cottage and small industries, especially textiles and powerlooms, would be encouraged to provide employment in the rural areas. Stress will be laid on extension of rural electrification programme, improvement in communication linkages, extension of schooling and medical facilities and development of the tourism industry. Large industries presently located in Varanasi, Gorakhpur and Allahabad would be diversified. Special programmes are being designed for handloom-weavers and carpet weavers.

24. The eastern region is visited by floods almost every year which cause widespread damage to valuable agricultural land and other property. The steps taken so far have not solved this problem to any appreciable extent and would be intensified. Some areas in the region suffer from chronic drought resulting not only in scarcity of water for irrigation purposes but also for drinking purposes. In such areas, programmes for conserving water, promoting dry farming practices and installation of deep bored tube-wells by the State would be undertaken.

25. Bundelkhand has mainly uneven land and rocky strata which makes provision of irrigation facilities a costly proposition and intensity of irrigation is consequently very low. There are also deep ravines of the Yamuna and Chambal rivers which make large chunks of land unculturable and seriously hamper development of transport and communication facilities. There is acute scarcity of water especially in the Patha area. Therefore, deep bored tube-wells should be installed by the State for making water available for irrigation and drinking purposes and dry farming **practices should also be propagated**. Social forestry and farm forestry programmes are being introduced on lands with shallow soil cover. Grasslands would be develop-

ed to encourage livestock development with special emphasis on goat and sheep husbandry. Programmes of rural electrification and link roads are proposed to be extended. This region offers a good scope for provision of forest based industries. A large part of this region is considered to be drought prone where some schemes are already under implementation. Speedy supply of piped water would be ensured in scarcity villages.

26. The hill region is characterised by tremendous variations in soil structure, altitude, climatic conditions and vegetation. There are fertile lands in the valleys which also have assured irrigation facilities. In such areas high-yielding varieties and high value crops would be promoted, while in other areas, at present growing inferior crops like madua, cash crops like soyabean and oil-seeds would be introduced. Horticulture would be encouraged and scientific forest plantation would be taken upon village panchayat lands. This would encourage soil and water conservation and would also make fodder available for the animals which are at present not properly fed. Thus, the animal husbandry programme will be dovetailed with social and farm forestry programmes. Irrigation facilities are to be extended through water lifting devices and other minor irrigation programmes. Regulated mandis, both for foodgrains and fruits, would be developed in the interior hill areas to ensure remunerative price to the producer. Special stress would be laid on marketing of horticultural produce.

27. The hill region offers good scope for development of sheep husbandry and nomad Gujars would be rehabilitated by developing the dairy industry, labour intensive forest and agro-based industries would be developed at identified nodal points to create employment opportunities to the local people. There is need for providing potable water facilities to scarcity villages whose percentage to the total villages in the region is very high. The region offers very good scope for developing tourism and steps in this direction would be intensified and expedited.

28. In the present system of planning, larger proportion of outlays is allocated

to backward regions and districts and some programmes like DPAP, SFDA, command area development projects, hill area development, tribal development agencies as also special programmes for establishment of industries in industrially backward districts have been functioning for some time past in the State. It would be observed that some of them are resource/problem based area programmes while others are target group programmes which take into account the aspirations of the people. The intensive rural development (IRD) programme has also been introduced from April 1978, which benefits not only the agricultural sector but also industrial and tertiary sectors. Mandaliya Vikas Nigams have been established in every division of the State to promote its economic development. The State Government is also embarking on a Special Component Plan for scheduled castes from 2nd October, 1980, covering practically all the major sectors of economy as well as social services. For this purpose, blocks having high percentage of scheduled castes population have been selected.

29. Under the minimum needs programme, national norms have been prescribed for providing the basic amenities to the masses. These include elementary education, adult literacy, medical and health facilities, safe potable water, rural roads, rural electrification, houses for the rural poor, environmental improvement of slum areas and nutrition. The norms have been fixed keeping in view topography and ruggedness of the area concerned. For example, new primary schools are to be opened in all the unserved rural areas within distance of 1.5 km. in plains and 1.0 km. in hills.

30. It is expected that these measures would help in raising the economic standard of the weaker sections of the society and will ultimately lead to reduction in regional disparities.

#### DISAGGREGATION OF PLANNING FUNCTIONS

31. The concept of regional planning cannot exist in isolation. It has to form an integrated part of multi-level planning frame-work. The multi-level planning frame-work requires plans to be formulated

at the national, State, regional, district, block and even village levels. In order to make the multi-level planning frame-work an effective instrument of development and to ensure people's participation in planning and implementation, a clear-cut demarcation of development functions at various levels should be done. Associated with this is the delegation of powers which is necessary to make decentralised decision making really effective in planning and development. In this connection, the Area Planning Division undertook some studies and defined the existing and proposed levels of Disaggregation of Planning Activities in the various sectors.\* It may, thus, be concluded that planning and implementation functions should be undertaken at the block, district and divisional levels.

32. As already mentioned, the administrative machinery available at the divisional level is not presently involved actively in planning and decision making processes although a number of functions which relate mainly to monitoring and progress reviewing are being performed effectively because of multiplicity of agencies and committees\*\* set up at this level, which confine themselves only to considering the progress of implementation of their respective sectoral programmes. Not only a lack of co-ordination is noticed but, in addition, there is overlapping and duplication in the functions of various agencies which tend to work in isolation of each other.

33. In order to overcome these weaknesses, it is necessary to create a unified agency at the divisional level so that planning and developmental activities are brought under an effective and unified control. It is, therefore, proposed that barring the hill region (comprising Kumaon and Garhwal Divisions) for which a separate Hill Development Department is functioning for its overall development, a Regional Planning and Development Council be constituted at the divisional level which would be headed by a Cabinet Minister. The divisional commissioner would act as its vice-chairman. Since the divisional commissioners remain awfully

pre-occupied with multifarious functions other than planning, it is also suggested to create a post of Regional Planning and Development Commissioner who will act as Secretary of this Council. This Council would have the District Magistrate, Adhyakshas Zila Parishads, Members of Parliament and Legislature as members besides the regional officers of various development departments. It would, thus, achieve the objectives of integrating political and administrative will and local initiative and also mobilize a direct interaction between people's representatives, Panchayati Raj bodies and official agencies to achieve more effectively the overall development goals.

34. It is also envisaged that as soon as a divisible pool of Plan outlays is worked out, every division/district would be allocated a lump sum on the basis of specific criteria. The divisional/district authorities will be required to prepare an integrated area plan on the basis of these resources which will have to be approved or sanctioned by some higher authority before its implementation. It would be desirable to assign this task to the Regional Planning and Development Council at the divisional level to avoid delay in its sanction at the State level. The other functions of the council will be as follows :

(i) Approval of integrated area plans of the district within the parameters given by the State Government;

(ii) Overall co-ordination and assigning specific time-bound roles and responsibilities to various agencies/departments for implementation of plans ;

(iii) Supervision and monitoring of progress with special focus on target groups;

(iv) Mid-term appraisal of district plans;

(v) Evaluation and research studies for providing guidance to district level officers ;

(vi) Manpower development, upgrading of skills for increasing overall efficiency of the planning process.

\* Draft Five Year Plan 1978-83, Vol. I, pp. 203-218.

\*\* Annexure II.

(vii) Sanction of projects costing up to Rs.10 lakhs; and

(viii) Providing feed-back to Government for timely removal of bottlenecks in development.

35. The Regional Planning and Development Council would need adequate planning support to discharge its functions effectively. It is, therefore, proposed to constitute a well represented\* high level Planning Cell at the divisional level under the chairmanship of Regional Planning and Development Commissioner.

#### DISTRICT LEVEL

36. Presently, at the district level also, there is a multiplicity of agencies for implementation of a number of special programmes like SFDA, DPAP, HADA, CADA, etc. This has resulted in imposition of super administrative structures upon the normal block and district level administrations and has distorted the very concept of district as a basic unit of planning. Consequently, this situation has created some fundamental problems of co-ordination and co-operation at various levels.

37. The present procedure for preparation of district plan merely gives an account of proposed outlays earmarked in various sectors of economy and social services. The plans if any, formulated at the district level are need-based plans and are not prepared on the basis of area planning techniques and lack an integrated approach. It is, therefore, obvious that some radical changes should be made to transform the institutional and organisational structure at the district and block levels so that integrated plans are prepared and successfully implemented at these levels.

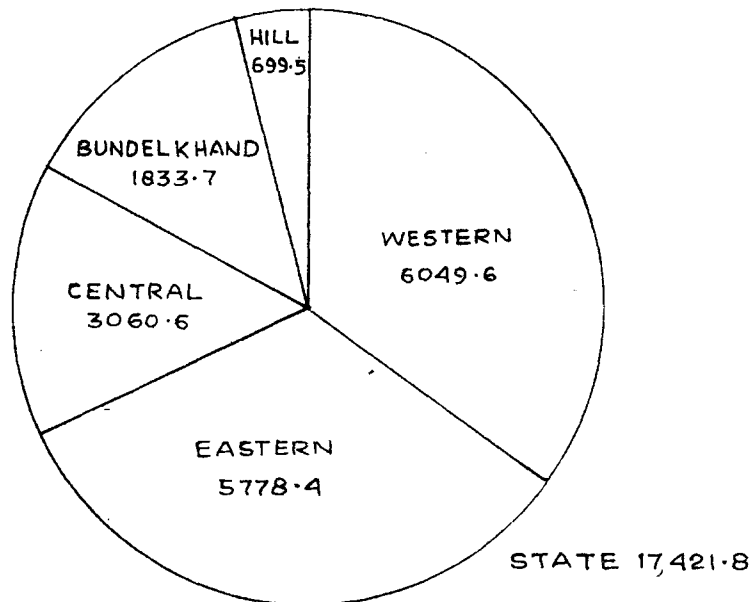
38. So far as the institutional arrangements for formulation and execution of district plans are concerned, the present

system does not need any change, but would require appropriate strengthening. Therefore, the function of formulation, implementation and monitoring should be carried out by the Zila Parishad as and when reorganised. What is imperative is an adequate technological and planning support to the Niyojan Samiti of the Zila Parishad which is and would be responsible for the preparation of integrated area plan of the district. It is, therefore, proposed that the planning team at the district level should be adequately strengthened. Besides the officers of the pooled planning office, this team would include officers belonging to various departments. The Chief Development Officer or the Additional District Magistrate (Development)/ District Development Officer would be the leader of the Planning team. The leader of the team should also be provided with some funds so that he can employ technicians, sociologists and other specialists on contract basis for project formulation, evaluation, etc. This planning team will also take the assistance of lead banks and other voluntary organisations which are interested in the planning and development activities of the district.

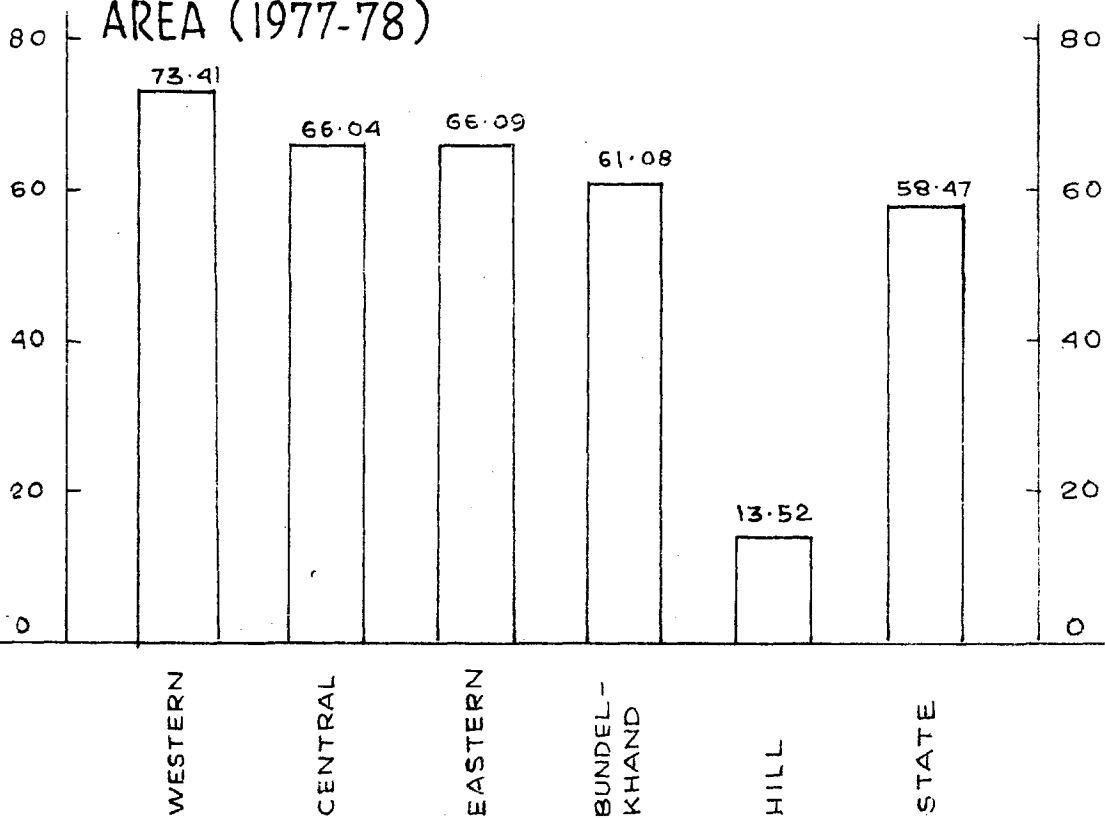
39. To start with, it has been decided to prepare district plans in 12 selected districts of the State, in which the most backward district from each division will be included. In this task, the UNICEF assistance is likely to be available. In the first phase, the programmes of concentrated delivery of social inputs in these districts will be formulated, but in the second phase, integrated district plans embracing all the sectors of development will be prepared. Some studies would also be conducted which would help in developing suitable mechanisms at different levels of planning for better implementation, monitoring and evaluation of development programmes.

\* Annexure III.

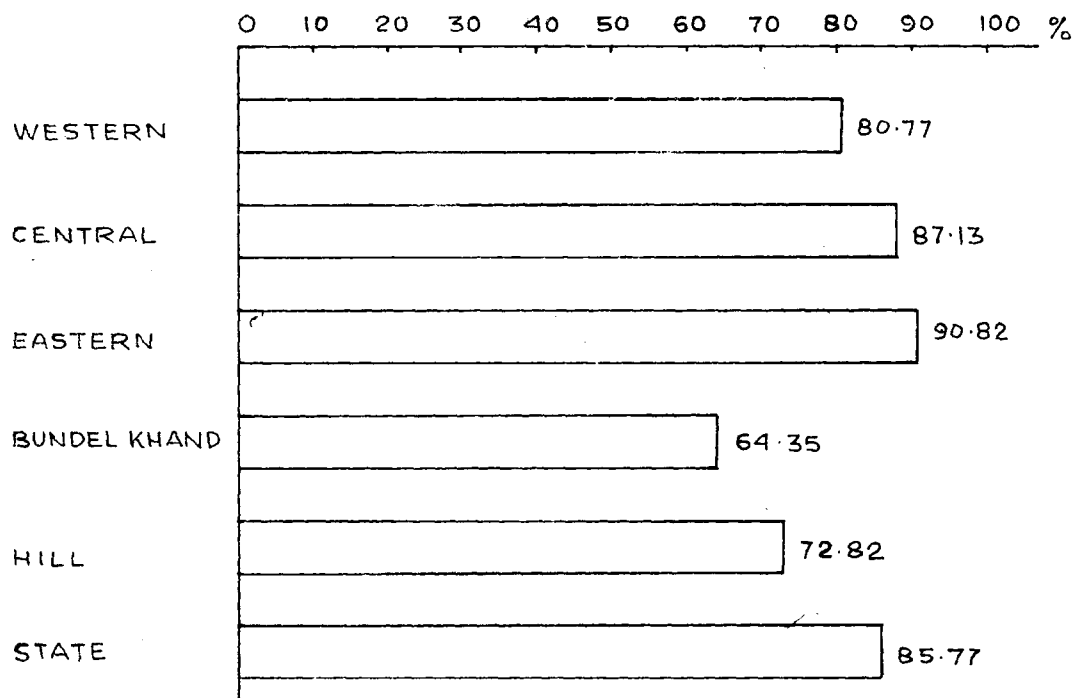
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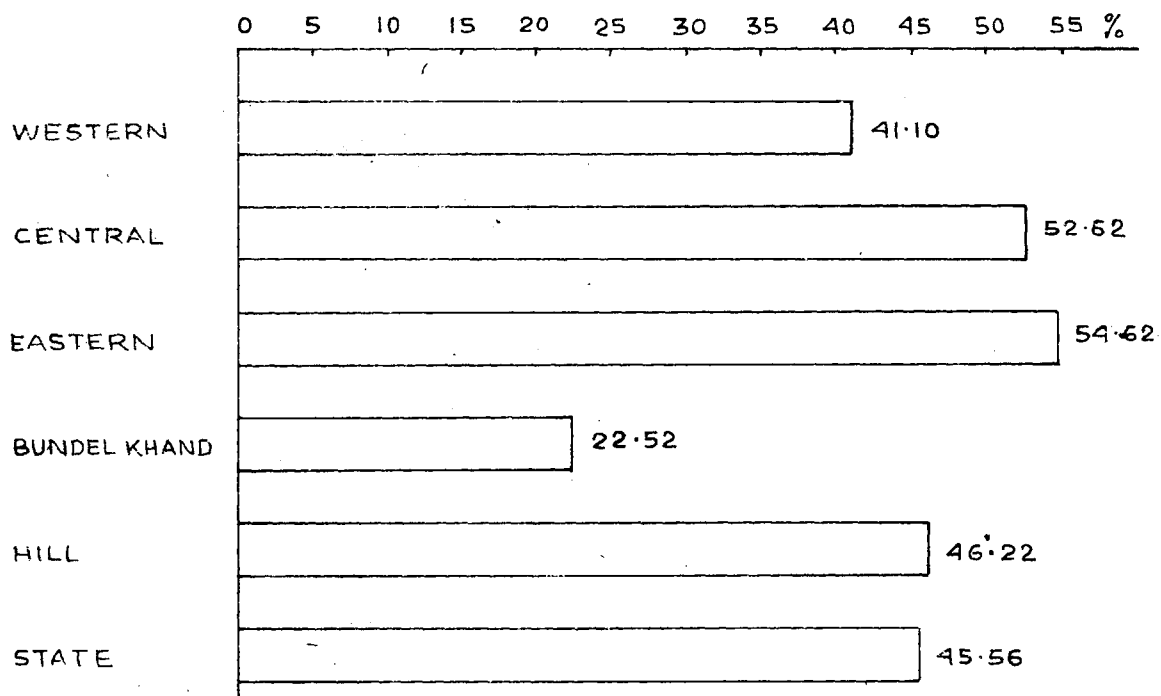
## PERCENTAGE OF NET AREA SOWN TO TOTAL REPORTING AREA (1977-78)



## PERCENTAGE OF SMALL & MARGINAL FARMERS, 1976-77

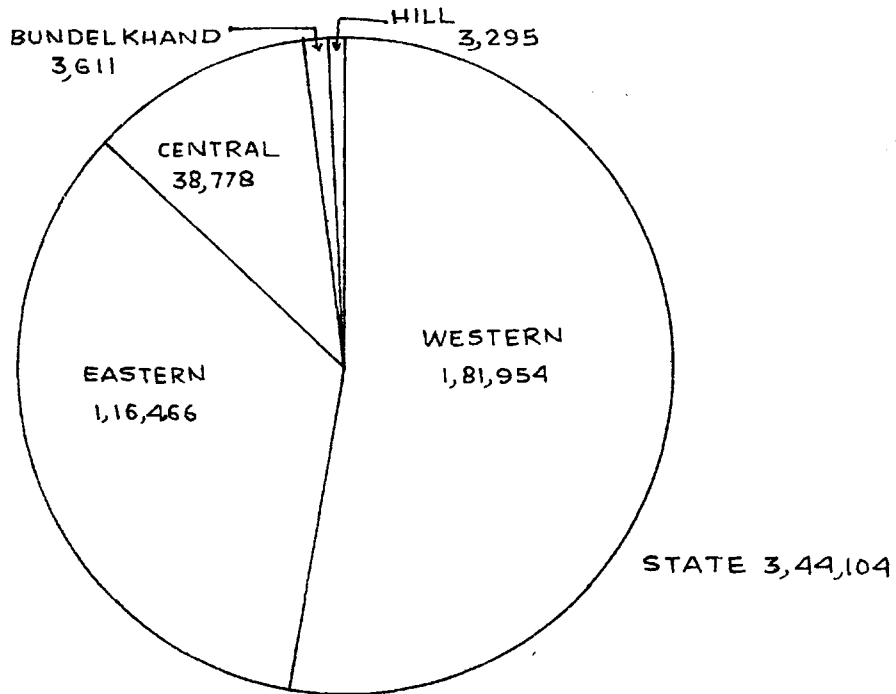


## PERCENTAGE OF AREA UNDER SMALL & MARGINAL HOLDINGS TO TOTAL HOLDINGS, 1976-77

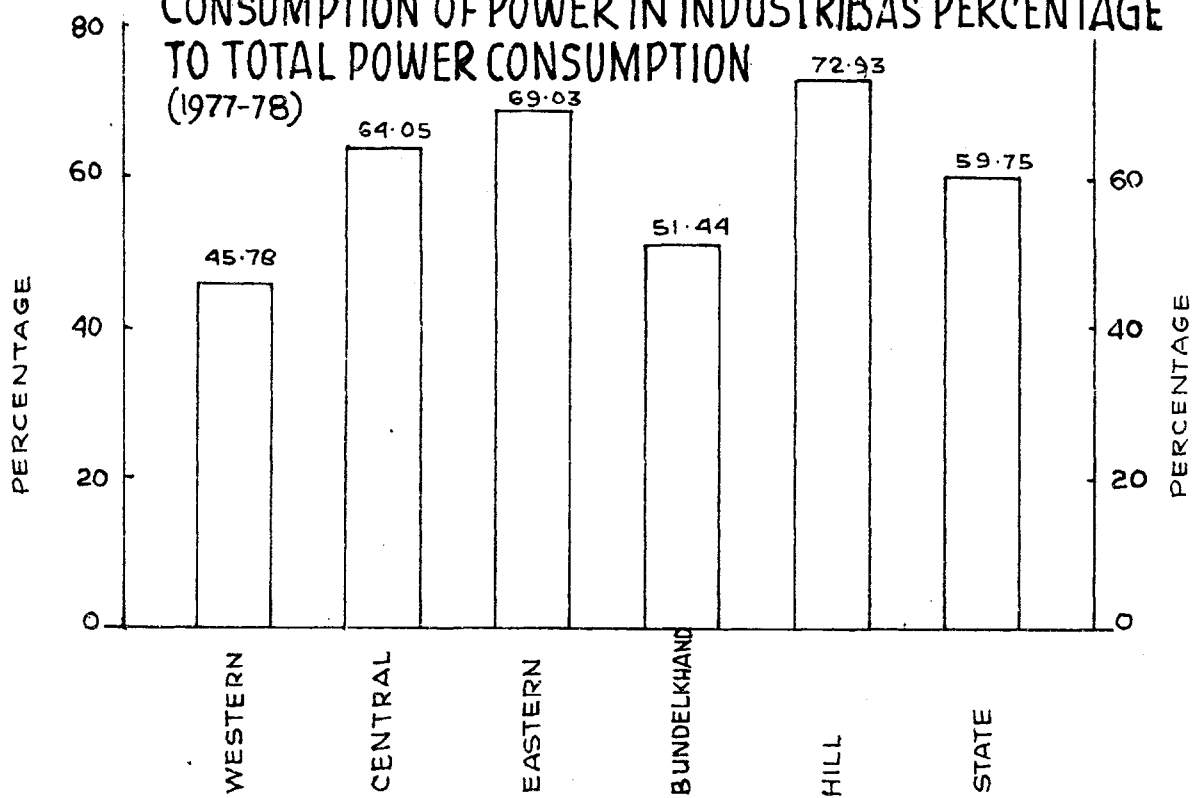




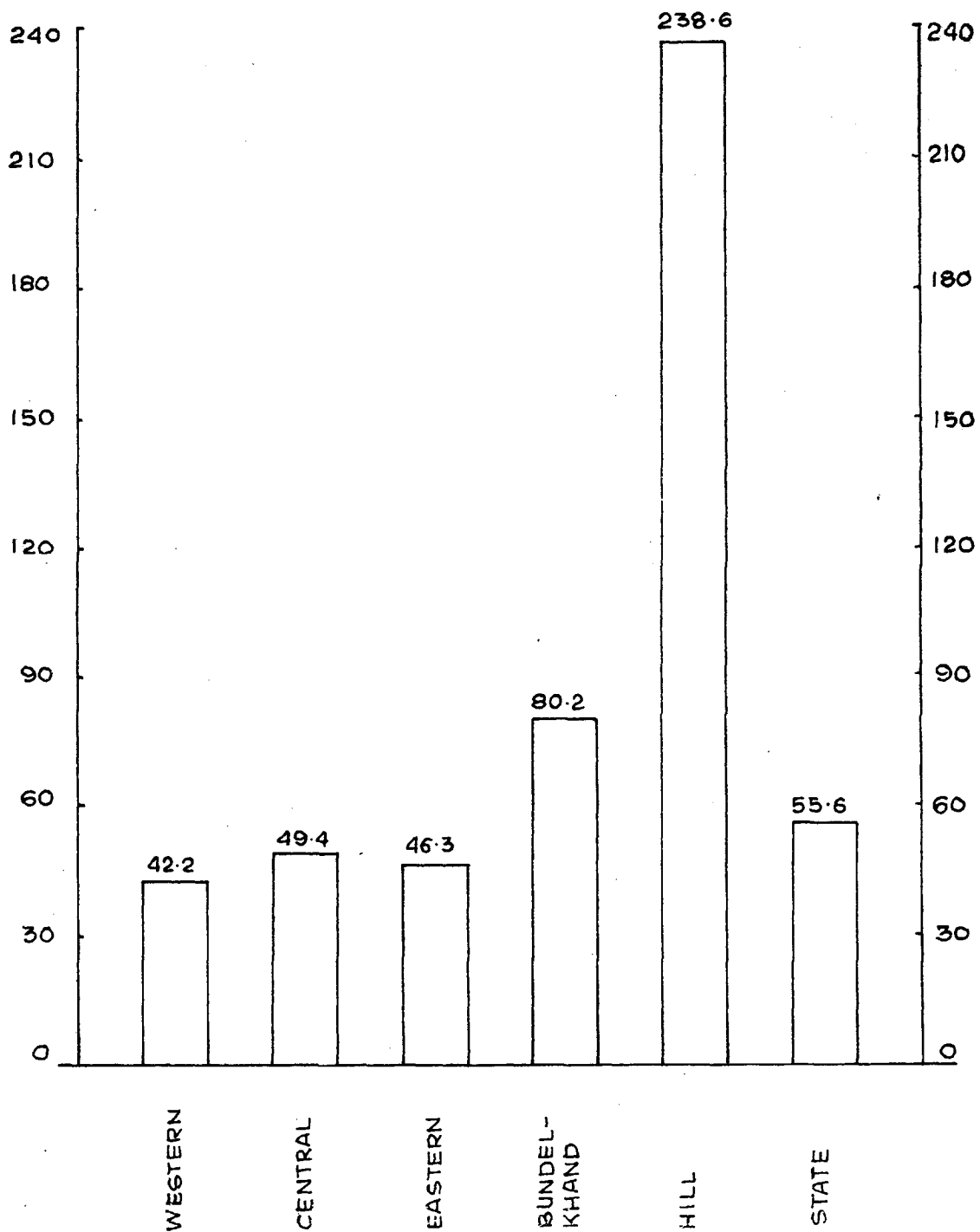
# No. OF PRIVATE ELECTRIFIED PUMPSETS / TUBEWELLS (JUNE 1980)



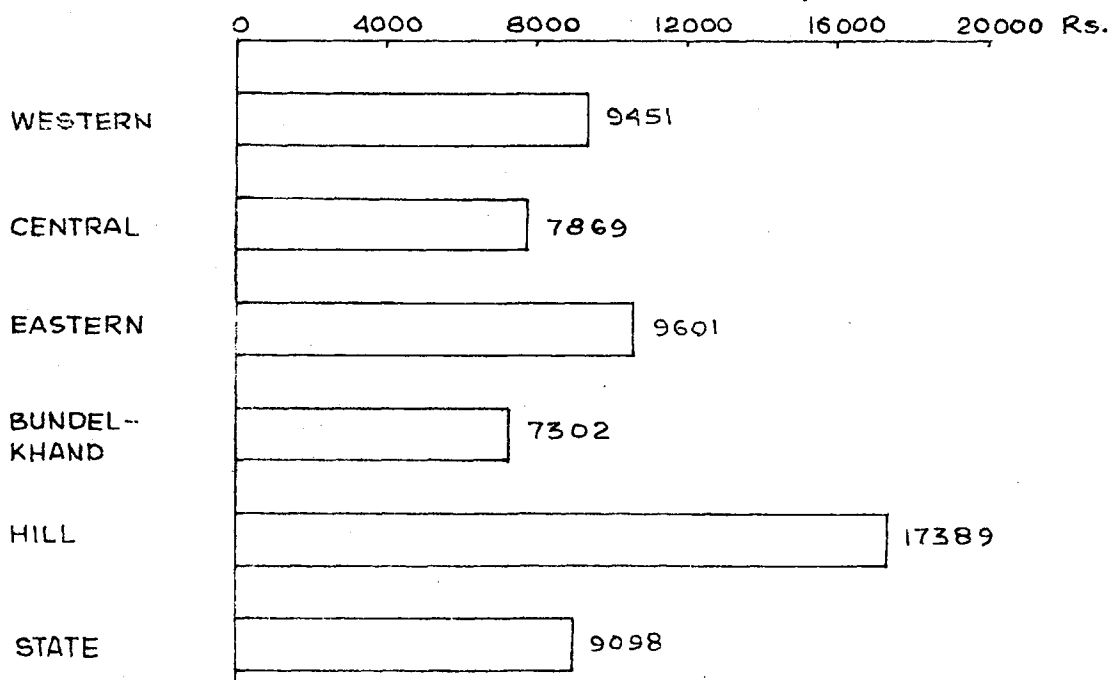
# CONSUMPTION OF POWER IN INDUSTRIES AS PERCENTAGE TO TOTAL POWER CONSUMPTION (1977-78)



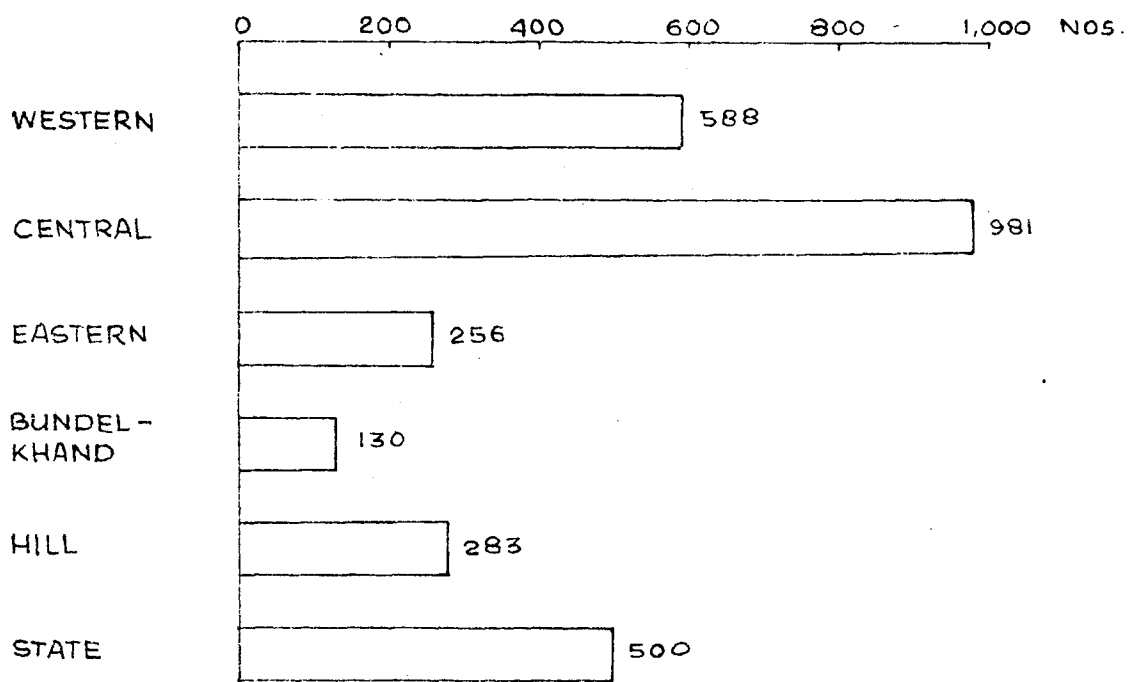
# LENGTH OF PUCCA ROADS PER LAKH OF POPULATION IN KM. (MARCH 1979)



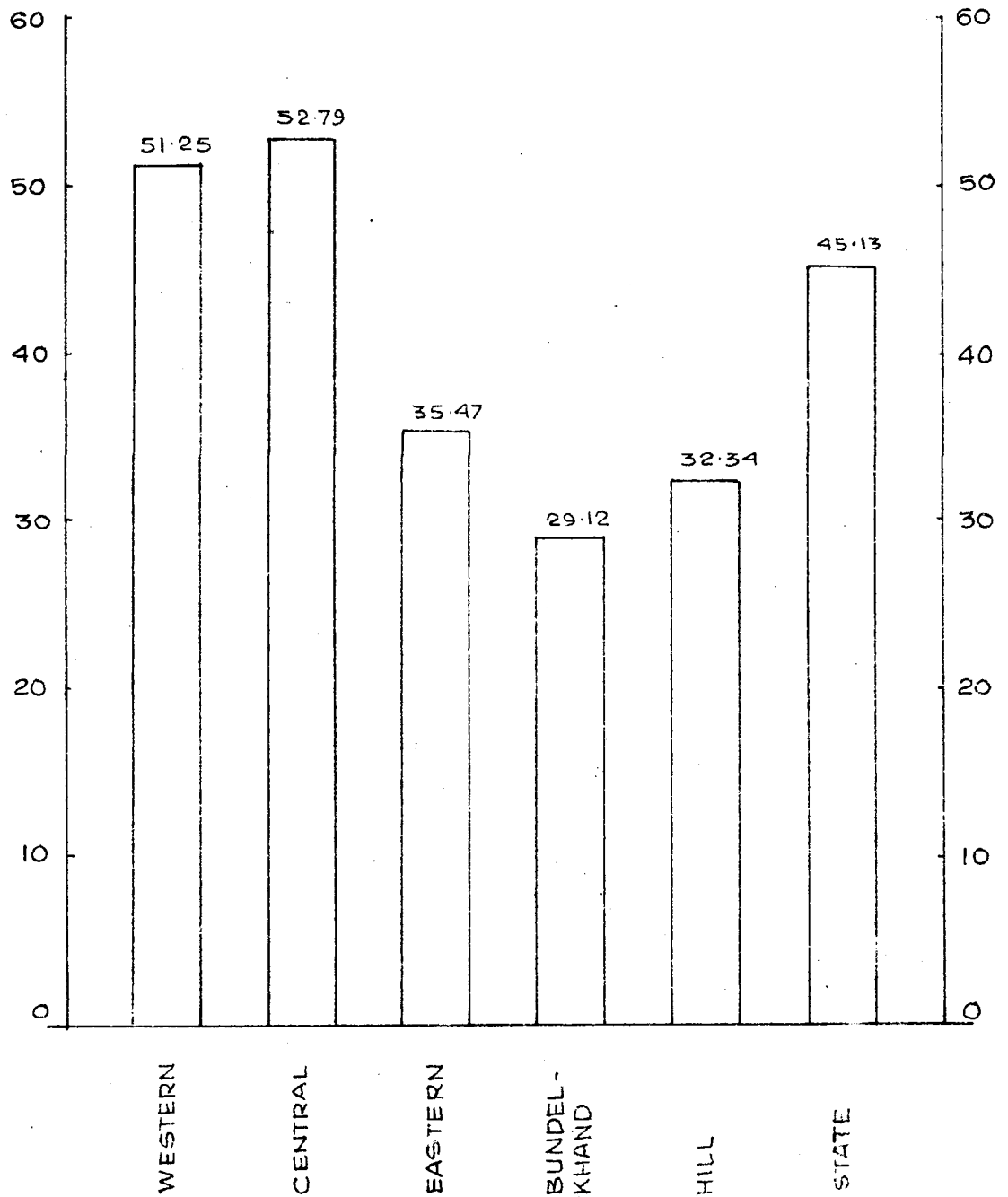
## VALUE ADDED PER INDUSTRIAL WORKER (1976-77) IN Rs.



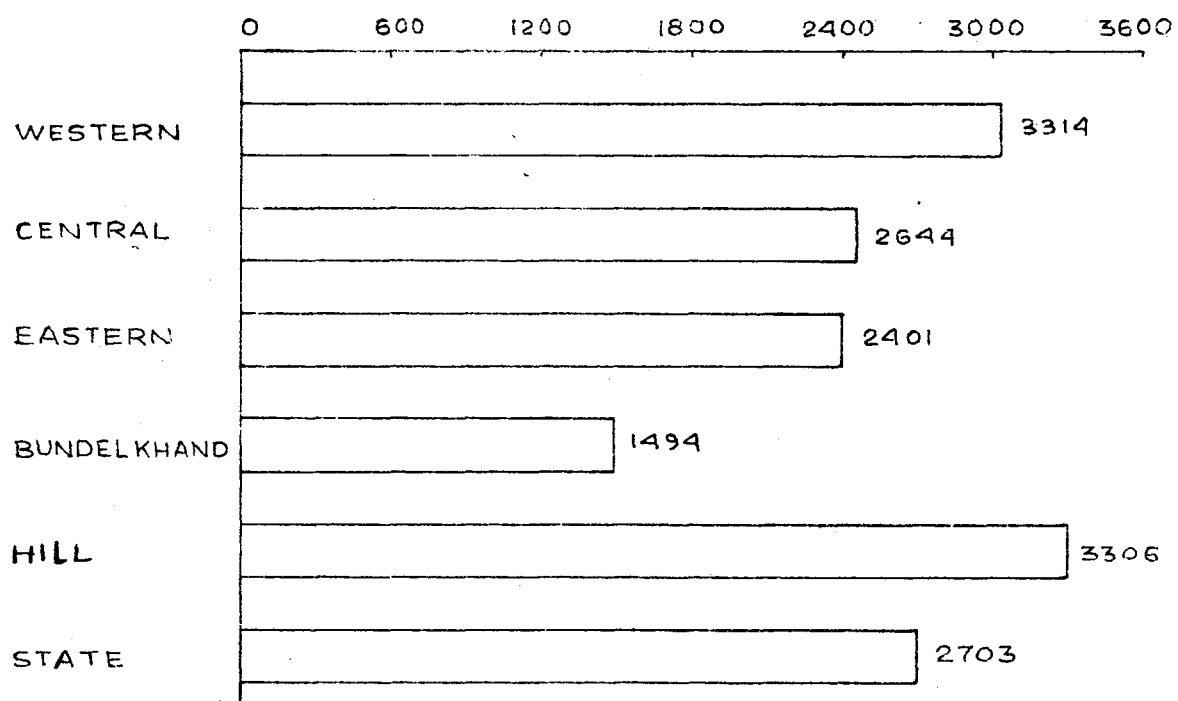
## No. OF WORKERS IN REGISTERED INDUSTRIAL ESTABLISHMENTS PER LAKH OF POPULATION (1976-77)



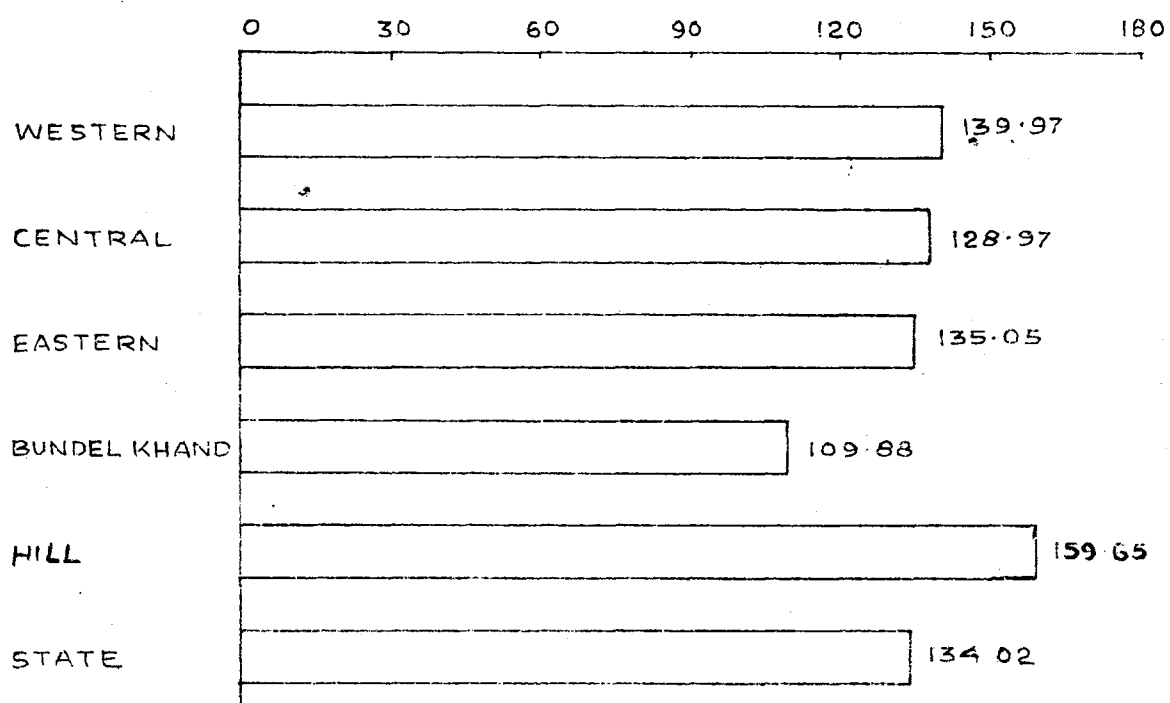
# CREDIT-DEPOSIT RATIO (DECEMBER 1978)



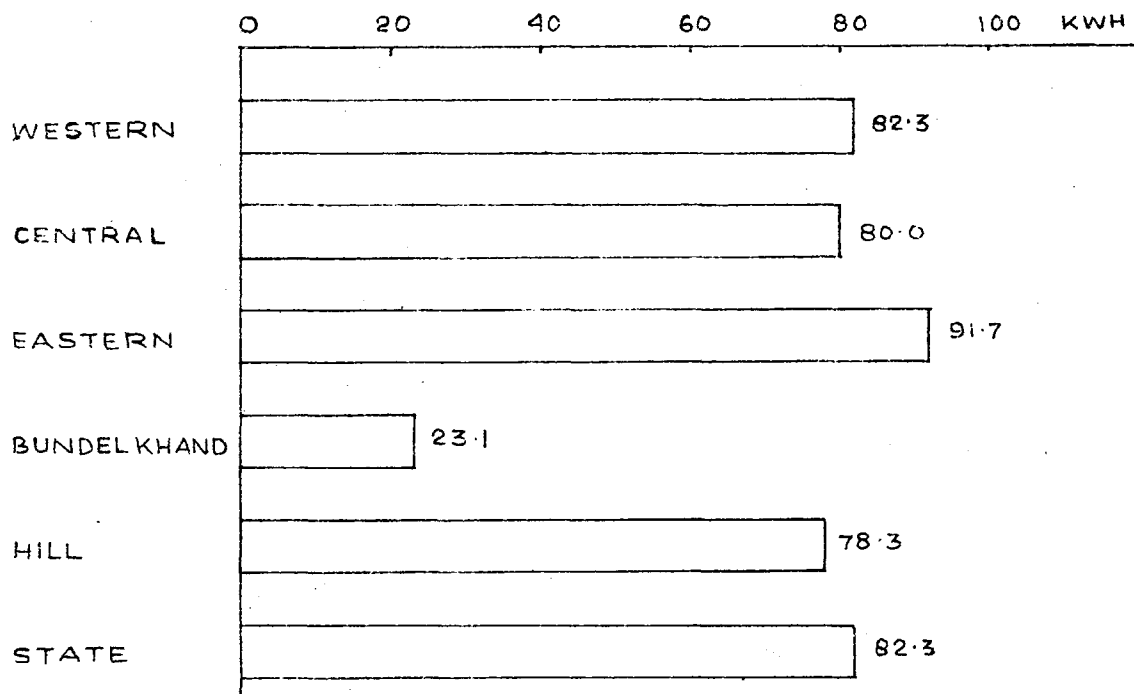
## GROSS VALUE OF AGRICULTURAL PRODUCE PER NET HECTARE OF AREA SOWN (1976-77) - IN Rs.



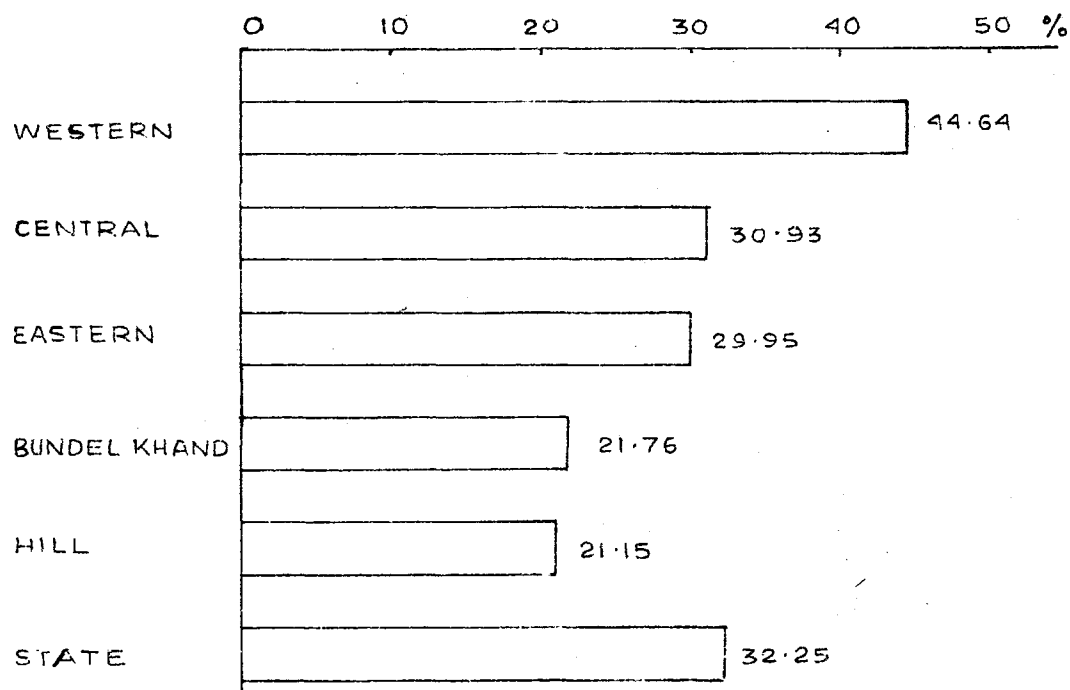
## INTENSITY OF CROPPING (1977-78)



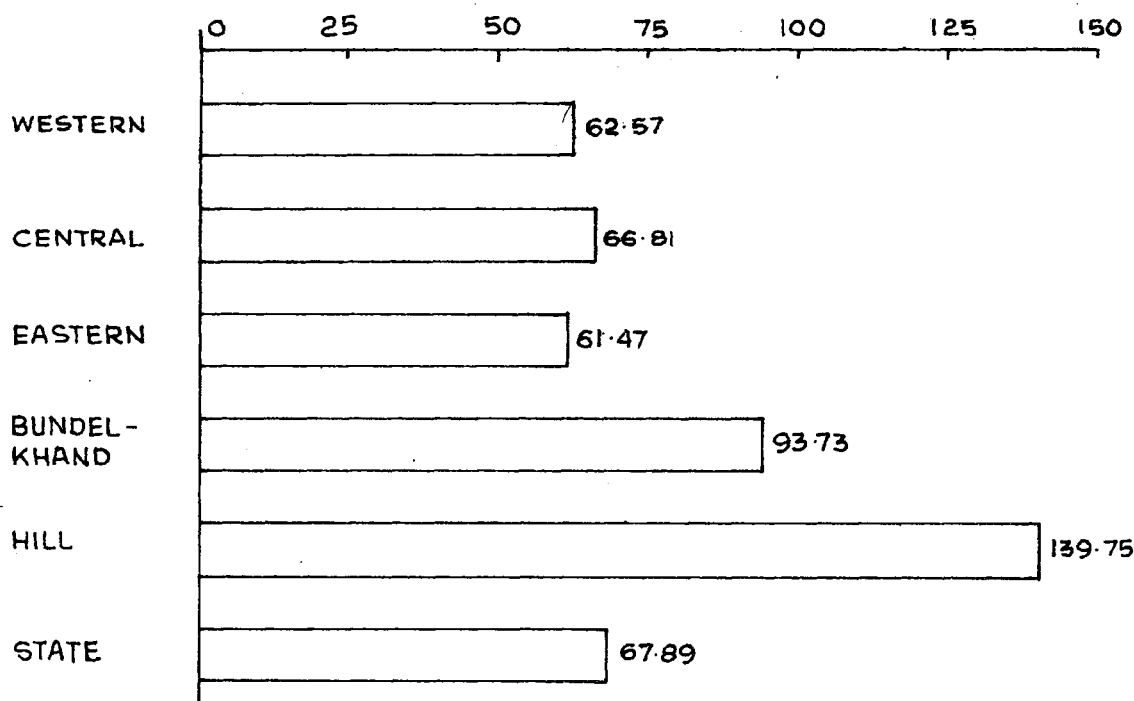
## PER CAPITA CONSUMPTION OF ELECTRICITY (1977-78) IN KWH



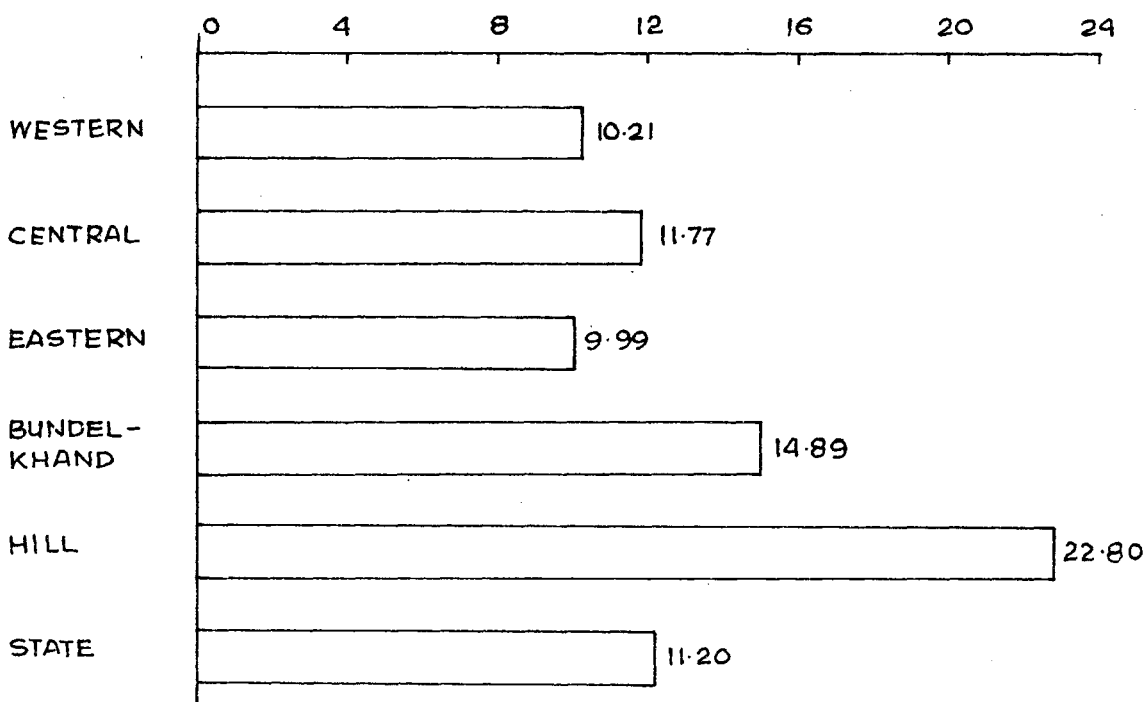
## PERCENTAGE OF ELECTRIFIED VILLAGES TO TOTAL VILLAGES (1977-78)



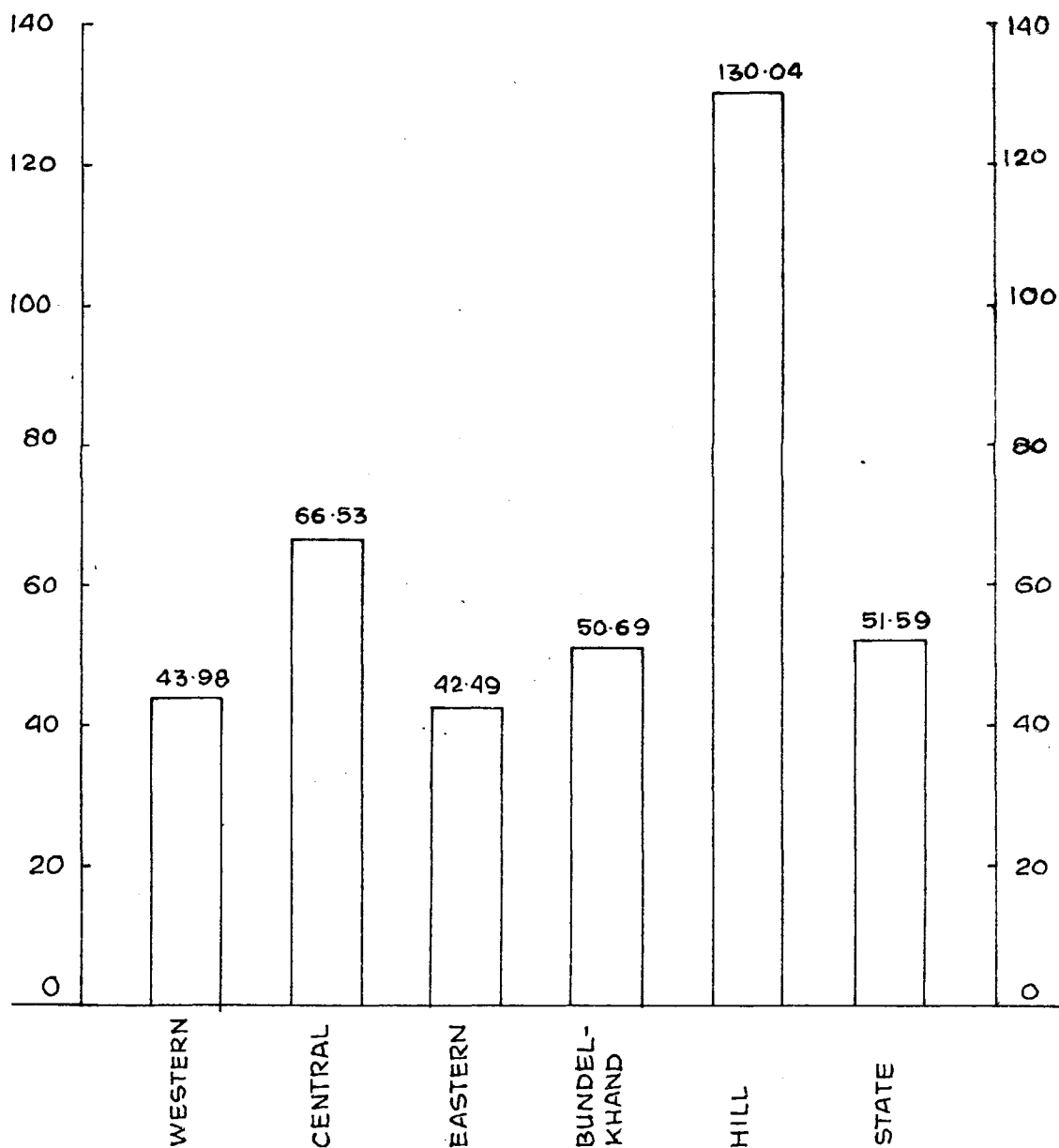
## No. OF JUNIOR BASIC SCHOOLS PER LAKH OF POPULATION (1978-79)



## No. OF SENIOR BASIC SCHOOLS PER LAKH OF POPULATION (1978-79)

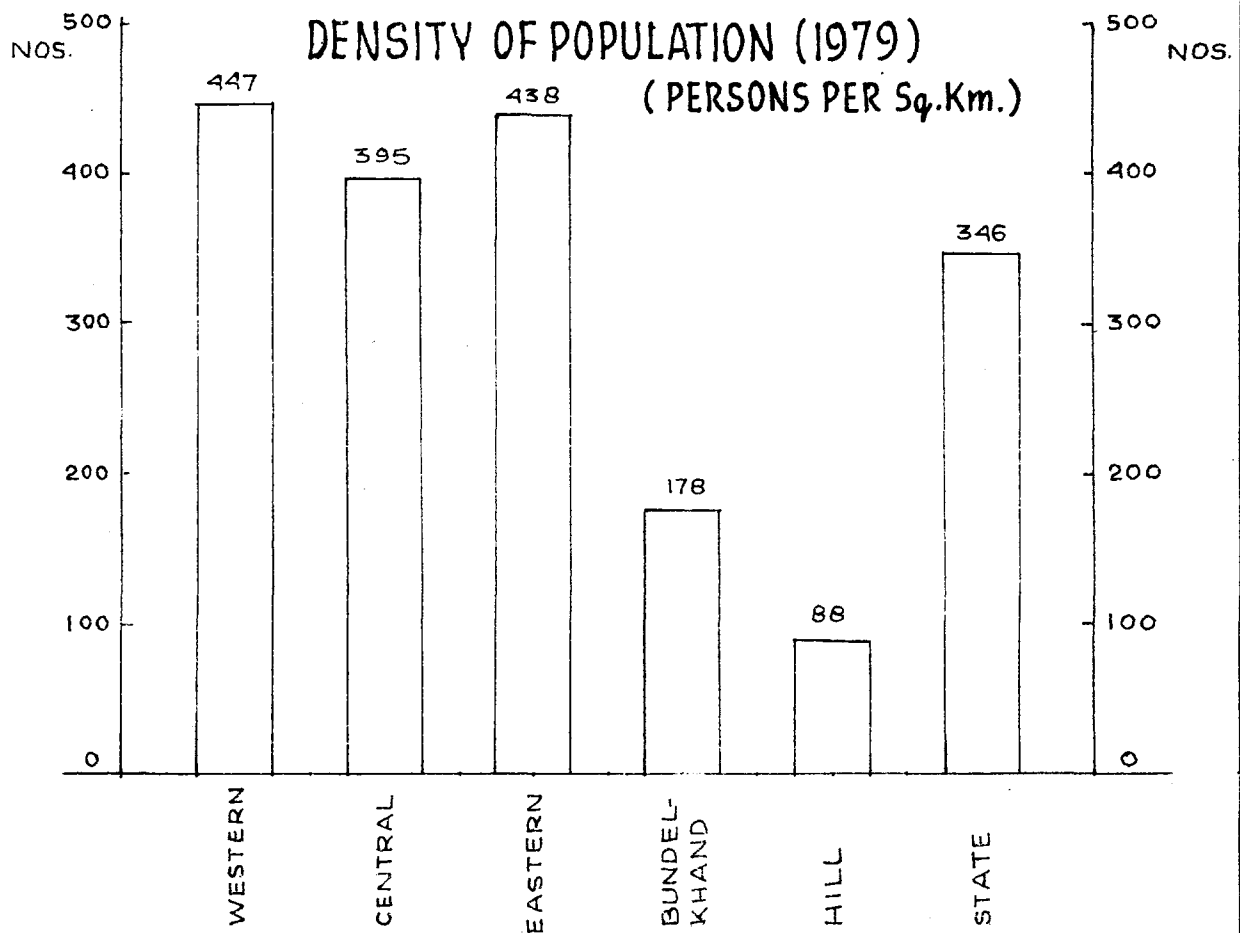
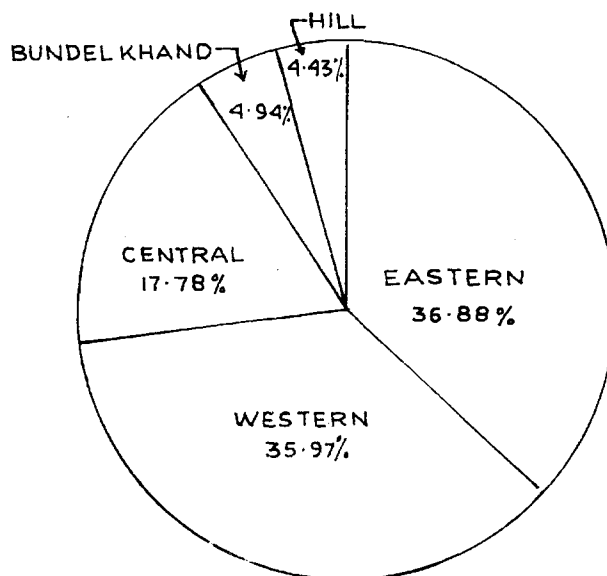


# No. OF BEDS IN ALLOPATHIC HOSPITALS PER LAKH OF POPULATION (1978-79)

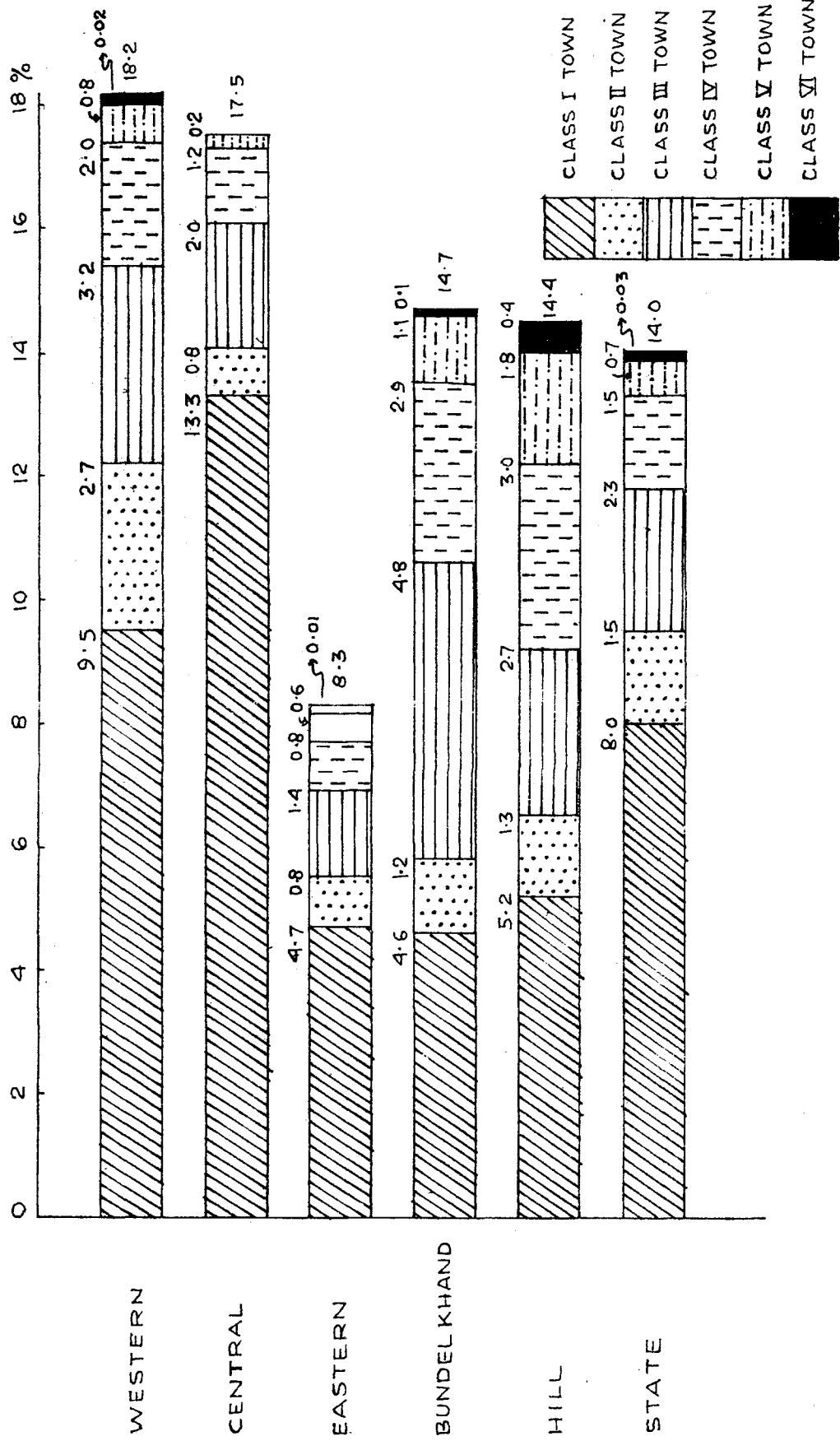




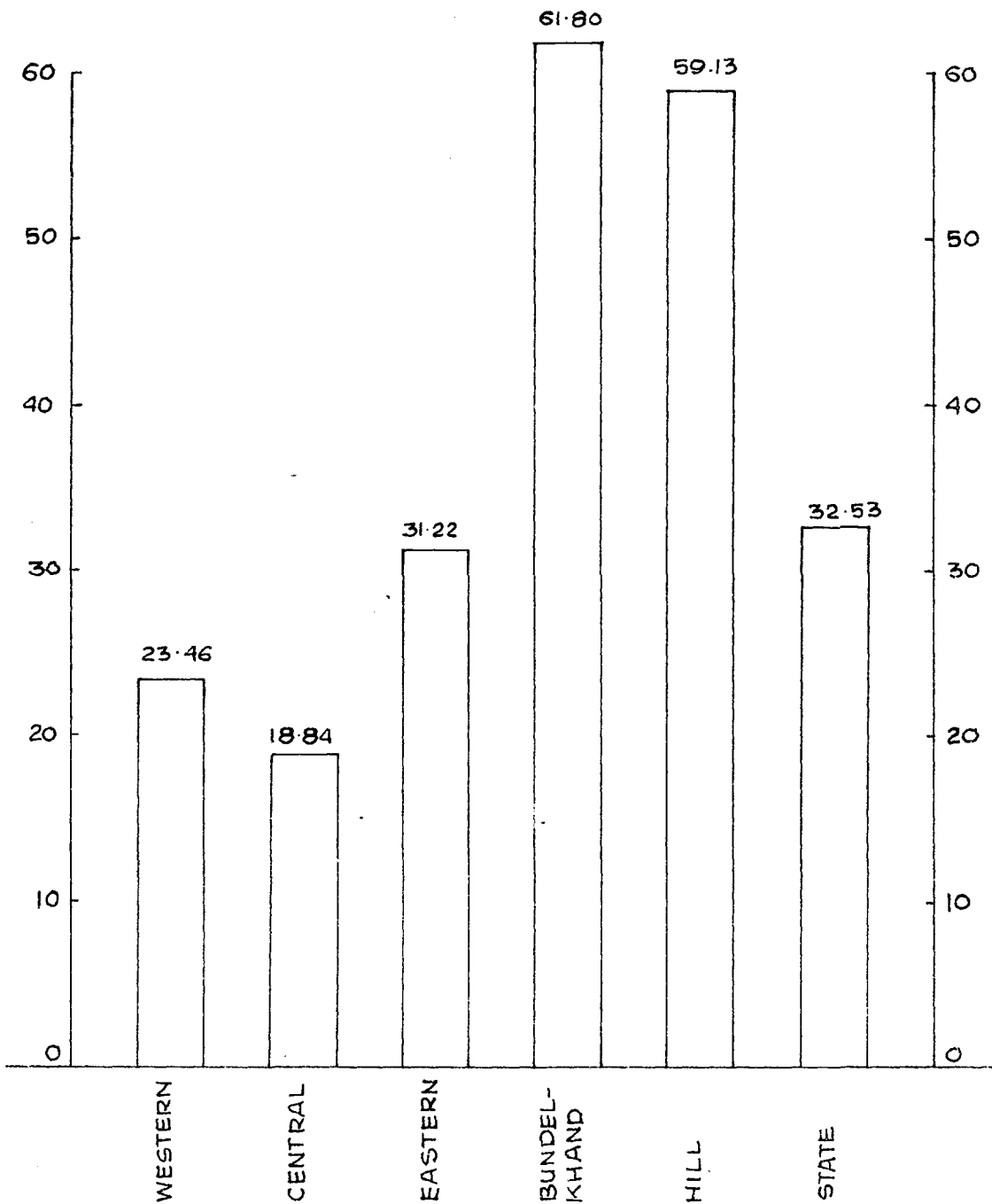
## REGION WISE POPULATION PERCENTAGE OF UTTAR PRADESH (1979)



# PERCENTAGE OF URBAN POPULATION TO TOTAL POPULATION (1971)



# PERCENTAGE OF SCARCITY VILLAGES TO TOTAL VILLAGES (1972)



PROPOSED COMPOSITE  
REGIONS OF  
UTTAR PRADESH



# ADMINISTRATIVE DIVISIONS OF UTTAR PRADESH



# BOUNDARIES OF ECONOMIC REGIONS OF UTTAR PRADESH



## (ii) HILL REGION

40. Hill region of the State, comprising eight districts, accounts for about 4.3 per cent (38.22 lakhs per 1971 census) population and 17.4 per cent (51,122 sq. kms.) area of the State's population and area respectively. The region falls into three Stratigraphical zones viewed from the ecological angle, viz. (i) Sub-Himalayan zone (ii) Lower Himalayan zone, and (iii) Higher Himalayan zone. Forests occupy about 67 per cent of the total geographical area out of which only about 41 per cent are well stocked forests. The region is sparsely populated and the average density of population is only about 75 persons per sq. km. as against the average of 300 for the State. Scheduled castes/tribes population of this area constitutes (7.54 lakh) 19.7 per cent of the total population. The urban population is about 14.4 per cent. The hill areas have wide variations in their geophysical features and agro-climatic conditions, differ from plains in their resource endowments, problems and potentials and is a region which is geographically and ethnically distinct.

41. The economy of this region is predominantly agrarian as about 75.3 per cent of the total workers are engaged in agriculture. The hill areas are rich in natural resources, i.e. forest, minerals, surface water etc. The agro-climatic conditions offer great potential for development of horticulture, forestry, tourism and livestock.

42. The hill areas have so far remained insulated from the full impact of development activities on account of their special problems and represent a special case of economic backwardness. Their peculiar geographical conditions and the nature of terrain impose severe constraints on the level of development on the one hand and the efficacy of infrastructural facilities on the other. Highly undulating topography, limited cultivable land (net area sown is only about 14 per cent of the total geographical area) scattered in small and marginal holdings (87.1 per cent of the operational holdings being below two hectares), difficult agricultural process, sparsely/thinly populated settlements (about 92 per cent of the total villages

having a population below 500), inadequate basic infrastructural facilities of roads, power, marketing and credit, irrigation (only 25.4 per cent of the net area sown is irrigated as against State's 48.7 per cent and excluding plain areas of the region only about 10 per cent area is irrigated), lack of industrialisation (92 per cent of the total net domestic product accrues from agriculture and allied sectors and only 8 per cent from all other sectors) and near absence of diversification and institutional backing, etc. are the main factors inhibiting the pace of development of this region. Animal-land ratio is quite high as there is only 0.7 hectare of land per animal which is almost half of the State average.

43. Another serious problem is of out-migration of people, especially men, resulting in denudation of population with skills, education and entrepreneurship, leaving behind women folk. Women perform the main functions of working force. Percentage of women workers to their total population is 31.3 per cent in hills as against 6.7 per cent in the State.

44. Drinking water facilities are still lacking in remote and inaccessible areas, (about 4,395 villages out of 7,771 villages identified in 1972 are yet to be provided with this facility at the end of 31st March, 1980). According to a recent departmental survey/assessment the total number of problem villages has since increased due to changing course of water resources. There is severe problem of soil erosion and degradation of ecology.

45. There are wide variations in the levels of development in this region as compared to that of the State as also intra-regional (district/pockets) imbalances. Hill areas are far behind the State as regards irrigation, power, industrial output, workers employed in secondary and tertiary sectors, *per capita* consumption on non-food items, electricity, etc. State's hill areas are also lagging behind other hill areas/States especially the adjoining hill State of Himachal Pradesh.

46. There are relatively more depressed pockets of tribal areas of hill region living in abject poverty and primitive conditions. These areas also need special attention.

## OBJECTIVES AND STRATEGY OF DEVELOPMENT

47. The long term objective has to be growth with social justice and consistent with the policy of promoting the protection and improvement of ecological and environmental assets. Within such an overall framework, in the short period of the Sixth Plan, programmes for improving incomes of people of the area, improving standard and quality of life of the rural as well as urban poor, especially people of weaker sections such as scheduled castes, scheduled tribes and people below the poverty line, will have to be undertaken. Built-in arrangements of social needs under Minimum Needs Programme in the areas of potable drinking water, health, education, housing, nutrition, rural electrification and rural communication have to be implemented and existing facilities brought to desired levels. Simultaneously, programmes for scientific management, preservation and generation of forests, conservation and management of soil and water resources and programmes in the direction of maintenance of ecological balance are a 'must'. U. P. hill areas are characterised by out-migration of people resulting in comparatively higher burden on the women folk and the Plan has to take care of their drudgery, nutrition and general health. Steps towards reducing unemployment and under-employment are also called for on a priority basis.

48. The strategy for achieving the above goals would necessitate :

(i) optimum utilisation of existing infrastructural facilities,

(ii) consolidating the gains of productive activities with a view to making past investments yield optimum results,

(iii) correcting the imbalance, if any, in investments in the productive sectors on the one hand and social facilities and infrastructural facilities on the other,

(iv) ensuring necessary inter-linkages by formulating plans and implementing them on the basis of micro-water sheds integrated area development plans with the help of an integrated multi-disciplinary institutional and other administrative frame

work.

49. Particular mention needs to be made about the immediate necessity of evolving an appropriate frame work for formulating schemes particularly suitable for the hill areas in which maximum possible involvement of the local people and optimum utilisation of local resources can be secured. Similarly, adequate and effective arrangements for continuous monitoring of the programmes taken up from time to time and the evaluation thereof would be essential. Specific points of emphasis in respect of investments in various sectors have been mentioned under the sectoral heads.

50. With a view to providing proper research and development to back up planning for the hill region, some important decisions have been taken for plan formulation suitable to hills, effective implementation, monitoring and feed back required for micro level planning, perspective of development and decentralisation of planning and administrative set up for hills. Accordingly action is being taken to establish (1) a separate Planning Institute for the Hills (2) Hill Development Project Authority to coordinate multi disciplinary projects and to function as a high powered ecology board, (3) a separate sub-group of the State Planning Commission to look after the relevant aspects of Hill Plan, (4) Decentralization of financial and administrative functions at the local level for effective local level planning and development, (5) Creation of separate cadres of various services for hill areas up to a certain specified level to ensure availability of man power for preventing under utilization of facilities created, (6) provision of microwave facilities at the divisional, district and block level for improving the communication gap and (7) a separate cell for women as part of the proposed planning institute for hills for augmenting employment opportunities for women as extension workers and reducing their burden of work and its drudgery.

### PLAN OUTLAYS

51. In view of the peculiar characteristics of hill areas and its backwardness and lack of desired investment in the past, the real problems could not be mitigated thereby affecting the pace of development



of the State's hill areas. It was only at the beginning of the Fifth Plan that special attention was given. During the Fifth Plan period (1974-79), an amount of about Rs.225 crores (including Rs.104 crores of special Central assistance) was spent against an outlay of Rs.204 crores. An outlay of Rs.782 crores was proposed on the basis of essential requirements for the Draft Mid-Term Plan 1978-83 of U. P. Hill areas but its final size could not be determined for want of any definite indication of quantum of special central assistance. Planning Commission, Government of India, however, at a later stage indicated the likely availability of Rs.200 crores of special central assistance. In the mean time the Mid-Term Plan (1978-83) was terminated and a new Sixth Plan for 1980-85 has been introduced.

52. Peculiar topography of Hill areas poses severe constraints of development on account of relatively high transport and construction costs, longer gestation period of programmes/projects, lack of institutional support, scarce local capital and chronic backwardness. Consequently, in terms of per unit capital cost, extension services/infra-structural facilities, the same level of investment in hill areas produces only half or even lesser facilities than in the plains. With a view to accelerating the pace of development in the hill areas, a break through in the socio-economic development of hills has to be made through substantial investment in order to make a real impact on the economy. Past neglect and backlog in this respect has also resulted in sizeable variation in the levels of development as compared to that of other hill areas/States, particularly Himachal Pradesh.

53. The national norms laid down by the Government of India for Minimum Needs Programme do not suit the hill areas and need be modified in view of the topography, sparsely/thinly populated settlements. For achieving the targets under MNP, relatively larger funds for the hills would be required.

54. Buildings are also not available, even on rent, in the hill areas. Substantial funds would also be required during 1980-85 plan for functional as well as non-

functional buildings for various departments and institutions.

55. Pockets of tribal concentration within the hill areas are relatively more depressed and need more attention by providing essential infra-structure facilities as also basic social inputs. No separate central assistance is being made available for the U. P. Hill areas and it is not possible to earmark the desired funds out of the total for the hills. It is, therefore, essential that in view of the scattered nature of tribal population, separate central assistance be made available for the Tribal-sub-Plan of U. P. hills.

56. On the basis of the present levels of development and requirement for optimal utilization of potential as also catering to special problems of hill areas, an outlay of Rs.969.45 crores is proposed for the Sixth Five Year Plan (1980-85). As the State of Uttar Pradesh itself is relatively backward and having problems of other backward regions/pockets, it would not be possible for the State to set apart more funds out of its own resources (normal State share) for hills. To maintain the present proportion of normal State share is also difficult within the limited resources of the State and its multiplicity of problems.

57. Since the hill region of U. P. is also a sensitive border area, speedy development of this area from the strategic point of view is also essential. As such, this area should be treated as special area like special category States of Himachal, J & K, Nagaland and Assam, etc.

A marked progress has been made by the neighbouring hill State (Himachal Pradesh having almost similar area, population and potential). Naturally considerable dissatisfaction prevails among the people of U. P. Hills over the size of Plan outlay and pattern of central assistance. While the State Government has been diverting maximum possible outlays to hill areas from its plan resources, the Planning Commission's share in the total outlays has lagged behind. Obviously a proportionately heavy "own efforts" criterion imposed on the State for U. P. Hills need be revised to that of Himachal Pradesh Plan, viz. out of the total size of U. P.

Hills, the supplemental central assistance need be of the order of 80—85 per cent. In view of the past neglect and gulf in the plan size, the total outlay for U. P. Hills needs to be more than that of Himanchal Pradesh so as to catch up with the pace of development in the neighbouring hill area. The same pattern of central assistance for U. P. Hills is also needed as that of other hill States, Himachal Pradesh, Jammu and Kashmir, Nagaland and Assam.

58. Out of the outlay of Rs.969.45 crores proposed for the Sixth Plan (1980—85) period, the supplemental/special central assistance for U. P. Hills would be required as contemplated earlier for which the State Government has been pressing. The outlays by broad heads of development and outlays under Minimum Needs Programme for 1980—85 are given below :—

*Sixth Plan Outlays of U.P. Hills*

(In crores Rupees)

Major Head of Development	Fifth plan 1974-79 Expendi- ture	Sixth Plan 1980 85 Proposed outlay	Outlays under MNP		
			Programmes	Fifth Plan 1974-79 Expendi- ture	Sixth Plan 1980—85 outlay
1	2	3	4	5	6
1. Agriculture and Allied Sectors	52.77	243.01	1. Rural Electrification	3.52	33.76
			2. Rural Roads	25.49	161.83
2. Co-operation	1.75	5.62	3. Elementary Education	6.78	47.54
			4. Adult Education	0.12	1.99
3. Water and Power Development	24.39	79.33	5. Public Health	1.42	17.04
			6. Rural Water Supply		
4. Industry and Mining	8.37	40.83	(a) Jal Nigam	16.95	141.70
			(b) Rural Development Department.	0.23	3.00
5. Transport and Communication	72.03	262.35	7. Nutrition	0.70	2.00
6. Social and Community Services	65.31	336.88	8. Housing for Rural Poor	0.13	1.80
7. Economic and other Services	0.17	1.43			
Grand Total ..	224.80	969.45		55.34	410.66

59. For the integrated development of tribal areas, funds are being earmarked out of the total Hill Area Plan. Up to the end of 1978-79, the tribal areas of 5 blocks of Chakrata, Kalsi, Naugaon, Puraula and Jaunpur were taken up for socio-economic uplift of tribal and other weaker communities. Since 1979-80, 4 new blocks, Khatima and Bajpur blocks of Naini Tal district, and Munsiri and Dharchula blocks of Pithoragarh district having a sizeable population of Tharus, Bhuksa and Bhotias, have also been included. For effective supervision and implementation of programmes, a

Project Authority with a Project Director was constituted for 5 tribal blocks of Garhwal Division during 1978-79. Provision has also been made for a nucleus fund at the disposal of the Project Authority for meeting the local requirements and evolving desired programmes for the benefit of tribals. During the Sixth Plan period major thrust would be on the family oriented programmes for tribals. For the Sixth Plan, 5 I.T.D.Ps. are also being prepared for the tribals of Khatima, Bajpur, Munsiri, Dharchula and Joshinath blocks.

60. Out of the total Hill Area Plan, an amount of Rs.16.41 crores was spent during the Fifth Plan (1974-79) in 5 Tribal blocks of Garhwal Division. An outlay of Rs.87.86 crores is earmarked within the total hill area plan for the Sixth Plan 1980-85 for socio-economic uplift of the tribal people.

61. Programme-wise/sector-wise outlays and expenditure in the hill areas are given in Annexure IV and important physical targets and achievements are given in Annexure V. A brief account of proposed programmes for the Sixth Plan are given below :-

#### SECTORAL PROGRAMMES

62. *Agriculture*—Agriculture is the main stay of the population of hill areas, but it has not been a paying proposition due to the limited cultivable land mostly

scattered into small/marginal holdings. During the Sixth Plan (1980-85) period, major thrust is for diversification of agriculture to horticulture and high value crops, i.e. change in cropping pattern, increasing the productivity per unit of land area and intensity of cropping. Efforts would be made for adequate inputs of chemical fertilizers, pesticides, assured irrigation in possible areas and intensive soil and water conservation measures. Besides, improved package of practices, to step up the productivity of small and marginal farmers would also be adopted.

63. On crop husbandry programme of Agriculture Department, an amount of Rs.137 lakhs was spent during the Fifth Plan (1974-79) period and an outlay of Rs.300 lakhs is proposed for the Sixth Plan 1980-85. The important physical achievements and targets are given below :-

Serial no.	Item	Achievement		Target	
		1977-78	1978-79	1980-85	1980-81
1	2	3	4	5	6
1.	Total Food grains Production (lakh tonnes)	12.20	11.97	17.50	14.00
2.	Area under High yielding varieties ('000 ha.)	253.91	265.70	415.00	280.00
3.	Distribution of chemical fertilizers ('000 Tonnes)—				
	(1) Nitrogenous	15.36	21.20	40.00	31.00
	(2) Phosphatic	4.73	6.83	13.00	10.00
	(3) Potassic	3.30	2.94	7.00	5.00
4.	Area covered under Plant Protection measures ('000 ha.)	566.72	652.94	870.00	645.00
5.	Soil cooservation—Additional Area treated ('000 ha.)	3.96	3.64	55.50	7.20

64. For providing quality seed suitable to hills, 10 new seed multiplication farms are proposed to be established in 1980-85. With a view to providing input facilities to cultivators within reasonable area of hills, it is proposed to set up 10 sale points in each block during 1980-85 plan period. Fertilizer distribution in small bags of 10 kgs. is also proposed. For evolving suitable agricultural practices and use of improved seeds etc. a seed testing and demonstration centre is proposed to be established in Garhwal Division (at Chinyali Saur) during 1980-85 plan. Besides, establishment of an Agricultural Implements work-

shop is also proposed. For encouraging adequate use of chemical fertilizers, 33 per cent subsidy on the cost of fertilizers to small and marginal farmers is proposed.

65. With a view to making available latest techniques of agricultural production and quick transfer of latest know how to rural people, two agriculture workshops were established during the Fifth Plan period in the existing Agriculture Extension Centres in the hills. During the Sixth Plan period, it is proposed to establish production units at Extension Centre Pauri and Peoples' College, Haldwani.

Besides, it is also proposed to strengthen and upgrade Extension Training Centre, Haldwani for specialised training of youth of scheduled tribes and other weaker sections of the hill areas. An outlay of Rs.66 lakhs is proposed for above programme during 1980-85.

56. *Marketing, storage and warehousing*—Krishi Utpadan Mandi Parishad is providing facilities for marketing of agricultural produce through the development of regulated mandies and market yards etc. in the hill areas. During the Fifth Plan period, two market yards at Sahibabad and Haldwani were developed. It is proposed to develop 7 market yards during the Sixth Plan 1980-85 for which an outlay of Rs.100.00 lakhs is proposed. For proper storage and marketing of agricultural produce, fruits and vegetables, State Warehousing Corporation is constructing scientific godowns in hill areas. During the Fifth Plan period, warehouses with an additional capacity of 25,073 tonnes were constructed. For Sixth Plan period, it is proposed to provide additional capacity of 40,500 tonnes for which an outlay of Rs.50 lakhs (State share) is proposed.

57. *Agriculture Research and Education*—For qualitative and quantitative improvement of agriculture and allied sectors through co-ordinated and effective research and extension education, a project of Hill campus is being established at Ranichauri (Tehri). The construction of main research station, farm development, provision of laboratories, water supply are in progress. A Master Plan for land use has been proposed and soil survey, research on vegetation, crop-germplasm, forestry and

triticale research etc. are in progress. An amount of Rs.138.16 lakhs was spent on this programme during the Fifth Plan and an outlay of Rs.350 lakhs is proposed for the Sixth Plan 1980-85.

68. *Horticulture*—With a view to exploiting the vast potential of agro-climatic conditions for growing various horticultural crops—fruits, vegetables, potato, ornamental flowers, spices, etc., efforts would be made for achieving substantial increase in the area and productivity of horticultural crops as also adequate processing and marketing support during the Sixth Plan (1980-85) period. The main objective of the horticultural development is given below :—

(1) Increase in existing area under horticulture.

(2) Diversification of horticulture crop encouraging cultivation of floriculture, spices, mushroom etc.

(3) Development of dry fruit cultivation in remote areas.

(4) Increase in productivity of existing area through better package of practices—judicious and scientific application of inputs, adequate extension services and incentives etc.

(5) Develop storage, processing and marketing facilities to ensure proper returns to growers.

On the various programmes of horticulture, an amount of Rs.5.20 crores was spent during the Fifth Plan (1974-79) period and an amount of Rs.1.33 crores was spent in 1979-80. An outlay of Rs.20.52 crores is proposed for the Sixth Plan (1980-85) period. The physical targets and achievements are given below :—

Serial no.	Item	1979-80 Achievement	1980-81 Target	1981-82 Target	1980-85 Target
1	2	3	4	5	6
1	Area under orchards (.000 Hect.)	99	105	111	129
2	Area under Vegetables ..	21	22	23	26
3	Area under Potato ..	27	28	29	32
4	Production of fruits (lakh tonnes)	2.00	2.20	2.50	3.30
5	Production of vegetables ..	0.85	0.95	1.00	1.30
6	Production of Potato ..	2.30	2.50	2.50	3.10

69. By the end of 1979-80, 61 progeny orchards, 89 nurseries, 4 big orchards, 8 vegetable seed production farms and 6 potato seed farms were developed. Besides, 146 horticulture-cum-plant protection mobile teams, 25 community canning-cum-training centres have also been established. During 1979-80, two Food Craft Institutes at Dehra Dun and Naini Tal have been established. During the Sixth Plan period, better utilization of the infrastructure created would be ensured for increasing area and productivity of horticultural crops. In addition, effective measures are envisaged for the development of marketing infra-structure with storage and processing support for which the following new schemes are proposed :—

- (1) Scheme for market intelligence.
- (2) Establishment of collection-cum-grading-cum-packing centres.
- (3) Construction of 3 transshipment Centres.

Besides the above, new schemes, viz., (1) construction of a Mushroom house at Chaubatia, (2) establishment of a hotel management training centre, (3) establish-

ment of a horticulture training centre at Dehra Dun, (4) Development of olive and almond cultivation, (5) Development of mushroom cultivation, etc. are also proposed to be taken up in the Sixth Plan.

70. *Minor Irrigation*—There is lack of irrigation facilities in the hill region as, at present, the percentage of net area irrigated to net area sown is only about 25 per cent including plain areas of hill districts and only about 10 per cent in the hilly region. For increasing intensity of cropping and productivity of different crops, the objective of the Sixth Plan (1980—85) is, therefore, to provide maximum irrigation facilities, especially minor irrigation, wherever possible.

71. Under the private minor irrigation programme emphasis would be on hydram/sprinkler irrigation, guls and hauz in the hill portion and private tube-wells/pumping sets, etc. in tarai areas. State irrigation facilities through contour channels, hydrams and lift irrigation would be augmented. The financial and physical targets proposed for the Sixth Plan 1980—85 are given below :—

Programme	Financial (In lakh Rupees)			Physical		
	1974—79 Expenditure	1979-80 Expenditure	Sixth Plan (1980—85) outlay	Irrigation Potential/ additional (*000 Hectares)		
				Base year 1979-80 Level	1980—85 Target	
1	2	3	4	5	6	
<i>Minor Irrigation</i>						
(a) Private M.I.	..	304.86	100.00	1050.00	59.00	51.00
(b) State M. I.	..	1074.03	448.27	4500.00	111.87	48.60
Total	..	1378.89	548.27	5550.00	170.87	99.60

72. *Soil Conservation*—Soil erosion in hill areas is a serious problem. The estimated critical area is about 17 lakh hectares both under agricultural and civil and soyam land. The main objective of soil and water conservation programme is (1) protection of agricultural land and reduction of soil erosion, (2) reclamation of denuded and degraded

land through an integrated watershed development programme, and (3) ecological regeneration through multi-disciplinary integrated development approach on micro-catchment basis. With a view to achieve the above objectives, the programme thrust during the Sixth Plan would be for augmenting integrated soil and water conservation schemes, land resource/capability

survey, agronomical programmes, forestry programmes, training and demonstration, maintenance of soil and water conservation works, integrated water shed planning through multi-disciplinary teams working

under one agency and peoples participation.

73. The outlay proposed for soil and water conservation programme for the Sixth Plan is given below :

(In lakhs Rupees)

Programme	1974-79 Expenditure	1979-80 Expenditure	Sixth Plan 1980-85 outlay
1	2	3	4
<i>Soil and Water Conservation :</i>			
(A) Agriculture Department .. .. .	369.72	82.61	1535.00
(B) Forest Department			
(i) Civil and soyam Forests .. .. .	272.93	157.00	1255.00
(ii) Centrally sponsored schemes, (State Share)			
(a) Ram Ganga Valley project .. .. .	*	22.50	384.00
(b) Himalayan Region Project .. .. .	*	52.70	2532.00
Total (B) .. .. .	272.13	232.20	4171.00
Total (A+B) .. .. .	642.65	314.81	5706.00

\*Implemented as 100% Centrally sponsored scheme before 1979-80.

The physical targets proposed for the Sixth Plan for the soil conservation programme are given below :

Department/Programme	Achievement up to 1978-79	1979-80 Achievement	Sixth Plan 1980-85 Target
1	2	3	4
<b>SOIL AND WATER CONSERVATION :</b>			
<i>(a) Agriculture Department :</i>			
Treatment of area ('000 ha.) .. .. .	64.04	5.16	55.50
<i>(b) Forest Department :</i>			
1. Soil conservation in civil and soyam Forests—			
(i) Afforestation and pasture Development ('000 ha.) .. .. .	36.35	8.04	37.50
2 Centrally sponsored Schemes			
Afforestation and Pasture development ('000 ha.)			
(a) Himalayan Region Project .. .. .	0.16	7.36	210.00
(b) Ram Ganga Valley Project .. .. .	23.64	3.19	18.00

74. *Area Development*—The main objective of the area development programme is to accelerate the process of socio-economic development and creation of employment opportunities in a specified area based on a specific targetted population group, especially small/marginal farmers, landless labourers, etc. Efforts are being made to help increase productivity in agriculture, horticulture and subsidiary occupations of animal husbandry, fisheries, dairying, etc. through various inputs, incentives and package of practices. The Area Development pro-

gramme in the hill areas includes activities like SFDA, IRD, Local Level Planning and Hill Area Development Agencies (HADA), and multi-disciplinary projects for Integrated Area Development on Micro-catchment basis.

In order to provide larger benefits and coverage, various programmes under these activities would be intensified and expanded during the Sixth Plan period. IGADA (Almora) will be replaced by HADA during the Sixth Plan period. The outlays for the Sixth Plan for above Area Development Programmes are given below :

(In lakh Rupees)

Programme	1974-79 Expenditure	1979-80 Expenditure	1980-85 outlay
1	2	3	4
1. Integrated Area Development† on Micro-catchment basis ..	—	—	1658.00
2. Hill Area Development Agencies (HADA/IGADA) ..	260.97	62.37	160.00
3. SFDA .. .. .	27.88	14.20	100.00
4. IRD* .. .. .	..	17.00	150.00
5. Local Level Planning .. .. .	204.11	91.41	1550.00
6. PRAD .. .. .	—	—	100.00
Total ..	492.96	184.98	4718.00

\*For subsidy over and above normal provision.

75. *Animal Husbandry*—The main objective of the animal husbandry programme is to augment production of milk, meat, eggs and wool, viz. productivity per unit of cattle and sheep and improving the occupational diversification for increasing the income and employment opportunities of the people during the Sixth Plan period. The major thrust, therefore, would be on quantitative and qualitative improvement of cattle, sheep and poultry by augmenting programmes for introduction of better and improved breed, ensuring adequate health cover and feed and fodder resources.

76. Cattle breeding programme would also be linked and intensified in milk shed areas with proper co-ordination of health, fodder, co-operative and marketing support. In the hill areas, special emphasis would be laid on deep frozen semen technology for artificial insemination of cattle. Efforts would also be made on reducing the animal population in hills. Sheep breeding programme will be intensified by strengthening the existing farms for increasing coverage of cross-breeding. The outlay proposed under this programme for the Sixth Plan is given below :

Programme	1974-79 Expenditure	1979-80 Expenditure	Sixth Plan 1980-85 outlay
1	2	3	4
Animal Husbandry .. .. .	247.41	73.47	1250.00

77.. The important physical targets proposed for the Sixth Plan are given below :

Serial no.	Item	Unit	1979-80 level	Sixth Plan 1980-85 Target
1	2	3	4	5
1	Veterinary Hospitls .. ..	(No.)	118	25
2	Stockman Centres .. ..	(No.)	427	50
3	Sheep Breeding farms .. ..	No.	13	..
4	Natural Breeding Centres .. ..	No.	179	95
5	Intensive sheep Development Project .. ..	No.	1	..
6	Sheep and wool Extension Centres .. ..	No.	46	28
7	Deep Frozen semen Station .. ..	No.	2	..
8	I.P.D.P. .. ..	No.	2	..
9	A.I. Centres .. ..	No.	51	..
10	A.I. Sub-centres .. ..	No.	151	..
11	Milk Production .. ..	('000 Tonnes)	312.5	350.00
12	Eggs Production .. ..	(Million)	23.5	32.8
13	Wool Production .. ..	(Lakh kg.)	4.23	6.42

78. At present there is a Deep Frozen Semen Production Station at Almora complete with bulls and liquid nitrogen plant and another centre is being established at Rishikesh in the Sixth Plan. A liquid nitrogen plant at Haldwani is continuing and another is being installed at Srinagar. An additional liquid nitrogen plant would be established at Almora. 52 frozen semen centres have so far been established and about 248 would be established in the Sixth Plan. A scheme of giving balanced concentrated feed at subsidised cost (50 per cent subsidy to small and marginal farmers and 66 2/3 per cent to landless labourers) is also continued in 1980-85 Plan.

79. Additional inputs are proposed to be provided for Intensive Sheep Development project during the Sixth Plan by increasing the number of rams and adequate coverage. During the Sixth Plan, existing sheep farms would be expanded with added pasture support. Establishment of a sheep farm at Mukku, which is in progress, would be expedited. A wool grading and marketing centre, which is being established in Tehri,

would be linked with purchase centres and marketing.

80. *Dairying*—Dairying is an important occupation for the socio-economic uplift of rural masses, particularly the weaker sections of the society, by opening of self-employment opportunities and supplementing the income to the people. The strategy for this programme for the Sixth Plan would be :

(i) Strengthening of primary milk co-operative societies.

(ii) Strengthening of existing milk plants in co-operative sector.

(iii) Sustained man power development to improve operational efficiency of plants.

(iv) Co-ordination and linking of dairying programme with animal husbandry in compact areas and ensuring proper marketing and price support.

81. In view of the above objective, effective measures would be taken in the Sixth Plan for revitalization, consolidation and expansion of existing milk unions and milk plants, education and training,



increasing extension support and strengthening of milk societies. The

outlay proposed for the Sixth Plan under this programme is given below :

(In lakh rupees)

Programme	Fifth Plan 1974-79 Expenditure	1979-80 Expenditure	Sixth Plan Outlay 1980-85
1	2	3	4
Dairying .. .. .	33.86	5.73	225.00

82. During the Sixth Plan period, it is proposed to revitalize 177 existing milk co-operative societies and organise 23 new societies. It is proposed to raise the present level of procurement from about 6,000 litres of milk per day to 20,000 litres (100 litres of milk per society) per day by the end of Sixth Plan. This would help to utilize about 51 per cent utilization of the capacity of milk plants of this region. Assistance to tribals for organising milk societies is also proposed.

83. *Forest*—Forests in hills cover an area of about 66.6 per cent (34,047 sq. kms.) of the total geographical area of the region, out of this area, only 41.8 per cent area is covered with well stocked forests as against 60 per cent of the minimum area envisaged by national forest policy.

84. The main objective of forestry planning will be "development without destruction". The major thrust, therefore, will be towards ecological balance, employment generation, energy conservation and economic stability of rural population. During the Sixth Plan period the following measures will be adopted :

(a) Improving the environment by protecting forests and undertaking massive afforestation in the degraded forests.

(b) affording strict protection to wild life and its habitats.

(c) Undertaking a massive programme of fuelwood plantation to meet the ever-growing rural fuel energy needs.

(d) Providing employment to the rural population, with special attention to the weaker sections of the society, i.e. tribals and scheduled castes.

(e) Increasing the productivity of forest produce so as to achieve self-sufficiency in meeting economic industrial and rural areas requirements.

85. An amount of Rs.9.84 crores was spent on the forestry programmes during the period 1974-79 of the Fifth Plan and an amount of Rs.2.22 crores has been spent during 1979-80. For Sixth Plan 1980-85 an outlay of Rs.25.22 crores is proposed.

86. Besides the continuing schemes, the following new programmes are also proposed for the Sixth Plan 1980-85 : (1) Intensification of forest management, (2) intensive management of sanctuaries, (3) Wild life conservation, (4) Establishment of High Altitude Zoo, (5) Forest Recreation, (6) Forest extension, and (7) Development of Minor Forest Produce. The important physical targets proposed for the Sixth Plan are given below :

Serial no.	Item	1974-79 Achievement	1979-80 Achievement	Sixth Plan 1980-85 Target
1	2	3	4	5
1	Plantation of species of economic and industrial importance ('000 ha.)	15.9	4.2	23.1
2	Plantation of Fast growing species ('000 ha.)..	10.5	1.7	7.00
3	Construction of new roads (kms.) .. .. .	123	22	261
r	Renovation of old roads (kms.) .. .. .	1376	323	1120

87. *Co-operation*—With a view to strengthening the co-operative structure in the hill areas, the main objectives for the Sixth Plan would be :

(1) Strengthening of the primary societies and diversification of their activities, (2) To build up a strong and effective marketing structure by utilizing primary co-operative societies, (3) To augment the existing storage and warehousing capacity in the co-operative sector, (4) To strengthen the consumer co-operative in urban and rural areas, (5) Effective measures for benefiting the weaker sections of

the society such as organisation of fruit marketing societies, strengthening of LAMPS and co-operatives for herb development.

88. Under this programme, an amount of Rs.173.13 lakhs was spent during the Fifth Plan (1974-79) period and during 1979-80, an expenditure of Rs.47.61 lakhs was incurred. For the Sixth Plan (1980-85), an outlay of Rs.550 lakhs is proposed for hill areas. The important achievements made and targets for the Sixth Plan are given below :—

Serial no.	Item	1979-80 Level	1980-81 Target	Sixth Plan 1980-85 Target
1	2	3	4	5
1	<i>Co-operative Loaning (Crores Rs.):</i>			
	(a) Short Term loan .. .. .	9.73	12.91	16.50
	(b) Medium Term loan .. .. .	3.00	2.65	3.50
	(c) Long term loan .. .. .	0.66	3.00	5.00
2	<i>Storage facility ('000 Tonnes):</i>			
	(a) By co-operatives .. .. .	36.50	7.50	40.00
	(b) By State Warehousing Corporation .. .. .	43.92	4.00	40.50
3	Retail sale of fertilizers (Crores Rs.) .. .. .	14.60	5.39	44.04
4	Retail sale of consumer goods (Rupees in crores):			
	(a) In rural areas .. .. .	2.33	4.26	17.04
	(b) In urban areas .. .. .	2.44	3.75	15.00
5	Processing Units (Nos.) .. .. .	5	..	1
6	Construction of Rural Godowns (Nos.) .. .. .	181	150	351
7	Construction of marketing godowns (Nos.) .. .. .	19	..	5
8	Organisation of Marketing societies (Nos.) .. .. .	20	2	2

89. *Major and Medium Irrigation*—Most of the continuing project viz., Kosi Irrigation Scheme, Haripura Reservoir, Kosi valley and Ram Ganga valley irrigation schemes have been completed by the end of year 1979-80. The remaining

continuing medium irrigation schemes would be completed by the end of 1981-82 during the Sixth Plan period. Possibilities of some new projects—are being explored during the Sixth Plan for which survey and investigation are in progress.

90. During the Fifth Plan period, an expenditure of Rs.754.54 lakhs was incurred and an amount of Rs.64.72 lakhs has been spent in 1979-80. An outlay of Rs.73 lakhs has been proposed for the Sixth Plan (1980-85) period. By the end of 1979-80, 56,169 hectares of total irrigation potential was created from major/medium irrigation works. For the Sixth Plan 1980-85, a target of 11,500 hectares of additional irrigation potential is proposed.

91. *Power*—Power is the most important infra-structure for economic and social development. Added importance is also attached to power for fuel energy in hills due to paucity of coal and fuel wood. Due to long distance of T and D lines, non-viable micro-generation schemes and difficult terrain of the area, power development is lagging behind.

92. The main objective of the power development in hill areas during the Sixth Plan is to accelerate the power development programme, especially rural electrification and maximum utilization of hydel potential for micro-generation schemes. Thrust would also have to be given to the speedy extension of T and D lines. Besides, special measures for reducing the cost of micro-generation of power in the hills as also know-how and training for their operation and maintenance would have to be taken.

93. The progress during 1979-80 and proposed financial targets for power development for the Sixth Plan is given below :

(In lakh rupees)

Serial no.	Programme	1979-80 Expenditure	1980-81 Outlay	Sixth Plan 1980-85 Proposed Outlay
1	2	3	4	5
1	Micro Generation .. .. .	24.17	25	500
2	T and D works (33 Kv. and below) .. .. .	155.50	175	2000
3	Rural Electrification—			
	(a) State Normal .. .. .	53.14	65	892
	(b) REC (i) Normal .. .. .	92.41	120	732
	(ii) MNP .. .. .	9.78	325	3376
	Total (3) .. .. .	245.33	510	5000
	Total power .. .. .	425.00	710	7500

The physical achievements so far and additional targets proposed for the Sixth Plan are given below :

Serial no.	Item	Unit	1979-80 Level	1980-81 Target	Sixth Plan 1980-85 Target
1	2	3	4	5	6
1	Micro-generaton-Installed capacity .. .. .	Kw	13738.4	300	1800
2	Transmission and Distribution :				
	(a) Construction of 33 Kv Lines .. .. .	CKt. Kms.	617.01	144	1086
	(b) Construction of 33/11 Kv. Sub-Stations .. .. .	Nos.	24	5	38
3	(a) Electrification of villages .. .. .	No.	3610	587	7344
	(b) Electrification of Harijan Basties .. .. .	„	1492	587	7344
	(c) Energisation of PTW/Pumpsets .. .. .	„	3241	270	2000

94. *Industry and Mining*—Keeping in view the industrial backwardness of hill areas, the main thrust would be :

(1) To develop adequate infrastructure and industrial nucleus suitable to hills.

(2) To develop entrepreneurial ability through training facilities, consultancies and technical know-how.

(3) To provide incentives, assistance, raw material and credit facilities.

(4) To step up investment in State as well as joint sectors through various State corporations.

(5) To develop growth centres and coordinate programmes of various agencies at focal points.

95. Efforts would, therefore, be concentrated during the Sixth Plan period

for developing the pace of resources (agro forest, mineral and wool) based industries, particularly through State Corporations and for promotion of village and small scale industries in the private sector in rural areas through various incentives and promotional measures.

96. *Large and Medium Industries*—The State Corporations, viz. Kumaon and Garhwal Development Corporations and its subsidiaries (i.e. Scheduled Tribes Development Corporation), U. P. HORTICO, State Industrial Development Corporation, State Mineral Development Corporation, State Cement Corporation and State Electronics Corporation, etc. are being provided share/seed capital for promoting/establishing resource based industries specifically in the hill areas.

97. The expenditure during the Fifth Plan and outlay proposed for the Sixth Plan for industry and mineral development is given below :—

(In lakh rupees)

Programme/Sector	Fifth Plan <sup>†</sup> (1974—79) expendi- ture	1979-80 Expendi- ture	1980-81 outlay	1980—85 Proposed outlay
1	2	3	4	5
1 Large and Medium Industries (Investment in public undertakings).	398.25	35.00	100.00	1400.00
2 Village and Small Industries .. ..	180.51	41.89	90.00	1874.00
3 Geology and Mining .. ..	257.92	24.98	43.00	809.50
Total—Industry and Mineral .. ..	836.68	101.87	233.00	4683.50

98. *Hill Development Corporation*—This corporation is undertaking promotional as well as commercial activities viz., establishing Industries, promoting tourism by conducting package tours and construction of rest houses, tent colonies, marketing of fruits and handling cooking gas agencies etc. Besides the existing projects, this corporation has proposed establishment of following projects during the Sixth plan : Paper Pulp Unit, Soyabean Solvent Extraction Plant, Match splint unit, Soap stone Mining, G. I. Wire plant. Raw material Depot, Coal Depot and Rope ways etc.

99. *Garhwal Development Corporation*—This corporation is also undertaking conducted tours for promotion of tourism, marketing of fruits and soyabean and construction of tent colonies and tourist rest houses in additions to establishing industries.. Besides the existing projects/units which will continue, the corporation has also proposed to establish following new project/units during the Sixth Plan period : Paper Pulp Unit, Mini Cement Plant, Binocular Manufacturing unit. Stone masonry Block unit, Flash Door Factory, Electronics unit, Soyabean

Processing Factory and Medicinal Herbs Processing unit etc.

100. *Kumaon and Garhwal Scheduled Tribes Development Corporations*—These corporations have established various training centres for training in skills and know-how, production and sale centres, and raw material depots to help and encourage tribals of the area. During the Sixth Plan, programmes of these corporations will be streamlined and strengthened.

101. *U. P. State Industrial Development Corporation*—This corporation is helping by providing developed site/plots for industrial complexes. UPSIDC has established an industrial complex at Mohan (Almora) for 14 small and medium units. This corporation is also establishing industries in hill areas in joint ventures. The two functioning projects are: M/s. Almora Magnesite Ltd. and a watch assembly unit—"U. P. Digitals Ltd.", Bhowali. This corporation proposes to expand the capacity of watch assembling unit and setup another unit in Garhwal region and a paper plant in hills during the Sixth Plan period.

102. *State Cement Corporation*—During the Sixth Plan, 2 medium size cement plants (at Baruwala, Dehra Dun and Gangoolihat, Pithoragarh) of about 4 lakh tonnes annual capacity and 5 mini cement plants in the hill areas will be setup. The Pithoragarh Cement Plant is likely to be taken up shortly.

103. *Small Scale Industries*—During the Sixth Plan period, efforts will be made to develop resource based (especially agro-based, forest-based, wool-based and traditional crafts, electronic, etc.), small scale and cottage industries in the hill areas through various incentives and promotional programmes, viz. setting up of industrial estates, training-cum-production centres, facility of raw material, loan facilities, expansion of handloom and sericulture, handicrafts, etc. for increasing the income and employment opportunities in the area. On the development of small scale industries in the hill areas, an amount of Rs.180.51 lakhs was spent during 1974-79 and Rs.41.89 lakhs during 1979-80. For 1980-85, an outlay of Rs.1874.00 lakhs has been proposed.

104. During the Sixth Plan period a massive programme for encouraging rural industries, specially revamping the existing training-cum-production centres, extending training facilities of modern techniques and skills in various craft, ensuring marketing and credit facilities and package of programmes through DICs and Growth Centres, etc. Demand based industries will also be encouraged.

105. At present, there are a number of production and training centres of Papri Wood, Artistic Wooden Goods, Ringal, shawl weaving and knitting, 7 carpet weaving training centres. Besides, 4 industrial complexes (woollen, cotton, forest and agro-based), 4 carding and spinning plants, 16 growth centres (2 in each district) and 8 DIC in the hill areas. Efforts would be made during the Sixth Plan for better capacity utilization of these institutions. Strengthening and expansion of existing training-cum-production centres and establishing these centres with entrepreneurial collaboration is also envisaged. Khadi and Village Industries Board will also be encouraging wool spinning by hand.

106. Establishment of 5 Industrial Estates is also proposed for the Sixth Plan. Land for three industrial estates (at Haldwani, Srikot and Balbhadrapur) is available and development/construction of sheds would be taken up. Besides, land for two more industrial estates is being acquired and development/construction of sheds will be taken up later on. Out of the existing 11 industrial estates, one industrial estate of Kashinur will be expanded and strengthened during the Sixth Plan.

107. With a view to organising industrial units, it is proposed to organise 100 industrial co-operative societies in 1980-85. It is also proposed to set-up 2 new quality control and inspections depots. For encouraging and involving local people by imparting intensive training in rural industries, training centres through entrepreneurs are proposed to be set up, viz., 10 Tat Patti centres, 10 Bandage centres, 10 Hosiery, 10 Wool spinning, 5 Wool weaving, Footwear and leather working centres, carpentry and wooden article centres are also proposed to be reorganized.

108. A scheme of entrepreneurial practical training in the trades of carpet weaving and chemical industries is also proposed. Under this scheme local artisans/craftsmen would be sent for practical training at the renowned centres to make available necessary know-how and expertise. Besides, expansion of wool development scheme is also proposed. Under this scheme, for training the artisans in improved methods—mechanical means of production for spinning and weaving, 5 wool carding and finishing plants would be provided with finishing plants. Two idle plants would also be reorganised and added with finishing plants. It is also proposed to open 16 new carpet training-cum-production centres during the Sixth Plan period. A scheme for instructors' training at master craftsmen centres is proposed. It is also proposed to set up a souvenir complex, a stone carving centre and establishment of a separate design centre in hills during the Sixth Plan. For the development of handloom, 750 looms are proposed to be brought under co-operative fold. For sericulture and tussar development, an Oak Tussar Development Project is also proposed for the Sixth Plan. Besides, 20 Chawki Rearing farms (5 acre each) and Demonstration centres are also proposed.

109. *Mineral Development*—In the hill areas, 15 investigation programmes are being carried out. These include 5 detailed level surveys on limestone, marble, magnesite and base metals, while the remaining are either preliminary investigations or regional geo-chemical surveys. Regional investigations including geo-chemical surveys and studies of heavy minerals in the stream sediments have also been carried out. The survey schemes have resulted in the outlining of mineral reserves in a number of areas and also delineating new mineralisation of tungston and gold in Almora and Pauri-Garhwal districts respectively. The works are being extended for an assessment of deposits. Besides, the intensive survey and investigation of continuing schemes, some new schemes, would also be taken up in the Sixth Plan for which an outlay of Rs.300.00 lakhs has been proposed.

110. *State Mineral Development Corporation is continuing the following projects for commercial exploitation of minerals of hill areas :*

(1) *Lambidhar Limestone Mining Project, Mussorie*—The total cost of the project is Rs.744 lakhs and on completion it will produce 4.5 lakhs TPY of chemical grade limestone for various industries. Major work including installation of aerial ropeway, etc. is in progress which is expected to be completed in 1981-82.

(2) *Calcium Carbide Project, Dehra Dun*—The cost of the project is Rs.806 lakhs which is being implemented by a subsidiary company (U. P. Carbide and Chemical Ltd.). It will produce 21,000 TPY calcium carbide which will go as an important basic chemical raw material for several down stream industries. The project is expected to be in production during 1981-82.

An outlay of Rs.509.50 lakhs is proposed for providing share capital to this corporation.

111. *Roads*—Hill areas are still isolated and suffer from inadequacy of net work of all weather roads in the hinterland and the remote potential areas. Roads being the only life-line of the hill areas, the development of roads is an indispensable infra-structure for opening up the economy. A high priority has, therefore, been assigned to roads during the Sixth Plan period.

112. The national norm of covering villages above 1500 population (100 per cent) and between 1,000—1,500 (50 per cent) does not suit the hill areas. Keeping in view the terrain and small and scattered village population (about 92.2 per cent of the total villages in hills have below 500 population), the Fifth Plan norm under M. N. P. for roads was 100 per cent coverage of cluster of villages of 500 and above population. Therefore norm under RMNP for the hill areas needs to be revised, i.e. 100 per cent coverage of villages having population above 500 and 50 per cent coverage of villages of population between 250—500. However, due to constraints of resources, provision has been made for

connecting 50 per cent unserved villages above 500 population which require about 1,100 kms. of rural roads in addition to missing links and roads required for the development of horticulture, tourism and other potential areas as also for tribal and scheduled caste area, link roads, by-passes, bridges and modernisation of roads.

113. The spill over works of roads at end of 1979-80, require, about 69 crores for completion. In view of the above factors and felt needs of roads, an assessment of about Rs.300 crores was made for the Sixth Plan. However, due to constraints of resources, an outlay of Rs.250 crores is proposed. The Fifth Plan expenditure and proposed outlay for the Sixth Plan for roads is given below :

(In crores Rupees)

Programme	1974-79 Expend- ture	1979-80 Expendi- ture	1980-81 outlay	Sixth Plan outlay 1980-85
1	2	3	4	5
<i>Roads and Bridges—</i>				
1. Total .. .. .	65.92	22.26	25.00	250.00
2. RMNP .. .. .	25.49	17.16	19.65	161.83

114. The physical targets proposed for the Sixth Plan are given below :—

Serial no.	Items	Unit	1979-80 level	1980-81 Target	1980-85 Target
1	2	3	4	5	6
1	Construction of new Motor roads .. .. .	Kms.	8017	800	4800
2	Reconstructun and Improvement of roads .. .. .	Kms.	244*	250	1500
3	Bridges .. .. .	No.	20*	25	150

\*Achievement during the year.

115 *Tourism*—In view of the long range of potentialities of tourism development in the hill areas including the peripheral places of interest, a high priority has been assigned for tourism development and a thrust would be on exploring the possibilities of its development on a co-ordinated and scientific basis during the Sixth Plan 1980-85. Main stress would, therefore, be for promotion of tourism on commercial lines for which stress would be to provide good accommodation for all category of tourists with proper facilities of lodging and catering etc. on the yatra routes and other tourist resorts, transport facilities, way side amenities and wide spread publicity and guidance etc. for encouraging tourists in the hill areas. Besides, stress is also being

laid on tourist cottages and compact tourist complexes for the economic development of the region. Financial incentives to local people is also envisaged for hoteling, catering and construction of accommodation for tourists.

116. During the Fifth Plan period, an amount of Rs.411.01 lakhs was spent and Rs.49.08 lakhs was spent during 1979-80. For 1980-85, an outlay of Rs.1235 lakhs has been proposed.

117. So far an accommodation of 1868 beds in 44 units has been provided in various tourist houses and pilgrim rest houses in the hill areas. During the Sixth Plan period, efforts would be made for increasing the occupancy of tourists accommodation by encouraging off-

season tourism, trekking and mountaineering, winter sports, etc., co-ordination of various programmes and developing satellite places adjacent to over crowded places.

118. Commercial aspect of the tourism is looked by Kumaon and Garhwal Development corporations. These corporations are conducting package tours, constructing tent colonies/rest houses and management of hotelling and catering.

119. During the Sixth Plan, spill over works of continuing project would be expedited and new places would be developed and additional accommodation facilities would also be provided. For encouraging tourists, fairs and festivals, publicity programmes would also be streamlined.

120. During the Sixth Plan it is proposed to provide additional accommodation for tourists at Chakrata, Gwaldam, Dehradun, Rudraprayag, Pithoragarh, Hari-kidooon, Lansdowne, Joshimath, Ramgarh, Tuni, Agora, etc. Besides, development of Kilbury, Valley of Flowers, Nainapeek, Malti Deer Park is also proposed.

121. *General Education*—Education is one of the essential prerequisites for the socio-economic development. According to the national objectives and guidelines, the Sixth Plan 1980–85 aims at universalisation of elementary education and priority for adult education. Major thrust for educational development in U.P. hill

areas will be given accordingly. Besides, in view of the topography and felt needs of hill area, emphasis would be given for diversification of education for gainful employment to students of secondary and higher education and special attention for qualitative improvement of higher education and extending women education is envisaged. In addition, special attention is also required for providing facilities of buildings, science equipments, libraries and other accessories in the existing institutions.

122. On general education, the expenditure incurred during 1974–79 period was Rs.24.19 crores and in 1979-80 an expenditure of Rs.8.19 crores was incurred. In view of the essential needs of educational facilities in remote and inaccessible hill area, an outlay of Rs.95.00 crores is proposed for the Sixth Plan 1980–85 which includes Rs.49.53 crores under R. M. N.P.

123. The main objective of the elementary education in hill areas is to provide facilities for universal education for children of age group 6–11 within a walking distance of one km. and for the age group 11–14 within a distance of 3 kms. Provision has been made for primary and Junior high schools for the Sixth Plan according to the requirement of unserved areas assessed by the Fourth educational survey. The physical targets proposed for the Sixth Plan are given below :—

Serial no.	Item	1979-80 Level	1980-81 Likely Achievement	Sixth Plan 1980–85 Target
1	2	3	4	5
1	<i>Institutions (No.)</i>			
	(a) Primary schools .. .. .	6592	136	667
	(b) Jr. High Schools .. .. .	1131	46	200
	(c) Higher Secondary Schools .. .. .	669	25	50
	(d) Degree Colleges .. .. .	31	..	..
2	<i>Enrolment ('000)</i>			
	(a) Primary Schools (Age group 6–11) .. .. .	528(86)*	546(88)*	728(110)*
	(b) Jr. Higher Schools (age group 11–14) .. .. .	180(52)*	188(54)*	305(76)*
	(c) Higher Secondary Schools .. .. .	118	129	218
3	<i>Adult Education</i>			
	1. No. of participants (('000) .. .. .	32	75	480
	2. No of Centres functioning—			
	(a) Central Programme .. .. .	1348	2404	2404
	(b) State Programme .. .. .	..	100	800

\*Figures in brackets relate to percentage of enrolment in the respective age group.



124. In order to minimise drop-outs, etc., provision of incentives (uniform and scholarships) has also been made for the children of weaker sections. In accordance with the recommendations of the Education Commission, the programme of "school complex" will also be started in the selected districts during the Sixth Plan period. Under this programme each junior high school will be integrally related to the primary schools in the neighbourhood so as to form one "complex" of educational facilities. It is also proposed to launch a programme of population education in the hill districts from 1981-82 as a part of the project sponsored by the Government of India and NCERT with UNESCO support. Under this programme, the expenditure on staff will be borne by the State Government.

125. Besides the expansion and strengthening of secondary education, emphasis would be given for the qualitative improvement in the Sixth Plan. Provision has also been made for the essential requirement of buildings, science laboratories, equipment and other accessories etc. In the field of higher education, emphasis will now shift from expansion to consolidation and capacity utilization for which financial incentives (scholarship) to poor students of hills would be provided for staying in the hostel of degree colleges of hills.

126. For augmenting the adult education programme in hills, 5 projects each consisting of 300 centres are being implemented in 5 hill districts under the centrally sponsored scheme. Remaining three districts are proposed to be covered during the Sixth Plan period. Besides, the State Government would also take up this programme by starting a project of 100 centres in each district.

127. *Technical Education*—The main emphasis, in the Sixth Plan, under this programme would be on consolidating and strengthening of present institutions (Government Polytechnics). It is also proposed to implement new schemes for proper co-ordination and relevant techniques for which intensive work-cum-train-

ing and product development programmes would be taken up. Augmentation of these programmes will be helpful for entrepreneurs and self-employment to trained persons. Provision for the schemes of remedial courses for weaker students has also been made.

128. By the end of 1979-80, nine polytechniques with total intake capacity of 980 seats were established in the hill areas. Some of these institutions are without buildings, staff and adequate equipments and appliances. Emphasis would, therefore, be also made to equip these institutions with these requirements and ensure better capacity utilization.

129. An amount of Rs.1.46 crores was spent during 1974-79 period and an outlay of Rs.4.10 crores is proposed for the Sixth Plan.

130. *Craftsmen Training*—The main objective of the Craftsman Training Programme for the Sixth Plan in the Hill area is :

(1) To ensure a steady flow of skilled workers in different trades for industrial development.

(2) To augment gainful and self employment opportunities to local educated youth through systematic training in various skills and trades.

(3) Diversification of various trades according to local needs.

(4) Strengthening of the existing I. T. Is. viz., provision of buildings, equipments, tools and appliances and qualified staff for increasing the efficiency of institution and quality of craftsmen.

131. In view of the above objectives, thrust would be made to strengthen the existing institutions (I. T. Is.) of hill areas during the Sixth Plan period. Diversification of trades and addition of new trades, suitable to local needs would be made. During the Fifth Plan period ten new I. T. Is were opened in Hills making the total number of I. T. I. to 18 (total intake capacity-4232) in addition to 4 G. I. T. Is. The I. T. Is are yet to be fully equipped with buildings, equipments,

appliances. Provision has, therefore, been made to provide land/buildings, equipments etc., for the existing institutions. During the Sixth Plan period, efforts would also be made for better capacity utilization of these institutions and addition of 224 new seats in different useful trades is also proposed to meet the demand of the area. During the Sixth Plan period it is proposed to open 5 branch I. T. I.s in remote and unserved areas instead of fullfledged I. T. I.s to meet the public demand of Hills. Under this programme, an amount of Rs. 81.17 lakhs was spent during the 1974-79 period. To meet the essential requirements of land/buildings, equipments, machines/material as also for diversification and strengthening of I. T. I.s., an outlay of Rs. 250 lakhs is proposed for the Sixth Plan.

132. *Medical and Public Health*—The basic objective of Health Planning is to organise medical and health services in such a way so as to secure prevention of diseases and provide proper curative services to the people for their physical and social well being. In the Hill areas these services are not available within easy reach, especially in remote and inaccessible rural areas. Besides the above, prevalence of communicable diseases and acute problem of residential and non-residential buildings, referral, paramedical and modern facilities, equipments and dearth of specialised services is still there. The main

thrust, therefore, in the Sixth Plan will be on the following :

(1) Strengthening and expansion of health services in unserved rural areas by upgrading P. H. C.s and providing one P. H. C. for every 20000 population and one sub-centre for every 3000 population in the Hill and Tribal areas.

(2) Control and eradication of communicable diseases.

(3) Adequate attention to mitigate intra-regional/pockets imbalances in health services, especially the areas of scheduled tribes and scheduled caste population.

(4) Consolidation and re-orientation of health services by removing deficiencies of staff, modern equipments, buildings and referral/paramedical services.

(5) Gear up training facilities and improving the quality of services.

(6) Encouraging/developing Indian system of medicine.

133. In view of the topographical problem and requirement of Hill areas, an outlay of Rs. 41.62 crores is proposed for the Sixth Plan 1980-85 including Rs. 17.04 crores under Minimum Needs Programme. The present level of physical achievements and targets proposed for the Sixth Plan are given below :

Serial no.	Item	1979-80 Level	1980-81 likely Achievement	Sixth Plan 1980-85 Target
1	2	3	4	5
1	Establishment of PHCs (No.) .. .. .	78	6	132
2	Establishment of Sub-Centres (No.) .. .. .	651	279	749
3	Construction of PHCs (No.) .. .. .	61	8	56
4	Upgrading of PHCs (No.)			
	(a) Construction .. .. .	6	6	21
	(b) Establishment .. .. .	1		18
5	Construction of Sub-Centres (No.) .. .. .	43	30	408
6	Establishment of Allopathic Dispensaries (No.) .. .. .	361	50	140
7	Establishment of women Hospitals (No.) .. .. .	25	5	25
8	Establishment of Ayurvedic Dispensaries (No.) .. .. .	294		60
9	Establishment of Homeopathic dispensareis (No.) .. .. .	22	5	53
10	Establishment of Dental Clinics. (No.) .. .. .	6	4	24
11	Extension of full Nursing Home Scheme (No.) .. .. .	9	2	5
12	Construction of Nurses Homes .. .. .	5	2	5

134. It is also proposed to establish an Ayurvedic Medical College in the hill area during the Sixth Plan. Besides the above, provision has also been made for strengthening of 441 sub-centres, 580 additional allopathic beds, eight I. C. C. units, five E. N. T. sections, Medical and Surgical units at 22 Tehsil level and other hospitals, six mobile units, 20 X-ray Plants at Tehsil level, 30 Ambulances for Tehsil level hospitals and up-graded P. H. C.s., ten Epidemic Ambulances, 24 MRP and CIB, 16 sweeper huts for improvement of sanitation on Yatra routes and provision of 12 generators during the Sixth Plan period.

135. *Water Supply*—The problem of Drinking Water supply in the Hill areas is acute as out of 7771 scarcity villages (according to the Departmental survey of 1972),

only 4376 scarcity problem villages could be covered and at the end of 1979-80, 3395 scarcity villages were yet to be covered along with other problem villages. According to the national objective, these remaining villages have to be covered by the end of 1984-85. Augmentation of urban water supply is also required. Besides problem of drinking water in Harijan *bastis* is also there.

136. A high priority has been assigned for water supply programme to meet the requirements of Hill areas, an outlay of Rs.152.10 crores is proposed for the Sixth Plan for the schemes of Jal Nigam and Rural Development Department. The financial and physical targets are given below :

Programme	Financial (crores Rs.)			Item	Physical Targets			
	1979-80 Actual	1980-81* outlay	1980— 85 outlay		1979-80 Level	1980-81 Target	1980— 85 Target	
1	2	3	4	5	6	7	8	
<b>JAL NIGAM</b>								
1 (a) I.D.A.				(a) Rural Water Supply				
(i) Rural	..	4.85	1.00	3.28	1. Total villages covered (No.)	5834	750	7000
(ii) Urban	..	..	..	..	2. Scarcity villages covered (No.)	4376	560	3395
(b) Non-I.D.A.				(b) Urban :				
(i) Rural	..	9.28	14.70	135.82	3. Town covered (No.)	49	..	7
(ii) Urban	..	0.52	1.00	10.00	4. Towns under Augmentation schemes (No.)	22	2	10
Total (a+b)	..	14.66	16.70	149.10				
2 R.M.N.P.	..	9.81	14.70	141.70	R.M.N.P. (Scarcity villages)436	4376	680	3000

137. The outlay for the Sixth Plan proposed for Rural Development Department for providing diggiss in Harijan *bastis* is

Rs.3.00 crores. The financial and physical target are given below :

Programme	Financial (In lakh Rupees)				Item	Physical		
	1979-80 Actual	1980-81 outlay	1980—85 outlay	1979-80 level		1980-81 Target	1980—85 Target	
1	2	3	4	5	6	7	8	
<i>Rural Development Dep.</i>								
Rural Water Supply ..	50.00	50.00	300.00	Diggies (No)	1242	208	1250	

138. *Labour Welfare*—During the Sixth Plan period, Labour Welfare Programme aims at — (1) wider and effective coverage of Minimum Wage Regulations, especially for the protection of relatively unorganised and weaker sections of the working class; (2) streamlining enforcement of labour laws, securing safe working conditions for welfare of labour in various organisation; (3) identification, emancipation and progressive rehabilitation of bonded labour in Hill/Tribal and other areas and conducting action oriented diagnostic studies in the field of labour; (4) encouraging workers participation in the management; and (5) promoting general efficiency of existing apparatus of labour administration through inservice training and specialisation of personnels.

139. Under this programme, the continuing schemes would be intensified and streamlined during the Sixth Plan. For rehabilitation of bonded labourers, a thrust would be made for intensive and multi-directional assault on poverty family by family. For securing their interest, various corrective measures and co-ordination with the various area development agencies is envisaged.

140. At the end of 1979-80, 4373 bonded labourers or 3211 families have been identified in Dehra Dun, Uttarkashi and Tehri-Garhwal districts. Besides, 1500 haigees were also estimated under this category. Up to March, 1980, 1,281 families of released bonded labourers have been rehabilitated and reported to have reached the earnings level of Rs. 3,600 per annum.

141. Out of the total outlay of Rs. 120.00 lakhs for labour welfare programme, an outlay of Rs. 110.00 lakhs (as State share) is ear-marked for rehabilitation of bonded labourers for the Sixth Plan. Since this scheme is under the Centrally sponsored scheme, matching assistance would also be made available from Government of India.

142. At present the financial assistance (grant) for the rehabilitation of bonded labour is being provided at the rate of Rs. 3,000 per family. The matter of providing this grant at the rate of Rs. 4,000 per labourer on the matching

basis is under consideration by Government of India. If above grant is made feasible, efforts would be made to rehabilitate all the bonded labourers identified so far during the Sixth Plan period.

143. *Welfare of Backward Classes*—The population (per 1971 census) of Scheduled Castes, Scheduled Tribes in the Hill areas is 19.7 per cent (16.00 per cent Scheduled Castes and 3.7 per cent Scheduled Tribes) of the total population of the region. Most (about 60 per cent) of this population is estimated to be below the poverty line. The basic objective of the Sixth Plan is to bring 50 per cent of this population above the poverty line and securing their progressive development. Efforts would, therefore, be made during the Sixth Plan period to intensify family oriented programmes, removal of inadequacy and backwardness in the educational level and significant and tangible improvement in their working conditions for removal of economic, educational and social inequalities.

144. Under this programme, an amount of Rs. 239.75 lakhs was spent during the Fifth Plan 1974-79 and Rs. 74.97 lakhs was spent in 1979-80 on the educational, economic, health and housing programmes. An outlay of Rs. 750 lakhs is proposed for the Sixth Plan for the welfare of Scheduled Castes/Tribes and other weaker communities. Besides the continuing schemes, which will be intensified and streamlined, the following new schemes are proposed for the Sixth Plan :

(1) Increase in rates of Pre-matric Scholarship.

(2) Scholarship in class IV and V (one in each class at the rate of Rs. 5 per month).

(3) Establishment of new Ashram type Schools.

(4) Increase in maintenance charges of the students of Ashram Type Schools from Rs. 76 to Rs. 125 per student.

(5) Opportunity cost to Scheduled Castes families at the rate of Rs. 15 per month.

(6) Coaching to the students studying in class X and XII.

145. *Social Welfare*—Social welfare programme aims at securing self reliance among socially and physically handicapped persons. During the Sixth Plan period more emphasis will be given on preventive rather than relief for this programme in the hill areas. Stress would also be laid on diagnostic approach for identifying and redressing the problem of handicapped persons/destitute women.

146. In view of the objective of this programme, it is proposed to establish a survey cell at the Regional level in the Sixth Plan for identifying and assessing the problems of handicapped persons. It is also proposed to establish a rehabilitation centre for physically handicapped persons at Regional level where training in various crafts will be imparted according to suitability of handicapped. After-care Homes for the destitute women are also proposed to be established with residential facilities where training in various crafts would be imparted for their rehabilitation. The daughters of the destitutes would also get education facilities. Besides, a Protective Home for women is also proposed to be established during the Sixth Plan. Besides, the continuing schemes would also be augmented.

147. Keeping in view the requirements for augmenting above programmes, an outlay of Rs.150 lakhs is proposed for the Sixth Plan period for the social welfare programme.

148. *Nutrition*—An amount of Rs.79.98 lakhs was spent on the Special Nutrition Programme in the Hill areas during the Fifth Plan and the expenditure incurred during 1979-80 was Rs.5.78 lakhs. An outlay of Rs.200.00 lakhs (Rs.50.00 lakhs for education department and Rs.150 lakhs for R. D. Department) is proposed for the Sixth Plan 1980-85. Besides, an outlay of Rs.125.00 lakhs for Applied Nutrition Programme is also proposed for the Sixth Plan period.

(a) *R. D. Department*

149. *Special Nutrition Programme*—The programme will be implemented in backward and tribal concentrated blocks. As far as possible Special Nutrition Programme will be run in Applied Nutrition Pro-

gramme blocks with a view to strengthening the educational and balanced food production aspects of supplementary feeding programme. Under this programme supplementary food will be given to vulnerable groups at the rate of 25 paise per beneficiary. The food will be prepared at local level by a member of the Mahila Mandal who will be given an honorarium of Rs.100 per month for processing the food.

150. *Applied Nutrition Programme*—This programme will be implemented in selected blocks during the Sixth Plan period. The programme aims at improving the nutritional status of the child in particular and the rural community in general. To achieve this objective rural women are helped to organise themselves and form Mahila Mandals. They are assisted to run Balbari classes to educate pre-schoolers between the ages 3 to 6 years.

151. Nutrition education will be imparted to officials and non-officials. During the Plan period 1,400 persons will be trained. Six thousand one hundred and forty women and youth will be assisted to take up nutrition production activities such as poultry, goat and pig rearing. 2,771 members of associate organisations will be helped for taking up environmental sanitation and income generating programmes.

(b) *Education Department*

152. *Special Nutrition Programme*—Nutrition sector forms an important part of the Minimum Needs Programme, its objectives being the provision of balanced nutrition to children of primary schools through mid-day meals and of supplementary feeding for pre-school children and lactating mothers belonging to economically weaker sections of the society. Under the mid-day meals programme, meals of calories content of about 300 calories and protein content of about 15 grams are provided to children in age group 6-11 for about 20 days in a year. The supplementary nutrition programme covers pre-school children in age group 8-6 and expectant and nursing mothers belonging to weaker sections. Under this programme, supplementary nutrition of about 200 to 300 calories with about 8 to 12 grams of proteins is provided per pre-school child

per day for about 300 days in the year. The provision of expectant and nursing mothers is provided at about 500 calories and about 25 grams of protein again for about 300 days in the year.

153. An outlay of Rs.50 lakhs is proposed for the Sixth Plan. It is proposed to provide nutrition food to .047 lakhs pre-school going children, pregnant and lactating mother in Pauri-Garhwal and Almora districts. This coverage would also be enlarged for which some areas are being identified.

### ANNUAL PLAN 1981-82

#### PLAN OUTLAYS

154. In view of the magnitude of problems and requirements of optimal utilization of potential of hill areas, higher outlays would be needed during 1981-82 for maintaining the present tempo of development activities. An amount of Rs.71.62 crores, including Rs.32.50 crores of special Central Assistance was spent in the year 1979-80. Out of the proposed outlay of Rs.969.45 crores for the Sixth Plan 1980—

85, an outlay of Rs.86.01 crores, including Rs.41.20 crores of special Central Assistance has been provided for 1980-81, against which the anticipated expenditure is Rs.95.83 crores. On the basis of assessment made, the minimum requirement of the outlay for 1981-82 is Rs. 120.00 crores. However, on account of constraints of resources of the State, the Planning Department has earmarked an outlay of Rs.99.00 crores for 1981-82 Plan of hill areas. Out of this total outlay, the special central assistance has been contemplated of the order of 80 per cent which is being pressed by the State Government. Uttar Pradesh hill areas being a problem and sensitive border area, the quantum of special Central assistance as also its pattern needs a parity with neighbouring hill States, especially Himachal Pradesh. Out of the outlay of Rs.99.00 crores for 1981-82, an amount of Rs. 44.92 crores is proposed under the Minimum Needs Programme. The outlay and expenditure for Hill region under major heads of development and for Minimum Needs Programme are given below :

(In Crore Rupees)

Serial no.	Major Head of Development	1980-81*		1981-82		Minimum Needs Programme			
		outlay	Anticipated Expenditure	Proposed outlay	Programme	1980-81 Outlay	Anticipated Expenditure	1981-82 Proposed outlay	
1	2	3	4	5	6	7	8	9	
1	Agriculture and Allied Serv.ces.	18.66	20.75	23.60	1. Elementary Education.	3.96	4.72	4.27	
2	Co-operation ..	0.81	0.81	0.92	2. Adult Education	0.02	0.02	0.28	
3	Water and Power Development.	8.41	8.41	8.77	3. Rural Health	0.60	0.60	1.33	
4	Industry and Mining	2.33	5.62	3.02	4. Rural Electrification.	3.25	3.25	3.57	
5	Transport and Communication.	25.90	28.50	28.50	5. Rural Roads	19.65	19.65	20.68	
6	Social and Community services.	29.84	31.68	34.08	6. Rural water supply	14.60	14.31	14.07	
7	Economic services and others.	0.06	0.06	0.13	7. Housing	0.14	0.14	0.30	
					8. Nutrition	0.10	0.09	0.15	
	Total ..	86.01	95.83	99.00		42.32	42.78	44.65	

155. Out of the total anticipated expenditure of Rs.86.01 crores during 1980-81, an amount of Rs.9.25 crores is likely to be spent in tribal areas of nine blocks. For 1981-82, an outlay of Rs.12.70 crores is earmarked for tribal areas against the total outlay of Rs.99.00 crores. On account of immensity of problems of hills, separate Central Assistance is needed for tribal areas of U. P. hills. The habitants of tribals in hills are isolated and scattered due to the topography and settlement pattern of Hills. It is, therefore, essential that the norms for qualifying Central Assistance for Tribal Sub-Plan areas in hills need be relaxed and modified. Similarly under the Minimum Needs Programme also, the National norms/targets envisaged do not suit the hills as compared to the plains. These norms especially in the rural roads programme need revision as about 92.2 per cent of the villages have population below 500. In view of this, the norm for hill areas for rural roads needs to cover 100 per cent villages having a population of 500 and above and 50 per cent coverage of villages having a population between 250-500.

#### *Need for Higher Outlay*

156. The proposed outlay of Rs.99.00 crores for 1981-82 is hardly sufficient for continuing programmes of 1980-81. The spillover expenditure alone on programmes of roads, irrigation, power, water supply, tourism, buildings of education, health and other departments, non-functional buildings etc. at the end of 1980-81 would be of the order of Rs.95 crores. Besides, the continuing schemes would also require more outlay than this year and no expansion, intensification and new starts for a major thrust in the economy of hills would be possible. It is, therefore, essential that at least an outlay of Rs.120.00 crores for 1981-82 for U. P. hill areas be allotted. For improving the ecological degradation, programmes for soil and water conservation, preservation, management and development of forests on a massive scale are needed. Road construction, drinking water supply, irrigation, power, education, health and housing programmes are required to be accelerated for providing essential basic needs. In order to maintain the present tempo of develop-

ment and the required buoyancy, an additional outlay of Rs.21.00 crores (over and above Rs.99.00 crores proposed) for 1981-82 is required to enable a total size of Rs.120.00 crores. If this outlay is not provided, the core sector programmes will starve for want of funds. The inescapable additional requirements of the core sector programme is given below :

<i>Programme</i>	<i>Amount required</i>	<i>(In lakh rupees)</i>
1. Minor Irrigation	..	60
2. Soil Conservation	..	85
3. Forests	..	90
4. Power	..	250
5. Village and Small Scale Industries		45
6. Roads and Bridges	..	600
7. General Education	..	250
8. Medical and Health	..	155
9. Drinking Water	..	525
10. Non-functional/Non-Plan buildings		40
	Total	2100

157. A brief account of progress and important programmes proposed for 1981-82 for the Hill areas of the State is given in subsequent paragraphs.

#### SECTORAL PROGRAMMES

158. *Agriculture*—Under this programme, stress is being laid on better use and change in cropping pattern, ensuring adequate and timely supply of inputs, viz., improved seed, fertilizers, pesticides and irrigation etc., for increasing agricultural production of the area. Efforts are also being made for diversification of agriculture to horticulture and high value crops of potato, soyabean and sunflower. On this programme the outlay of Rs.44.00 lakhs of 1980-81 is likely to be utilized by the Agriculture Department. For 1981-82, an outlay of Rs.50.00 lakhs has been

proposed. The important physical targets and achievements are given below :

Serial no.	Item	1979-80 Achievement	1980-81		1981-82
			Target	Anticipated Achievement	Proposed Target
1	2	3	4	5	6
1	Production of Foodgrains ('000 tonnes)	980.99	1400.00	1400.00	1485.00
2	Oilseeds ('000 Tonnes)	6.83	26.00	26.00	28.00
3	Distribution of chemical fertilizers ('000 tonnes)				
	(i) Nitrogenous	24.90	31.00	31.00	35.00
	(ii) Phosphatic	7.40	10.00	10.00	10.50
	(iii) Potassic	3.20	5.00	5.00	5.50
	Total	35.50	46.00	46.00	51.00
4	Plant Protection- Total Area Covered ('000 ha.)	613	645	645	740
5	Area under high yielding varieties ('000 ha.)	273.76	280.00	280.00	350.00
6	Soil conservation—Area Treated ('000 ha.)	69.20	76.40	76.40	85.85

159. Cultivators in hills having holding up to 2.00 hectares are being encouraged for intensive cultivation of pulses for which 33 per cent subsidy on the cost of fertilizers for growing pure pulses is provided. It is proposed to cover an area of 4500 hectares during 1981-82 against the target of 3900 of 1980-81 under this programme. For easy coverage of inputs distribution in hills, it is proposed to set up 10 sale points in each block during the Sixth Plan 1980-85, out of which 2 sale points are proposed for 1981-82. In order to encourage consumption of fertilizers by poor farmers in hills, it is proposed to supply fertilizers in small bags of 10 kgs. It is also proposed to set up a Seed Testing and Demonstration Centre at Chimyali Saur in Garhwal hills during 1981-82. Besides, to encourage more use of fertilizers, it is proposed to provide 33 per cent subsidy on the cost of fertilizers to the marginal and small farmers from 1981-82.

160. For marketing and storage facilities of agriculture produce, scientific godowns are being constructed by the State Warehousing Corporation. Against a target of 3700 tonnes capacity to be developed during 1980-81, the target proposed for 1981-82 is 4000 tonnes capacity for

which an outlay of Rs.5 lakhs (State share) is proposed for 1981-82. Krishi Utpadan Mandi Parishad is also developing regulated markets/market yards for which an outlay of Rs.5 lakhs is proposed for 1981-82.

161. *Agriculture Research and Education*—With a view to undertaking comprehensive, problem solving and production oriented research and extension education for scientific and rapid development of agricultural economy of hills, a project of hill campus at Ranichauri (Theri) is being established for which an outlay of Rs.20 lakhs is proposed for 1981-82. Under this programmes, construction of building, provision of water supply, link roads and development of farm is in progress at the main research station. A master plan for land use has been prepared and soil survey, research on vegetation, geology, crop-germ plasm etc. would be intensified in 1981-82. Agriculture diploma training is also continued at two extension training centres of Agriculture Department for which an outlay of Rs.1.00 lakh is proposed for 1981-82.

162. *Horticulture*—High priority has been assigned to develop horticulture in hills. Main emphasis for this programme



during 1981-82 would be (1) increasing area under horticulture crops, (2) developing dry fruit cultivation in remote areas, (3) diversification of horticulture crops and interculture i.e., encouraging floriculture, spices, mushroom and other high value crops, (4) developing storage, processing and marketing facilities to ensure better return to the producers and (5) increasing productivity through better

extension facilities, inputs and incentives, training and technical know-how.

163. Under this programme the outlay of Rs.160.75 lakhs proposed for 1980-81 will be fully utilized and for 1981-82, an outlay of Rs.200.00 lakhs is proposed. The main targets and achievements are given below :

Serial no.	Item	1979-80 Level	1980-81		1981-82
			Target	Anticipated Achievement	Target
1	2	3	4	5	6
1	Area under orchards—additional ('000 ha.) ..	99	6.00	6.00	6.00
2	Area under vegetable- additional ('000 ha.) ..	21	1.00	1.00	1.00
3	Control of pests and diseases— additional ('000 ha.)	29.40*	25.00	25.00	25.00
4	Rejuvenation of old orchards—additional ('000 ha)	6.70*	6.00	6.00	6.00
5	Area under Potato— additional ('000 ha.) ..	27	1.00	1.00	1.00
6	Production of fruits (lakh Tonnes) ..	2.00	2.20	2.20	2.50
7	Production of Potatos (lakh Tonnes) ..	2.30	2.50	2.50	2.60
8	Production of vegetables (lakh Tonnes) ..	0.85	0.95	0.95	1.50

\*1979-80 achievement.

For assisting and rendering technical guidance to growers in horticulture operations, at present there are 146 horticultural cum-plant protection mobile teams in operation. During 1980-81, 5 additional teams are being set up and a target of 5 such teams is proposed for 1981-82. It is proposed to distribute Rs.65 lakhs long-term horticulture loan and Rs.3 lakhs for mushroom cultivation during 1981-82. A new scheme for marketing intelligence has been taken up during 1980-81. Besides the continuing schemes, the following new schemes are proposed for 1981-82: (1) Establishment of collection-cum-grading-cum-packing centres, (2) Construction of transshipment centres, (3) Hotel management training centre, (4)

Establishment of a horticulture training centre, (5) Development of olive and Almond cultivation, (6) Scheme for the development of mushroom cultivation through intensification of research and extension facilities, and (7) Construction of a Mushroom house at Chaubatia.

163. *Minor Irrigation*—By the end of 1979-80, total irrigation potential of 1.71 lakh hectares from minor irrigation was created in the Hill region. Emphasis would be given to increase minor irrigation facilities during 1981-82 through private as well as State Minor Irrigation Works. The continuing/spill over works of State Minor Irrigation will be expedited to pay off quicker benefits. The outlays/expendi-

ture and physical targets/achievements are given below :

Year	Financial (lakh Rs.)			Physical-Irrigation Potential (Hect.)		
	Private M.I works	State M.I. works	Total	Private M.I. works	State M.I. works	Total
1	2	3	4	5	6	7
1. 1979-80—						
Expenditure/Achievement	100.00	448.27	548.27	1000	4290	5290
2. 1980-81—						
(a) Outlay/Target .. ..	108.00	495.00	603.00	12000	7000	19000
(b) Anticipated Expenditure/Achievement.	108.00	614.00	722.00	12000	7100	19100
3. 1981-82—						
Outlay/Target .. ..	125.00	597.00	722.00	11000	8900	19900

165. *Soil Conservation*—During 1981-82, soil and water conservation programme will be intensified on the basis of integrated water sheds. It is proposed to strengthen soil conservation units and training centres in hills, undertake soil/land use Survey and augmentation and maintenance of soil conservation works of Agriculture Department during 1981-82. For treating predominantly agricultural water sheds in the catchment of Ramganga, a

centrally sponsored scheme is also proposed by the Agriculture Department. The soil and water conservation measures by the Forest Department would also be intensified. The multi-disciplinary projects of integrated water sheds would be implemented for ecological regeneration.

166. The financial outlays of soil and water conservation programme proposed for 1981-82 are given below :—

Programmes/Department	(Lakh Rupees)			
	1979-80 Expenditure	1980-81 Outlay	1981-82 Anticipated Expenditure	1981-82 proposed outlay
1	2	3	4	5
<i>Soil and Water Conservation</i>				
1. Agriculture Department .. ..	82.61	140.00	140.00	165.00
2. <i>Forest Department</i>				
(1) Civil and Soyam forest .. ..	157.00	190.00	190.00	215.00
(2) <i>Centrally sponsored scheme (State share)</i>				
(i) Ram Ganga Project .. ..	22.50	25.00	25.00	30.00
(ii) Himalayan Region Project .. ..	52.70	70.00	70.00	105.00
Total-2 .. ..	232.20	285.00	285.00	350.00
Total (1 and 2) .. ..	314.81	425.00	425.00	515.00

167. The physical targets proposed under soil and water conservation programme are given below :

Serial no.	Item/Department	1979-80 Achievement	1980-81		1981-82 Target
			Target	Anticipated achievement	
1	2	3	4	5	6
<i>(a) Agricultural Department</i>					
1	Area Treated ('000 Hect.) .. .. .	5.16	7.00	7.20	9.45
<i>(b) Forest Department</i>					
1	Civil and Soyam Forest—				
	(i) Afforestation and Pasture Development .. .. .	8.04	7.50	7.50	7.50
	(ii) Treatment of Agricultural Land .. .. .	0.05	0.05	0.05	..
2	Afforestation and Pasture Development ('000 Hect.)				
	(i) In Ram Ganga Valley .. .. .	3.19	2.00	2.00	2.00
	(ii) In Himalayan Region .. .. .	7.36	7.00	7.00	19.00
3	Treatment of Agricultural land ('000 Hect.) .. .. .				
	(i) In Ram Ganga Valley .. .. .	0.13	0.30	0.30	0.05
	(ii) In Himalayan Region .. .. .	0.04	0.20	0.20	0.15
4	Land use and Capability survey ('000 Hect.) .. .. .	5.31	5.00	5.00	5.00

168. *Area Development*—With a view to increase productive capacity of small farmers, marginal farmers and landless labourers, etc. as also increasing the employment opportunities, area development

programmes of SFDA, HADA, IRD and local level planning would be intensified for the benefit of more target population. The outlays under this programme for 1981-82 are given below :—

(Rupees in lakhs)

Programme	1979-80 Expenditure	1980-81		1981-82 Outlay
		Outlay	Anticipated Expenditure	
1	2	3	4	5
1. Integrated Area Development on Micro-catchment basis	..	..	..	65.00
2. Hill Area Development Agencies (HADA/IGADA) ..	62.37	80.00	80.00	100.00
3. S.F.D.A. .. .. .	14.20	9.75	9.75	16.00
4. L.R.D. .. .. .	17.00	20.00	200.00	25.00
5. Local level Planning .. .. .	91.41	65.00	65.00	100.00
6. PRAD .. .. .	..	..	..	25.00
<b>Total ..</b>	<b>184.98</b>	<b>174.75</b>	<b>354.75</b>	<b>331.00</b>

169. *Animal Husbandry*—Main thrust during 1980-81 under this programme would be for intensive cattle, sheep and poultry development with exotic/improv-

ed breeding, proper health cover and fodder and pasture support. The outlay and expenditure under this programme is given below :—

(In lakh Rs.)

Programme	1979-80 Expenditure	1980-81		1981-82 Outlay
		Outlay	Anticipated Expenditure	
1	2	3	4	5
Animal Husbandry .. .. .	73.47	109.00	126.81	135.00

170. The establishment of an exotic cattle breeding farm is in progress which would be stocked with 60 exotic and 60 indigenous cattle during 1980-81. The feed and fodder production would be taken up during 1981-82 for which land is developed in 1980-81. At present there are 52 frozen semen centres in hills which will be increased to 135 at the end of 1981-82. The liquid Nitrogen Plants at Srinagar and Rishikesh would be installed in 1979-80 and its building construction would be completed in 1981-82.

171. The subsidy on rearing of cross bred heifers would also be continued. 45 Natural Breeding Centres and 7 Sheep and Wool extension centres are being established in 1980-81 and during 1981-82, it is proposed to establish 7 more sheep and wool extension centres. Construction of building for sheep farm at Makkū will be completed in 1979-80 and exotic sheep would be stocked in 1981-82. Out of 13 existing sheep farms, 4 farms are proposed to be expanded and strengthen in 1981-82 with land development, buildings and irrigation facilities. For catering to the needs of health cover and breeding facilities for migratory sheep, it is proposed to establish 2 mobile units in 1980-81 and 2 such units in 1981-82. A pashmina goat unit is also proposed to be established in 1981-82. A wool grading and marketing centre in Tehri is being established in 1980-81 will continue in 1981-82. Three new poultry farms are being established in 1980-81 and two existing farms would be expanded during 1981-82.

172. *Dairying*—With a view to providing self-employment and supplementing the income of people, especially weaker sections of society, it is proposed to revitalize and strengthen primary milk co-operatives and existing milk plants in 1981-82. Provision for education and training to members and development of dairying activities in compact areas through better inputs, extension services and financial assistance has also made for 1981-82. An outlay of Rs.15 lakhs fixed for 1980-81 for this programme is likely to be fully utilized and an outlay of Rs.20.00 lakhs is proposed for 1981-82.

173. *Forest*—Forestry programme aims at intensive development and scientific management and conservation of forests for economic exploitation of natural resources and arresting ecological degradation as also for raising of forest produce for sustaining both primary and secondary sectors of the economy and increasing employment opportunities to weaker sections of the society.

174. The forestry programmes are proposed to be intensified during 1981-82. Besides, the continuing programmes, the following new schemes : (1) wild life conservation, (2) establishment of high altitude zoo, (3) intensive management of sanctuaries and (4) survey and management of minor forest produce will also be taken up.

175. An outlay of Rs.225 lakhs proposed for 1980-81 will be fully utilized and for 1981-82, an outlay of Rs.275 lakhs is proposed for forestry programme.

The important physical targets are given below :

Serial no.	Item	1980-81		1981-82 Target		
		Target	Anticipated Achievement			
1	2	3	4	5		
1	Plantation of Economic species ('000 ha)	..	..	3.6	3.6	3.6
2	Plantation of fast growing species ('000 ha)	..	..	1.6	1.6	1.6
3	Construction of new roads (Kms)	..	..	10	10	15
4	Renovation of roads (,,)	..	..	79	79	100

176. *Co-operation*—With a view to strengthening the co-operative structure in the hill areas, emphasis would be laid on intensifying the credit and banking, co-operative marketing and processing and storage facilities during 1981-82 plan.

The outlay of Rs.80.00 lakhs proposed for 1980-81 is likely to be utilized and an outlay of Rs.90 lakhs is proposed for 1981-82. The important physical targets proposed for 1981-82 are given below :

Item	1980-81		1981-82 Target			
	Target	Anticipated Achievement				
1	2	3	4			
1. <i>Co-operative loaning (Crore Rs.)</i>						
(a) Short Term Loan	..	..	..	12.91	12.91	13.50
(b) Medium Term Loan	..	..	..	2.65	2.65	2.85
(c) Long Term Loan	..	..	..	3.00	3.00	3.50
2. <i>Storage ('000 Tonnes)</i>						
(a) Co-operatives	..	..	..	7.50	7.50	3.75
(b) State warehousing corporation	..	..	..	8.54	8.54	9.34
3. Retail sale of fertilizer (crore Rs.)	..	..	..	5.39	5.39	6.69
4. <i>Retail sale of consumer goods (crore Rs.)</i>						
(a) In rural areas	..	..	..	4.26	4.26	4.50
(b) In urban areas	..	..	..	3.75	3.75	4.00
5. Rural godowns (No.)	..	..	..	150	150	75

177. *Major and Medium Irrigation*—Under this programme, continuing schemes of Kosi Valley irrigation, Ram Ganga Valley irrigation and Haripura Reservoir were completed in 1979-80 and

the remaining continuing schemes, viz., Khatima and Laster Valley irrigation schemes will be completed in 1981-82. On these continuing schemes, an expenditure of Rs.64.72 lakhs was incurred in 1979-80

and during 1980-81, an expenditure of Rs.71 lakhs is anticipated. For 1981-82, an outlay of Rs.2 lakhs is proposed. By the end of 1979-80, total irrigation potential of 56169 hectares was created from Major and Medium irrigation works. During 1980-81, an additional irrigation potential of 1,000 hectares is likely to be created from above works and for 1981-82, a target of 6020 hectares of additional irrigation potential is proposed.

178. *Power*—Efforts would be made to

accelerate the power development programme in hill areas during 1981-82, especially rural electrification and micro-generation. The outlay of Rs.710 lakhs (including 510 lakhs under MNP) for 1980-81 is likely to be fully utilized and an outlay of Rs.800 lakhs (including 530 lakhs under MNP) is proposed for 1981-82 for the development of power in the hill areas. The physical targets proposed for 1981-82 are given below :

Year	Micro-generation— Installed capacity (KW)	Transmi- sion and Distribu- tion cons- truction of 33kV lines (Ckt. km.)	Rural Electrification (No.)			
			Villages	Harijan Basties	PTW/ Pump sets	
1	2	3	4	5	6	
1980-81 :						
1. Target	.. .. .	300	144	587	587	270
2. Anticipated Achievement	.. .. .	300	144	587	587	270
1981-82 :						
Proposed Target	.. .. .	..	150	757	757	350

179. *Industry and Mining*—Concerted efforts will be made for the development of resource based agro, forest, mineral and wool based) industries, particularly small and cottage industries, in the hill areas during 1981-82. Establishment/

promotion of industries would also be augmented through the various State Corporations.

The outlay proposed for 1981-82 for industry and mineral development is given below :—

Rupees in lakhs)

Programme/Sector	1980-81		1981-82
	Outlay	Anticipated expenditure	Outlay proposed
1	2	3	4
1. Large and Medium industries (investment in public under takings)	100.00	100.00	125.00
2. Village and small industries .. .. .	90.00	172.29	120.00
3. Geology and Mining .. .. .	43.00	290.00	57.00
Total—Industries and Minerals .. .. .	233.00	562.29	302.00

180. *Large and Medium Industries*—Various State Corporations, *viz.* Kumaon and Garhwal Development Corporations and its subsidiaries (Scheduled Tribes Development Corporations), U. P., HORTICO, State Industrial Development Corporation, State Mineral Development Corporation, State Cement Corporation and State Electronics Corporation etc. are being provided share capital and loan by the State for promoting/establishing resource based industries exclusively in the hill areas for which an outlay of Rs.125 lakhs is proposed for 1981-82.

181. Hill Development Corporations, Garhwal and Kumaon are undertaking promotional as well as commercial activities *viz.*, establishing industries promoting tourism by conducting package tours and construction of rest houses, tent colonies, marketing of fruits and handling cooking gas agencies, etc. Besides the existing projects and activities, these corporations are exploring the possibility of establishing some new projects/units in 1981-82, *viz.* Paper Pulp unit, G. I. Wire Plant, Raw material Depot, Coal Depot and a Rope way and Binocular manufacturing unit, Stone Masonary Block Unit, Flash Door Factory. Kumaon and Garhwal Scheduled Tribes Development Corporations will augment its programmes of various production and training centres, sale centres and raw material depots etc. for helping and encouraging tribals. ,

182. U. P. State Industrial Development Corporation proposes to expand the capacity of existing watch assembling unit "U. P. Digitals Ltd." and set up another unit in Garhwal Region.

183. State Cement Corporation has proposed setting up of 2 Medium Cement Plants, 5 Mini Cement Plants during the Sixth Plan, out of which establishment of Pithoragarh Cement Plant and the two Mini Cement Plants is likely to be started in 1981-82.

184. *Small scale industries*—For the development of Small Scale Industries, the outlay of Rs.90 lakhs for 1980-81 is likely to be utilized fully and for 1981-82, an outlay of Rs.120.00 lakhs is proposed.

Efforts would be made during 1981-82 to promote Small Scale and Cottage Industries by streamlining various measures, *viz.*, strengthening the existing training-*cum*-production centres, availability of raw material, extending training facilities in modern techniques and skills in various crafts, ensuring marketing and credit facilities and package of programmes through DICs and Growth Centres etc. The traditional handicrafts, handloom and sericulture and tusser programmes would be expanded and streamlined. Besides, better capacity utilization of existing training and production centres, new centres with entrepreneurial collaboration are also proposed in 1981-82 for intensive involvement of the people in industries. Khadi and Village Industries Board will also be encouraging wool spinning by hand.

185. Land for three Industrial estates has been acquired and development/construction of sheds is being taken up. Besides, land for two more industrial estates is proposed to be acquired during 1981-82. Industrial estate at Kashipur will be expanded and strengthened. It is proposed to bring 20 looms into co-operative fold in 1981-82 and organise 15 industrial co-operatives for encouraging local artisans. A scheme of entrepreneurial Practical Training in the Trades of carpet weaving and chemical industries is proposed for 1981-82. Under this scheme, local artisans/craftsmen are proposed to be sent for practical training at renowned centres to make available necessary know-how and expertise. Expansion of Wool Development scheme is also proposed for 1981-82. Under this scheme wool carding and dyeing plants would be installed and idle plants would be reorganised. A scheme for "instructors Training of Master Craftsman Centres" is proposed. For sericulture and tusser development, an Oak Tusser Development Project is being established in 1980-81, which will be augmented during 1981-82. Besides, Chawki Rearing farms and Demonstration centres are also proposed to be established.

186. *Mineral Development*—In the hills areas, 15 investigation programmes are

being carried out. These include 5 detailed level surveys on limestone, marble, magnesite and base metals, while the remaining are either preliminary investigations or regional geo-chemical surveys. Regional investigation including geo-chemical surveys and studies of heavy minerals in the stream sediments are also being carried out. The survey schemes have resulted in the outlining of mineral reserves of tungston and gold in Almora and Pauri-Garhwal districts respectively. Besides, the intensive survey and investigation of continuing schemes, some new schemes would also be taken up in 1981-82 for which an outlay of Rs. 42 lakhs is proposed.

187. State Mineral Development Corporation is establishing two projects in hills, viz. (1) Lambidhar Limestone Mining Project, Mussoorie and (2) Calcium Carbide Project, Dehradun. The work on these projects will be expedited in 1981-82. An outlay of Rs.15 lakhs is proposed for 1981-82 to provide share capital to this corporation.

188. *Roads*—Development of roads in the hill areas is required to be treated in the core sector of the economy as roads in hills are supposed to be a condition precedent for developing primary, secondary and tertiary sectors of the economy as also opening up of the remote and inaccessible areas. A high priority has, therefore, been assigned for the development of roads and bridges during 1981-82 Plan.

189. The spill-over works at the end of 1980-81 are estimated to be of the order of about Rs.49 crores. Efforts would, therefore, be made to expedite spill-over works during 1981-82 and some new works of only specific requirements including rural roads under RMNP, would be taken up. An outlay of Rs.27.00 crores (Rs.20.68 crores under RMNP) is proposed for 1981-82 as against the outlay of Rs.25.00 crores (Rs.19.65 crores under RMNP) for the current year 1980-81. The physical targets proposed for 1981-82 are : (1) new roads 800 km., (2) reconstruction of roads 250 and (3) 30 bridges.

190. *Tourism*—Emphasis would be laid on exploring the possibilities of tourism

development on co-ordinated and commercial lines. The main emphasis would be to provide good accommodation, especially for middle and low income groups, facilities of transport, hotels and catering and way-side amenities to cater to the needs of tourists. During the current year 1980-81, the State Government has taken up a scheme for encouraging local people to develop tourist industry by way of financial incentives (loan/subsidy) for construction of tourist cottages, hotels restaurants and transport facilities. Provision has also been made for publicity, fairs and festivals, mountaineering and trekking etc. during 1980-81.

191. An outlay of Rs.150 lakhs has been proposed for 1981-82 as against the outlay of Rs.90 lakhs during the current year. Priority would be given to expedite spill-over works construction and new tourist resorts along with additional tourists accommodation would also be developed. It is proposed to take up new construction of tourist banglows/rest house at Chakrata, Gwaldam, Rudraprayag, Pithoragrth, Dhakuri, Chandrabadni, Hari-ki-Dun, Mornaula, Gauchar, Berinag, Lansdowne, Manila, Yamunotri, Joshi-math, Kedarnath, a restaurant at Giri Sarowar and development of Malti Deer Park during 1981-82. Kumaon and Garhwal Development Corporations would also intensify their commercial activities of package tours, etc. in 1981-82.

192. *Education*—Major efforts for the development of education would be for universalization of elementary education and prorty for adult education during 1981-82 Plan of hill areas. Besides the above, emphasis would also be laid on the consolidation and qualitative improvement of secondary and higher education, provision of buildings, equipments etc. for the institutions, and incentives for the children of weaker sections.

193. An outlay of (Rs.3.98 crores for RMNP) has been fixed for the current year 1980-81, against which the anticipated expenditure during 1980-81 is Rs.9.49 crores (Rs.4.74 crores under RMNP). For 1981-82, an outlay of Rs.10.00 crores



(Rs.4.55 crores for RMNP) has been proposed.

194. During 1980-81, 136 primary and 46 middle schools are being opened in rural areas and six primary schools in urban areas. Besides this, 56 Government model schools consisting of Classes I—VIII are also being opened in Tehri-Garhwal and three border districts. During 1981-82 it is proposed to open 110 primary and 38 middle schools in rural areas and 10 primary schools in urban areas. All these schools will be opened with simultaneous provision for construction of their buildings also. The percentage of enrolment in the age-group 6—11 is expected to rise from 88 (103 per cent boys and 72 per cent girls) in 1980-81 to 93 (107 per cent boys and 79 per cent girls) in 1981-82. It is expected that the percentage of school going children in the age-group 11—14 would also rise from 54 (76 per cent boys and 31 per cent girls) in 1980-81 to 60 (80 per cent boys and 39 per cent girls) in 1981-82. For 1981-82, provision has also been made for the construction of 80 primary and 20 middle school buildings, facilities of teaching of science and for free supply of text-books. It is proposed to give uniforms and scholarships to the children of weaker sections.

195. In accordance with the recommendations of the education commission the programme of school complex will be started in some selected districts. Each junior high school will be integrally related to the primary schools in its neighbourhood so as to form one 'Complex' of educational facilities.

196. It is proposed to launch a programme of population education in the hill districts from 1981-82 as a part of the project sponsored by the Government of India and the NCERT with UNESCO support. The expenditure on the staff will be borne by the State Government. During 1981-82 necessary provision for the establishment of population education cell at the regional level has also been made.

197. For the expansion of secondary education 25 new Government high schools are being opened and 25 Government high schools are being upgraded to inter-standard during 1980-81. In 1981-82 it is proposed to open three Government high schools in

urban colonies, where there is no facility for secondary education, three higher secondary schools in other unserved areas on cent percent grant basis. Five Government high schools are proposed to be upgraded to inter-standard. For accommodating the large influx of students, necessary provision has also been made for opening additional sections and subjects in existing Government higher secondary schools. Provision has also been made for the construction of school buildings, science laboratories, purchase of science equipments, furniture, etc. for Government as well as non-Government secondary schools.

198. During 1981-82 it is proposed to convert the present four B. T. C. units into full fledged Normal Schools and to start 10 extension services and training centres for teachers. Under adult education programme, a project of 100 centres is being started in one district under State Plan during 1980-81 and it is proposed to start one project each of 100 centres in the remaining seven districts in 1981-82.

199. *Technical Education*—Efforts would be made to strengthen the existing polytechnics through diversification of courses and better capacity utilization, viz., provision of necessary equipments, qualified staff, integration of better management, techniques and production skills and construction of buildings of the institutions in 1981-82.

200. During 1980-81, a scheme for remedial courses for weaker students has been included for reducing wastage and improving quality of training. Audio-visual aides and reprographic services and short-term courses will also be provided. It is also proposed to undertake intensive work-cum-training and product development programme in the polytechnics of hill areas.

200. Under this programme, an outlay of Rs.60.00 lakhs is proposed for 1981-82 against the outlay of Rs.50 lakhs during the current year 1980-81.

201. *Craftsmen training*—Under this programme, an outlay of Rs.35 lakhs is proposed for this programme in the current year 1980-81 which is likely to be utilized fully and an outlay of Rs.40 lakhs is proposed for 1981-82.

203. During the year 1980-81, efforts are being made to provide equipment, land for buildings of I. T. Is and diversification of some trades of the present institutions. One hundred and twelve additional seats of useful trades are also being provided in 1980-81. It is also proposed to open five branches of I. T. Is in remote areas in 1981-82 to meet the demands of local people.

204. *Medical and Health*—Efforts would be made to provide medical and health facilities to cater to the special problems of the area and mitigate the

dearth of essential requirements, especially in the unserved areas during 1981-82. Programmes under minimum needs and tribal areas are also proposed to be streamlined.

205. During the current year 1980-81, an outlay of Rs.202 lakhs (Rs.60.00 lakhs under RMNP) has been proposed for the development of health facilities in Hill areas which is likely to be utilized fully. For 1981-82, an outlay of Rs.260 lakhs (Rs.133.00 lakhs under RMNP) has been proposed. The additional physical achievements and targets proposed for 1981-82 are given below :

Serial no.	Item	1979-80 Achievement	1980-81		1980-85 Target
			Target	Anticipated Achievement	
1	2	3	4	5	6
1	Establishment of New Health centres				
	(a) PHCs. (No.) .. .. .	2	6	10	..
	(b) Sub-Centre (No.) .. .. .	43	279	279	..
2	Construction of Health Centres				
	(a) PHCs (No.) .. .. .	1	8	8	3
	(b) Sub-Centres (No.) .. .. .	14	30	30	..
3	Up-gradation of PHCs				
	(a) Construction (No.) .. .. .	4	6	6	..
	(b) Establishment (No.) .. .. .	1	..	..	..
4	Construction of Nursing Homes (No.) .. .. .	2	2	2	2
5	Establishment of new rural dispensaries (No-)				
	(a) Allopathic (No.) .. .. .	60	50	50	..
	(b) Ayurvedic (No.) .. .. .	19	..	..	..
	(c) Homeopathic (No.) .. .. .	5	5	5	..
6	Establishment of women Hospitals (No.) .. .. .	7	5	5	..
7	Extension of full Nursing scheme (No.) .. .. .	2	2	2	..
8	Establishment of Dental clinics (No.) .. .. .	4	4	4	..

206. Besides the above, provision for construction of 6 male and 2 female dispensaries and construction of 2 mortuary and for one ambulance has also been made during 1981-82. Specialised facilities and modern equipments will also be provided during 1981-82.

207. In fact minimal additional targets required for various facilities in 1981-82 could not be included due to constraints of resources as the meagre outlay provided for 1981-82, is only sufficient for continuing schemes and works. For main-

taining the present tempo of activities, an additional amount of at least Rs.155 lakhs is required for inescapable additional physical target in 1981-82.

208. *Water Supply*—A high priority has been assigned to rural drinking water supply programme as about 2835 scarcity villages would be remaining to be covered after 1980-81. An outlay of Rs.17.35 crores (Rs.16.75 crores for Jal Nigam and 0.60 crores for Rural Development Department schemes), has been proposed for 1981-82. The financial and physical targets are given below :

(a) JAL NIGAM

Programme	Financial (Rs. Crores)			Item	Physical			
	1980-81		1981-82 outlay		1980-81		1981-82 Target	
	Outlay	Anticipated Expenditure			Target	Anticipated Achievement		
1	2	3	4	5	6	7	8	
(1) <i>I.D.A.</i>				(A) <i>Rural Water Supply</i>				
(a) Rural	..	1.00	1.00	2.28	1. Total Village covered (No.)	750	750	800
(b) Urban	..	..	..	..	2. Scarcity villages (No)	560	560	530
(2) <i>Non-I.D.A.</i>				(B) <i>Urban.</i>				
(a) Rural	..	13.20	14.70	12.72	(i) Towns covered ..	..	..	..
(b) Urban	..	1.00	1.00	1.75	(ii) Towns covered under augmentation scheme.	2	2	2
Total (1+2)	..	15.20	16.70	16.75				
(3) RMNP	..	14.60	14.90	13.47	RMNP (villages covered)	680	680	600

(b) RURAL DEVELOPMENT DEPARTMENT

209. The financial and physical targets for providing diggies in harijan basties is

given below :

Financial (Lakh Rs.)			Physical—Construction of Diggies (No.)		
1980-81		1981-82	1980-81		1981-82
Outlay	Anticipated Expenditure	Target	Outlay	Anticipated achievement	Target
1	2	3	4	5	6
50.00	21.00	6.00	208	208	250

\*Tentative/being verified

210. *Labour Weelfare*—On the labour welfare programmes, an amount of Rs.20.45 lakhs was spent in 1979-80 and Rs.14.53 lakhs is likely to be spent during 1980-81. An outlay of Rs.20.00 lakh is proposed for 1981-82.

211. Under the rehabilitation of bonded labour programmes, an amount of Rs.12.53 lakhs (excluding matching Central share of Rs.10.00 lakhs) is likely to be spent during 1980-81 and an outlay of Rs.17.50 lakh (excluding matching share of Rs. 15.00 lakhs) is proposed for 1981-82.

212. During 1981-82 labour welfare programme of 1980-81 will be continued

and bonded labour scheme is proposed to be streamlined on more secure and functional basis. A target of rehabilitating 775 bonded labourers is proposed for 1981-82 against the target of 500 during the current year 1980-81.

213. *Welfare of Backward Classes*—Under this programme, an amount of Rs.74.97 lakhs was spent during 1979-80 on the continuing programmes, viz., Education, Economic Development and Health, Housing and other Schemes. An expenditure of Rs.75.00 lakhs is estimated during 1980-81. An outlay of Rs.90.00 lakhs has been proposed for 1981-82. The programmewise details of the outlay proposed for 1981-82 are as under :

(Ropees in lakhs)

Group/Programme	Education	Economic Development	Health/Housing	Total
1. Scheduled castes .. .. .	21.50	7.00	9.00	37.50
2. Scheduled Tribes .. .. .	10.45	28.50	11.00	49.95
3. Other Backward Classes .. .. .	2.55	..	..	2.55
Total	34.50	35.50	20.00	90.00

During 1980-81, the new schemes proposed for Sixth Plan would also be taken up for socio-economic uplift of weaker communities.

214. *Social Welfare*—On the social welfare programme, a sum of Rs.10.12 lakhs was spent in 1979-80 and the outlay of Rs.15.00 lakhs for 1980-81 is likely to be utilized fully. For 1981-82, an outlay of Rs.20.00 lakhs is proposed.

215. During 1981-82, weightage would be given on the curative aspects of social welfare programme. Besides the con-

tinuing programmes, one Rehabilitation Centre for handicapped persons, one After Care Home for destitute women with residential facilities for women and their daughters and one Protection Homes for women are proposed to be established during 1981-82. In these centres, suitable training in various crafts would be provided.

216. *Nutrition*—Nutrition programme is being implemented by the Education Department and Rural Development Department. The financial and physical

targets proposed for 1981-82 under this programme are given below :

Programme	Financial (Lakhs Rs.)			Item	Physical		
	1980-81		1981-82 outlay		1980-81		1981-82 Target
	outlay	Anticipated Expenditure			Target	Anticipated Achievement	
1	2	3	4	5	6	7	8
<i>Special Nutrition.</i>							
(a) Education Department	4.00	4.00	5.00	1. (a) Beneficiaries(lakhs)	0.05	0.05	0.05
(b) Rural Development Department	6.00	5.00	10.00	(b) Beneficiaries ( ,,)	0.30	0.30	0.47
Total ..	10.00	9.00	15.00	2. (i) Training of persons. ('000)	1.20	1.20	1.40
2. <i>Applied Nutrition.</i>				(ii) Personstaking up other activities ('000)	8.00	8.00	9.00
Rural Development Department	9.00	9.00	10.00				
Total (1+2) ..	19.00	18.00	25.00				

ANNEXURE  
INTRA-STATE VARIATION

District/Region	In-habited villages (No.)	Percentage of population (1979)	Density of population per sq. km. (1979)	Percentage of urban population to total population (1971)	Literacy percentage (1971)	Reporting area '000ha. (1977-78)	Net area sown '000ha. (1977-78)	Percentage of small and marginal holdings to total holdings (1976-77)	Percentage of area under marginal and small holdings to total area under holdings (1976-77)	Percentage of unemployed and underemployed to total labour force (1978)
1	2	3	4	5	6	7	8	9	10	11
1. Agra	1182	2.70	571	36.60	27.97	482.6	354.9	74.35	33.26	7.53
2. Aligarh	1717	2.39	485	17.85	24.89	503.3	384.4	72.24	31.77	7.00
3. Bareilly	1926	2.02	501	22.25	17.82	407.4	332.8	84.11	47.29	7.29
4. Bijnor	2097	1.75	367	19.12	20.17	492.3	344.0	73.62	29.62	6.17
5. Badaun	1814	1.82	360	9.36	12.66	521.7	402.3	84.98	48.80	6.37
6. Bulandshahr	1537	2.12	498	13.21	21.92	437.1	332.8	77.34	37.08	6.59
7. Etah	1524	1.79	410	9.80	21.69	442.4	302.8	86.34	51.67	5.98
8. Etawah	1477	1.67	393	9.81	28.86	443.4	294.0	85.29	50.42	6.70
9. Farrukhabad	1626	1.77	414	10.98	25.11	431.3	288.9	88.95	55.84	6.53
10. Mainpuri	1386	1.66	398	8.44	24.24	434.7	279.5	87.51	53.56	6.31
11. Mathura	886	1.46	393	16.51	24.83	377.8	302.8	65.11	25.73	6.82
12. Meerut	1503	2.48	681	24.27	28.14	393.3	311.0	77.34	37.08	6.24
13. Ghaziabad	..	1.66	608	*	*	260.1	191.4	*	*	..
14. Moradabad	2461	2.81	682	23.76	17.13	594.6	478.2	79.45	40.55	6.39
15. Muzaffarnagar	927	2.10	405	13.87	22.64	419.4	331.3	75.47	31.19	5.85
16. Pilibhit	1156	0.86	251	13.70	16.73	356.4	215.6	82.17	44.12	6.58
17. Rampur	1092	1.07	462	19.53	12.90	236.4	186.8	83.45	46.79	6.41
18. Saharanpur	1688	2.44	450	23.50	23.41	548.4	379.6	73.50	35.15	6.23
19. Shahjahanpur	2088	1.40	311	15.24	17.09	458.4	336.5	85.48	46.48	6.58
Western Region	28087	35.97	447	18.20	22.31	8241.0	6049.6	80.77	41.10	6.53
20. Bara Banki	2049	1.80	415	5.75	14.25	449.5	309.3	90.33	59.23	5.34
21. Fatehpur	1352	1.44	352	5.63	20.90	427.6	297.1	82.67	41.65	6.38
22. Hardoi	1876	2.06	350	7.89	19.25	601.2	421.9	86.43	51.31	5.23
23. Kanpur	1895	3.53	589	42.79	36.63	620.3	430.3	84.79	48.15	6.67
24. Kheri	1671	1.66	220	6.19	14.63	794.5	456.3	74.55	48.08	5.45

\*included under Meerut

## IN UTTAR PRADESH

Percentage of workers (1971)		Gross value of Agr. output per ha. of net area sown in Rs. (1976-77)	Gross value of Agr. output per capita (rural) Rs. (1976-77)	Intensity of cropping (1977-78)	Per capita consumption of electricity (KWH) (1977-78)	Per ha. consumption of electricity in Agr. (KWH) (1977-78)	No. of electrified private pump-sets/ tube-wells (June 1980)	Per ha. consumption of fertilizers in kg. (1977-78)	Value of Agricultural produce per Agricultural worker in Rs. (1976-77)
engaged in secondary sector	engaged in tertiary sector	14	15	16	17	18	19	20	21
18.7	28.6	2710	586	126.82	83.6	108.6	5904	34.5	4251
11.3	20.1	3095	633	147.74	90.5	123.1	12882	36.8	3074
8.5	17.6	3118	672	141.68	70.4	61.0	3391	37.9	2601
14.1	15.7	3257	802	126.79	100.5	220.1	13316	44.8	3824
3.7	7.7	2530	630	129.25	40.6	99.1	7722	34.4	2226
9.2	18.3	3497	657	152.58	86.2	249.7	24185	58.5	2961
5.6	11.8	2820	646	145.61	34.3	93.3	5477	32.9	2335
5.6	12.7	2334	468	134.73	27.1	56.4	3185	30.6	2138
7.0	12.2	3184	573	137.08	58.2	167.5	9282	50.0	2402
5.7	12.0	3076	559	143.11	35.2	73.8	5654	42.3	2507
8.7	21.7	2404	611	128.13	42.7	61.0	5921	29.6	3004
18.4	26.9	4876	838	148.59	127.1	322.4	30173	112.2	4609
*	*	3973	629	153.88	293.7	122.6	2511	43.8	*
10.6	15.8	3220	744	133.50	62.9	136.4	14123	41.4	2967
11.2	17.2	5886	1011	144.93	108.9	249.8	18507	69.8	4806
5.7	11.3	3364	980	151.17	41.3	33.1	3212	34.6	3660
8.7	13.8	3528	771	152.05	50.3	81.7	2605	50.8	3083
12.1	24.0	4113	865	148.18	111.4	111.7	10168	62.2	4048
5.2	11.6	2889	847	132.38	33.7	34.8	3736	38.8	2830
10.3	17.7	3314	701	139.97	82.3	135.8	181954	47.1	3117
5.9	6.7	2941	547	136.40	29.1	50.6	4532	48.4	1858
4.9	8.4	2410	532	126.94	25.5	73.8	6661	18.5	1896
3.8	7.5	2426	553	127.46	14.6	19.9	2455	21.3	2027
18.1	30.3	2825	636	125.45	240.6	48.7	4518	26.5	2719
3.4	7.7	2513	756	129.77	34.8	26.1	4096	26.6	2641

\*included under Meerut

ANNEXURE  
INTRA-STATE VARIATIONS

Disirict/Region	In-habited villages (No.)	Percentage of population (1979)	Density of population per sq. km. (1979)	Percentage of urban population to total population (1971)	Literacy percentage (1971)	Reporting area '000ha. (1977-78)	Net area sown '000ha. (1977-78)	Percentage of small and marginal holdings to total holdings (1976-77)	Percentage of area under small and marginal holdings to total area under labour (1976-77)	Percentage of unemployed and employed to total labour force (1978)
1	2	3	4	5	6	7	8	9	10	11
25. Lucknow ..	907	1.85	746	50.87	33.97	253.2	146.9	87.92	61.53	6.16
26. Rae Bareli	1749	1.65	366	3.38	18.33	454.1	285.1	90.75	61.94	6.38
27. Sitapur ..	2329	2.09	372	7.54	16.45	570.7	414.6	87.45	54.35	5.38
28. Unnao	1699	1.69	376	2.56	19.63	463.1	299.1	88.44	57.15	6.44
Central Region ..	15527	17.78	395	17.50	22.86	4634.2	3060.6	87.13	52.62	5.96
29. Allahabad ..	3531	3.34	459	18.45	23.88	736.4	470.5	88.33	47.27	9.57
30. Azamgarh	4951	3.20	569	5.21	19.11	574.6	437.7	93.37	60.21	9.08
31. Bahraich ..	1884	1.89	281	5.91	12.19	692.4	461.1	87.62	52.85	8.46
32. Ballia ..	1900	1.79	573	4.59	21.67	313.5	225.7	88.27	46.30	9.19
33. Basti ..	6935	3.23	451	2.51	15.61	731.2	558.1	91.38	57.55	8.61
34. Deoria ..	3559	3.15	594	2.95	17.95	537.8	449.9	91.09	57.06	8.99
35. Faizabad	2654	2.15	496	9.55	19.32	437.8	307.0	93.43	63.92	8.76
36. Ghazipur ..	2509	1.69	509	4.50	20.14	333.2	267.1	88.22	49.25	9.14
37. Gonda	2814	2.45	341	5.65	14.04	743.5	527.9	89.50	54.29	8.56
38. Gorakhpur	4099	3.40	550	7.90	19.77	635.5	480.8	91.40	58.34	9.01
39. Jaunpur	3226	2.21	558	6.23	21.23	398.3	289.4	95.12	69.59	9.02
40. Mirzapur	2993	1.78	161	12.01	19.39	1279.3	417.6	79.11	29.59	8.78
41. Pratapgarh	2195	1.54	421	1.97	18.50	367.9	244.2	93.76	65.95	9.02
42. Sultanpur	2491	1.81	417	1.95	17.86	445.6	312.4	92.20	60.28	9.05
43. Varanasi ..	3630	3.25	652	25.13	27.27	515.8	329.0	93.07	57.70	9.36
Eastern Region ..	49371	36.88	438	8.30	19.40	8742.8	5778.4	90.82	54.62	8.99
44. Banda ..	1207	1.37	183	8.29	18.39	807.7	505.3	69.23	24.04	7.96
45. Hamirpur	930	1.15	163	9.98	20.25	723.5	509.6	61.19	20.66	9.29
46. Jalaun	957	0.94	210	13.76	27.36	459.1	342.7	64.82	22.84	8.19
47. Jhansi ..	1451	1.00	203	24.98	24.98	505.5	306.8	61.88	22.70	8.32
48. Lalitpur ..		0.49	98	**	**	506.1	169.3	**	**	**
Bundelkhand Region	4545	4.94	171	14.70	22.52	3001.9	1833.7	64.35	22.52	8.41

\*\*included under Jhansi



I  
IN UTTAR PRADESH

Percentage of workers (1971)		Gross value of Agr. output per ha of net area sown Rs. (1976-77)	Gross value of Agr. output per capita rural Rs. (1976-77)	Intensity of cropping (1977-78)	Per capita consumption of electricity (KWH) (1977-78)	Per ha. consumption of electricity in Agri. (KWH) (1977-78)	No. of electrified private pump-sets/ tube-wells (June 1980)	Per ha. consumption of fertilizers (Kg.) (1977-78)	Value of Agricultural produce per Agricultural worker (Rs.) (1976-77)
engaged in secondary sector	engaged in tertiary sector								
12	13	14	15	16	17	18	19	20	21
13.3	39.7	3189	540	131.72	124.0	29.9	5038	50.5	2109
3.9	7.8	2794	502	130.34	49.7	156.5	6558	23.4	1855
4.8	7.6	2449	502	124.88	26.6	39.8	2607	18.6	1827
5.3	7.8	2655	491	132.31	20.4	17.3	2313	19.4	2033
7.8	14.8	2644	563	128.97	80.0	48.9	38778	26.5	2103
9.0	17.6	2759	488	129.21	126.1	148.1	9752	32.3	1877
8.9	8.2	2640	386	135.56	38.2	143.4	17643	41.1	1705
2.3	6.3	1480	390	138.46	12.8	23.9	2610	22.5	1241
6.3	10.6	2941	409	136.36	25.9	110.4	6391	52.6	1868
3.8	5.2	2291	411	143.35	14.0	30.5	7079	34.6	1339
3.8	6.8	2918	437	138.89	20.9	45.1	6084	51.1	1728
6.8	9.5	2716	438	137.20	43.7	102.5	10289	57.5	1632
7.4	10.8	2609	439	127.57	42.4	129.1	10440	65.5	1867
3.3	6.4	1753	405	134.08	19.1	23.7	3967	23.4	1269
5.1	10.1	2611	407	141.98	125.5	62.0	5198	45.8	1505
6.1	9.8	2937	416	137.47	41.8	191.3	13192	58.0	1884
8.0	11.5	1820	490	126.86	886.8	56.5	2699	29.1	1735
4.4	7.9	2414	404	120.02	17.3	61.4	4397	29.6	1601
4.1	7.6	2225	395	128.13	16.9	48.2	5039	36.7	1532
9.2	21.5	2650	375	139.14	94.4	195.5	11686	65.8	1825
6.7	10.1	2401	418	135.05	91.7	84.1	116466	41.2	1610
4.2	7.9	1487	602	118.17	17.5	18.1	1185	4.2	2065
5.0	8.7	1327	665	102.85	11.0	16.2	482	3.4	2427
5.2	13.3	1690	747	103.71	12.3	13.2	609	16.3	3096
7.4	19.9	1454	709	106.29	58.0	8.5	1305	16.1	2604
		1512	615	127.04	12.2	0.7	30	5.2	
5.5	12.5	1494	664	109.88	23.1	13.4	3611	7.6	2471

ANNEXURE  
INTRA-STATE VARIATIONS

District/Region	In-habited villages (No.)	Percentage of population (1979)	Density of population per sq. km. (1979)	Percentage of urban population to total population (1971)	Literacy percentage (1971)	Reporting area '000ha. (1977-78)	Net area sown '000 ha. (1977-78)	Percentage of small and marginal holdings to total holdings (1976-77)	Percentage of area under marginal and small holdings (1976-77)	Percentage of unemployed and under-employed labour force (1978)
1	2	3	4	5	6	7	8	9	10	11
49. Almora	3576	0.84	136	5.20	28.08	727.6	106.1	96.44	78.91	3.92
50. Pithoragarh	1542	0.35	54	3.82	31.87	596.0	78.6	95.34	70.66	3.85
51. Dehra Dun	767	0.72	237	47.14	43.74	318.4	56.3	84.03	41.62	4.65
52. Garhwal	3236	0.60	113	6.33	32.00	689.7	111.1	78.57	35.31	3.83
53. Chamoli	1487	0.32	36	4.10	28.67	829.5	41.4	87.03	58.22	3.59
54. Naini Tal	1771	1.00	150	22.15	31.94	689.1	201.0	66.62	20.71	4.62
55. Tehri Garhwal	1952	0.43	100	2.77	19.29	530.2	73.6	88.61	62.65	4.02
56. Uttar Kashi	672	0.17	2.1	4.05	22.04	794.5	31.4	85.15	44.95	3.45
Hill Region	15003	4.43	88	14.40	31.02	5175.0	699.5	72.82	46.22	4.09
U.P. State	112533	100.00	346	14.00	21.70	29794.9	17421.8	85.77	45.56	7.37

I  
IN UTTAR PRADESH

Percentage of workers (1971)	engaged in second- dary sector	engaged in tertiary sector	Gross value of Agr. output per ha. of net area sown Rs. (1976-77)	Gross value of Agr. output per capita (rural) Rs. (1976-77)	Intensity of cropping (1977-78)	Per capita consump- tion of electricity (KWH) (1977-78)	Per ha. consump- tion of electricity in Agri. (KWH) (1977-78)	No. of electrified private pump-sets/ tube-wells (June 1980)	Per ha. consump- tion of fertilizers (Kg.) (1977-78)	Value of agricul- tural produce per agricul- tural worker (Rs.) [(1976-77)
12	13	14	15	16	17	18	19	20	21	
2.4	12.4	2992	547	163.47	19.2	0.5	6	4.3	1480	
3.2	15.1	3261	525	160.03	8.1	3.0	..	1.4	2274	
10.5	50.3	3331	520	153.65	323.6	36.6	198	17.7	2524	
2.0	17.1	2304	448	153.28	8.6	2.1	6	1.4	1256	
2.4	10.6	4852	720	153.27	5.6	0.1	..	1.8	1444	
9.1	21.9	4293	1223	164.77	92.1	46.5	3083	65.3	5208	
1.9	5.9	2137	386	162.65	2.7	0.5	2	1.4	857	
3.2	8.5	2337	522	147.97	10.3	0.1	..	2.5	1000	
4.5	18.4	3306	656	159.65	78.3	17.4	3295	21.6	1968	
7.9	14.1	2703	562	134.02	82.30	87.6	344104	37.1	2220	

District/Region	Value added per Industrial worker in Rs. (1976-77)	Number of workers in registered industrial establishments per lakh of population (1976-77)	Percentage of manufacturing to total net output at current prices (1976-77)	Net domestic output per capita at current prices in Rs. (1976-77)	Credit deposit ratio December (1978)	Percentage of net sown to total reporting area (1977-78)	Per capita net sown in hectare (1977-78)	Percentage of gross irrigated area to gross cropped area (1977-78)	Percentage of net irrigated area to net sown area (1977-78)
1	22	23	24	25	26	27	28	29	30
1. Agra ..	6051	898	23.06	447.44	40.91	73.55	0.21	46.23	56.03
2. Aligarh	7690	386	15.83	555.51	42.19	76.37	0.20	66.97	85.98
3. Bareilly	11444	621	20.20	585.79	31.58	81.69	0.21	46.09	52.52
4. Bijnor ..	4023	1161	15.55	633.83	53.70	69.87	0.25	44.46	48.43
5. Badaun	1542	43	1.54	541.63	35.32	77.11	0.24	41.68	52.03
6. Bulandshahr ..	5921	151	11.71	525.10	41.55	76.15	0.17	76.76	89.07
7. Etah ..	8986	72	8.69	506.48	53.27	68.44	0.19	53.70	68.55
8. Etawah ..	5158	60	9.41	439.11	27.73	66.31	0.20	59.32	66.02
9. Farrukhabad ..	3350	60	5.05	502.61	52.34	66.97	0.18	47.73	57.25
10. Mainpuri ..	9676	164	12.82	547.84	45.37	64.30	0.19	62.34	77.55
11. Mathura ..	6779	111	9.91	519.15	46.39	80.16	0.25	62.75	75.18
12. Meerut	7989	1388	23.24	597.41	41.35	79.07	0.18	82.77	89.51
13. Ghaziabad	14270		52.85	1174.08	82.57	73.60		77.98	85.07
14. Moradabad ..	4351	465	14.00	532.05	59.90	80.41	0.23	51.64	60.09
15. Muzaffarnagar ..	4461	1120	12.87	795.14	60.20	79.00	0.18	77.36	83.78
16. Pilibhit ..	6778	425	6.22	843.45	76.04	60.50	0.29	46.42	53.65
17. Rampur ..	4173	521	7.47	540.44	100.00	79.02	0.22	46.31	55.13
18. Saharanpur ..	21157	1114	37.81	876.48	53.12	69.22	0.21	56.87	63.50
19. Shahjahanpur ..	2686	461	3.42	638.19	58.22	73.41	0.29	51.22	55.92
Western Region ..	9451	588	17.86	606.14	51.25	73.41	0.21	57.92	66.81
20. Bara Banki ..	4527	134	15.61	553.58	33.42	68.67	0.18	40.16	45.81
21. Fatehpur	11221	32	5.34	518.74	24.36	69.39	0.22	39.10	40.66
22. Hardoi	4950	99	3.93	486.06	40.18	70.22	0.22	39.68	45.69

Source-wise percentage of irrigation potential to total irrigation potential			Percentage of balance of ground water to total safe yield as on 1-4-79	Percentage of electrified villages to total villages (1978-79)	Length of pucca roads per 1000 sq. km. of area (March 1979)	Length of pucca roads per lakh of population in km. (March 1979)	Number of Schools per lakh of population (1978-79)			Percentage of villages having allopatics with-in 3 km. (1978-79)	No. of beds in allopatics per lakh of population (1978-79)	Percentage of scarcity to total villages in the district (1972)
Canals	State tube-wells	Private minor works					Junior basic school	Senior basic school	High/secondary school			
31	32	33	34	35	36	37	38	39	40	41	42	43
27.65	9.21	63.14	30.30	40.10	192	33.7	52.60	14.08	4.62	12.69	104.26	58.21
30.67	12.98	56.35	54.53	43.74	176	36.2	59.98	9.40	5.09	12.11	70.00	9.26
46.74	9.88	43.38	51.71	35.22	263	52.4	71.57	10.90	3.63	8.62	84.26	37.44
16.38	21.57	62.05	55.17	46.67	246	62.2	53.71	9.38	4.33	13.83	23.88	0.86
..	25.84	74.16	38.21	33.08	154	42.8	62.16	6.94	2.64	10.25	23.09	40.90
30.00	14.00	56.00	50.72	60.83	199	40.0	70.69	8.52	8.06	17.76	27.41	..
29.45	10.93	59.62	64.71	44.55	166	40.4	54.68	11.62	4.93	11.15	26.90	2.69
50.13	4.39	45.48	68.67	28.17	164	41.7	60.49	15.93	5.82	11.31	27.75	37.17
18.78	12.89	68.33	46.31	59.84	145	34.9	57.47	14.99	5.72	13.78	32.04	34.75
34.80	9.02	56.18	63.60	31.67	161	40.4	74.93	14.75	3.78	13.13	20.24	28.07
49.09	0.48	51.43	41.13	44.91	201	51.1	79.05	10.17	6.56	13.32	84.74	62.90
36.93	14.27	48.80	41.98	64.62	194	29.8	57.11	8.85	6.49	17.17	53.30	..
			64.01								18.34	..
10.38	22.71	66.91	26.92	58.80	183	38.0	59.88	8.10	3.95	14.02	33.10	21.68
38.16	10.83	51.01	50.60	82.09	307	60.8	66.65	5.92	4.38	12.73	24.25	..
37.29	1.25	61.46	73.40	32.27	149	59.3	72.84	11.93	2.39	12.54	31.59	46.97
38.29	11.58	50.13	52.92	40.29	188	40.7	57.48	6.57	3.38	10.35	28.01	53.66
31.31	15.23	63.46	49.64	39.51	163	36.9	56.29	8.28	4.50	11.82	45.12	6.58
30.28	10.44	59.28	59.00	26.72	148	47.5	83.52	10.80	2.59	11.30	27.77	18.53
30.89	12.52	56.59	50.68	44.64	188	42.2	62.57	10.21	4.82	12.93	43.98	23.46
43.58	2.84	53.58	80.51	27.36	150	36.2	77.20	8.89	1.85	12.93	19.86	15.58
46.33	4.97	48.70	86.60	37.06	165	46.9	62.28	15.42	4.37	8.58	27.56	5.92
29.45	5.61	64.94	66.50	16.98	166	47.4	66.03	12.65	2.33	9.81	22.98	20.81

District/Region	Value added per industrial worker in Rs. (1976-77)	Number of workers in registered industrial establishments per lakh of population (1976-77)	Percentage of manufacturing to total net output at current prices (1976-77)	Net domestic output per capita at current prices (1976-77)	Credit deposit ratio December 1978	Percentage of net sown to total reporting area (1977-78)	Per capita net area sown in hectare (1977-78)	Percentage of gross irrigated area to gross cropped area (1977-78)	Percentage of net irrigated area to net sown area (1977-78)
1	22	23	24	25	26	27	28	29	30
23. Kanpur ..	8594	1704	32.92	579.62	48.17	69.35	0.22	48.72	49.93
24. Kheri ..	4621	390	3.80	656.01	16.17	57.36	0.29	17.43	20.01
25. Lucknow ..	7903	5077	40.18	404.12	58.68	58.10	0.17	46.58	48.92
26. Rae Bareli ..	1371	113	7.48	514.69	60.72	62.78	0.18	49.21	50.84
27. Sitapur ..	8219	275	8.79	503.89	76.62	72.68	0.21	26.89	31.24
28. Unnao ..	6781	124	6.79	469.13	20.50	64.58	0.18	48.07	48.10
Central Region ..	7869	981	15.56	524.60	52.79	66.04	0.21	37.97	40.89
29. Allahabad	17140	490	28.59	521.78	35.94	63.89	0.17	35.17	36.40
30. Azamgarh ..	463	82	7.73	363.32	26.34	76.18	0.14	46.74	58.16
31. Bahraich ..	1727	112	1.33	390.57	34.61	66.62	0.26	11.59	15.83
32. Ballia ..	6846	30	2.63	343.97	23.14	71.99	0.13	39.53	48.14
33. Basti ..	2402	191	3.91	367.50	61.38	76.33	0.18	41.08	57.84
34. Deoria ..	3754	587	7.41	396.28	42.82	83.65	0.15	40.14	48.74
35. Faizabad	2716	113	6.07	349.17	26.96	70.09	0.16	47.06	58.75
36. Ghazipur ..	33391	47	13.16	420.97	23.77	80.16	0.17	47.18	53.76
37. Gonda ..	3988	243	5.48	373.45	39.43	71.06	0.23	22.27	28.17
38. Gorakhpur ..	4746	557	18.24	407.13	38.81	75.66	0.15	40.05	56.38
39. Jaunpur ..	3662	65	4.23	363.17	22.94	72.65	0.14	44.72	56.72
40. Mirzapur ..	27651	457	26.13	627.85	36.09	32.64	0.27	29.47	27.56
41. Pratapgarh	included in Sultanpur		3.54	403.20	13.64	66.30	0.16	39.85	45.04
42. Sultanpur ..	5184	4	3.90	379.70	41.60	69.96	0.18	37.03	43.94
43. Varanasi	15869	331	41.18	424.59	38.56	63.77	0.14	48.29	53.39
Eastern Region ..	9601	256	14.12	408.20	35.47	66.09	0.17	36.86	44.92

Source-wise percentage of irrigation potential to total irrigation potential (1975-76)			Percentage of balance of ground water to total safe yield as on 1-4-79	Percentage of electrified villages to total villages (1978-79)	Length of pucca roads per 1000 sq. km. of area (March 1979)	Length of pucca roads per lakh of population in km. (March 1979)	Number of Schools per lakh of population (1978-79)			Percentage of villages having allopactic hospitals with-in 3 km. (1978-79)	No. of allopactic hospitals per lakh of population (1978-79)	Percentage of scarcity villages to total villages in the district (1972)
Canals	State tube-wells	Private minor works					Junior basic school	Senior basic school	High/secondary school			
31	32	33	34	35	36	37	38	39	40	41	42	43
53.45	3.06	43.49	67.93	29.35	422	71.6	62.04	13.79	3.94	10.13	110.68	4.16
14.55	19.83	65.62	81.80	36.53	110	49.8	74.34	7.37	2.36	11.01	26.31	43.47
34.54	5.92	59.54	74.30	73.87	252	33.8	72.60	9.64	5.51	15.33	201.91	0.77
43.17	2.63	54.20	82.20	49.91	204	55.7	58.16	11.22	2.91	14.58	41.84	43.28
31.50	7.56	60.94	87.90	17.39	144	38.8	57.85	12.05	2.48	7.08	68.68	20.40
41.44	1.80	56.76	85.10	18.19	171	45.4	76.38	13.29	2.96	11.77	22.87	5.41
39.51	5.21	55.28	79.74	30.93	195	49.4	66.81	11.77	3.23	10.95	66.53	18.84
40.73	15.09	44.18	78.77	40.73	307	65.5	54.02	8.37	5.26	13.91	79.30	36.99
23.39	12.32	64.29	83.63	37.79	233	41.0	49.11	8.42	4.32	16.54	22.75	10.12
5.12	14.10	80.78	87.25	19.96	129	46.0	67.27	9.91	1.71	13.00	31.48	47.29
28.65	18.15	53.20	90.71	26.15	232	40.2	69.45	13.27	4.94	17.74	22.87	31.38
8.01	16.49	75.50	81.62	29.59	135	30.0	58.93	7.19	3.83	15.27	28.14	43.22
42.43	13.32	44.25	90.58	27.84	262	44.2	61.10	9.35	4.15	16.97	16.80	44.17
24.45	13.79	61.76	82.57	43.03	173	34.8	63.58	9.43	4.06	14.28	50.59	7.50
27.05	19.29	53.66	89.13	31.12	223	43.7	68.97	11.56	4.30	13.59	22.14	44.22
5.86	9.85	84.29	78.46	24.88	118	34.5	78.57	7.60	2.16	8.10	36.27	12.22
31.66	11.14	57.20	88.10	23.22	246	44.7	57.62	10.92	4.06	17.00	60.01	30.64
23.08	13.38	63.54	73.82	27.93	223	39.9	53.75	11.62	5.50	19.71	27.89	31.00
59.44	7.74	32.82	88.44	15.95	97	60.4	73.32	11.55	3.08	9.32	39.05	63.82
37.02	3.02	59.96	82.01	25.65	235	55.7	63.04	10.18	4.26	17.22	34.03	4.97
31.02	10.33	58.65	84.77	39.02	207	49.6	79.81	11.42	3.41	10.40	31.67	3.97
35.63	24.20	40.17	73.89	29.61	410	62.9	50.08	12.39	4.73	15.43	93.79	41.57
29.16	13.86	56.98	83.99	29.95	203	46.3	61.47	9.99	4.06	14.81	42.49	31.22

District/Region	Value added per industrial worker in (Rs.) (1976-77)	Number of workers registered in industrial establishments per lakh of population in 1976-77	Percentage of manufacturing to total net output at current prices (1976-77)	Net domestic output per capita at current prices in Rs. (1976-77)	Credit deposit ratio December 1978	Percentage of net area sown to total reporting area (1977-78)	Per capita net sown area in hectare (1977-78)	Percentage of gross irrigated area to gross cropped area (1977-78)	Percentage of net irrigated area to net sown area (1977-78)
1	22	23	24	25	26	27	28	29	30
44. Banda ..	7722	8	7.39	561.86	21.95	62.50	0.41	20.91	21.06
45. Hamirpur ..	Included in Jalaun		4.59	583.87	29.65	70.44	0.50	16.92	17.17
45. Jalaun ..	2090	8	2.99	560.64	38.93	74.73	0.43	30.85	31.20
47. Jhansi ..	7434	415	11.21	496.99	23.11	60.67	0.43	24.82	26.16
48. Lalitpur ..	Included in Jhansi		5.78	575.41	32.08	33.40	**	23.31	26.99
<b>Bundelkhand Region ..</b>	<b>7302</b>	<b>130</b>	<b>6.38</b>	<b>555.10</b>	<b>29.12</b>	<b>61.08</b>	<b>0.44</b>	<b>22.40</b>	<b>23.28</b>
49. Almora ..	11713	31	4.06	528.05	16.33	14.56	0.13	9.90	8.35
50. Pithoragarh ..	Included in Almora		5.21	827.30	23.52	13.26	0.24	11.32	12.12
51. Dehra Dun ..	23027	934	40.72	604.42	17.55	17.61	0.15	38.76	40.40
52. Garhwal ..	4167	20	1.75	488.74	22.95	16.09	0.20	9.93	8.89
53. Chamoli ..	Included in Garhwal		1.91	1002.52	25.54	4.95	0.14	7.74	6.37
54. Naini Tal ..	11460	558	8.23	986.34	75.40	29.17	0.27	49.17	53.78
55. Tehri Garhwal ..	Included in Garhwal		2.04	482.20	20.80	13.96	0.18	17.27	14.53
56. Utttar-Kashi ..	do		1.32	1010.91	38.94	3.90	0.19	17.57	15.06
<b>Hill Region ..</b>	<b>17389</b>	<b>283</b>	<b>9.66</b>	<b>708.28</b>	<b>32.34</b>	<b>13.52</b>	<b>0.19</b>	<b>24.93</b>	<b>25.31</b>
<b>U.P. State ..</b>	<b>9098</b>	<b>500</b>	<b>15.27</b>	<b>520.16</b>	<b>45.13</b>	<b>58.47</b>	<b>0.20</b>	<b>42.87</b>	<b>48.75</b>

\*\*Included under Jhansi



Source-wise percentage of irrigation potential to total irrigation potential 1975-76			Percentage of balance under ground water to total safe yield as on 1-4-79	Percentage of electrified villages to total villages (1978-79)	Length of pucca roads per 1000 sq. km. area (March 1979)	Length of pucca roads per lakh population in km. (March 1979)	Number of Schools per lakh of population (1978-79)			Percentage of villages having allopatic hospitals with in 3 km. (1978-79)	No. of beds in allopatic hospitals per lakh of population (1978-79)	Percentage of scarcity villages to total villages in the district (1972)
Canals	State tube-wells	Private minor works	34	35	36	37	38	39	40	41	42	43
51.92	1.24	46.84	88.46	23.61	115	62.8	83.54	13.60	3.72	4.64	26.84	53.85
43.83	2.35	53.82	91.40	21.61	119	72.6	89.53	11.23	3.06	4.95	20.00	61.61
60.21	1.96	37.83	93.18	30.83	162	77.3	95.61	17.57	6.59	8.25	34.94	73.04
35.33	0.00	64.67	64.82	14.34	209	101.6	93.03	16.78	4.91	3.93	141.71	61.13
			59.67		107	109.1	130.30	18.18	2.83		33.94	
47.47	1.26	51.27	83.13	21.76	137	80.2	93.73	14.89	4.26	5.24	50.69	61.80
41.39	..	58.61	..	18.57	277	203.0	136.19	20.68	14.29	8.33	106.53	61.38
75.41	..	24.59	..	12.78	136	250.7	179.83	24.95	13.93	15.56	104.37	48.12
77.04	10.17	12.79	97.93	31.55	559	235.9	92.62	17.49	7.65	4.95	207.38	63.23
34.10	2.49	63.41	..	14.89	288	254.7	183.60	26.62	14.29	1.24	111.53	43.65
90.20	..	9.80	..	20.03	87	242.4	189.63	28.96	16.77	9.41	106.71	64.58
52.44	3.29	44.27	69.82	50.20	353	235.4	89.39	17.09	8.64	13.55	148.53	93.05
8.58	..	91.42	..	11.13	189	189.5	166.14	31.14	11.14	4.30	81.14	57.10
78.22	..	21.78	..	27.38	96	449.1	222.22	35.67	10.53	9.82	99.42	58.33
51.77	3.78	44.45	76.02	21.15	211	238.6	139.75	22.80	11.63	7.64	130.04	59.13
33.09	10.91	56.00	72.71	32.25	193	55.6	67.89	11.20	4.58	12.47	51.59	32.53

## ANNEXURE II

*Important committees set up at the Divisional level under the Chairmanship of Divisional Commissioner.*

Committee					Approximate number of members
1					2
1. Divisional Planning and Development Committee	..	..	..	..	80—85
2. Divisional Institutional Finance Committee	..	..	..	..	70
3. Divisional Irrigation and Power Committee	..	..	..	..	40
4. Divisional Education Committee	..	..	..	..	20
5. Divisional Medical, Public Health and Family Welfare Committee			..	..	15
6. Divisional Dairy Development Committee	..	..	..	..	20
7. Divisional Harijan and Social Welfare Committee		..	..	..	15
8. Divisional Industrial Development Committee	..	..	..	..	16
9. Divisional Public Works Department and Rural Engineering Service Committee				..	15
10. Divisional Post Office Coordination Committee	..	..	..	..	32

## ANNEXURE III

*Proposed composition of high level Planning Cell at the Divisional Level*

1. Regional Planning and Development Commissioner	..	..	..	..	Chairman
2. Joint/Deputy Development Commissioner	..	..	..	..	Convenor
3. Joint Director, Industries	..	..	..	..	Member
4. Deputy Director, Agriculture	..	..	..	..	"
5. Deputy Director, Animal Husbandary	..	..	..	..	"
6. Deputy Director, Soil Conservation	..	..	..	..	"
7. Deputy Registrar, Co-operatives	..	..	..	..	"
8. Executive Engineer, P. W. D.	..	..	..	..	"
9. Executive Engineer, Irrigation (Canals)	..	..	..	..	"
10. Executive Engineer, Tubewells	..	..	..	..	"
11. Executive Engineer, Minor Irrigation	..	..	..	..	"
12. Expert in Financial Management and Accounting	..	..	..	..	"
13. Managing Director of each Divisional Development Corporation	..	..	..	..	"
14. A representative of Forest Department	..	..	..	..	"
15. Economist/Sociologist/Geographer of the Divisional University	..	..	..	..	"
16. A nominated representative of the concerned Agricultural University	..	..	..	..	"
17. A nominated representative of the Engineering University, Roorkee (in respect of environmental and ecological regeneration, soil conservation, irrigation projects etc.)	..	..	..	..	"
18. A representative of Lead Bank	..	..	..	..	"
19. Directors of Area Planning, Manpower Planning and Yojna Monitoring and Cost Management Divisions of State Planning Institute, U. P.	..	..	..	..	"
20. Deputy Director, Economics and Statistics	..	..	..	..	Jt. Convenor

## OUTLAY AND EXPENDITURE—

Head of Development/Department	Actual Expenditure		Proposed Sixth Plan Outlay 1980-85				Approved Outlay	
	1978-79	1979-80	Total	Capital	Foreign Exchange	M.N.P.	Total	Capital
1	2	3	4	5	6	7	8	9
<b>I. Agriculture and Allied Services</b>								
1. Agriculture Production.	259.03	187.23	2993.00	1151.79	..	..	228.50	76.11
2. Land Reforms	..	..	25.00	..	..	..	..	..
3. Minor Irrigation	360.15	548.27	5550.00	4877.00	..	..	603.00	532.71
4. Soil Conservation	233.88	314.81	5706.00	35.00	..	..	425.00	3.15
5. Area Development.	169.94	184.98	4718.00**	..	..	..	174.75	..
6. Animal Husbandry	82.67	73.47	1250.00	225.91	88.38	..	109.00	28.04
7. Dairying and Milk Supply.	4.10	5.73	225.00	69.40	..	..	15.00	3.03
8. Fisheries	..	4.23	30.00	14.00	..	..	3.00	0.10
9. Forests	..	235.15	2522.00	..	..	..	225.00	..
10. Community Development and Panchayat.	178.75	31.01	1282.00	190.20	..	..	82.50	9.05
<b>Total I—Agriculture and Allied Services.</b>	<b>1527.90</b>	<b>1573.10</b>	<b>24301.00**</b>	<b>6563.30</b>	<b>88.38</b>	<b>..</b>	<b>1865.75</b>	<b>652.19</b>
<b>II. Co-operation</b>	<b>48.99</b>	<b>36.91</b>	<b>562.00</b>	<b>192.72</b>	<b>..</b>	<b>..</b>	<b>81.00</b>	<b>21.10</b>
<b>III. Irrigation and Power</b>								
1. Irrigation	133.75	64.72	73.00	73.00	..	..	71.00	71.00
2. Flood Control	23.33	42.06	360.00	360.00	..	..	60.00	60.00
3. Power	507.25	425.00	7500.00	7500.00	..	3376.00	710.00	710.00
<b>Total III—Irrigation and Power.</b>	<b>664.33</b>	<b>531.78</b>	<b>7933.00</b>	<b>7933.00</b>	<b>..</b>	<b>3376.00</b>	<b>841.00</b>	<b>841.00</b>
<b>IV. Industry and Mining</b>								
1. Large and Medium Industries.	57.00	35.00	1400.00	1400.00	..	..	100.00	100.00
2. Village and Small Scale Industry.	49.95	41.89	1874.00	466.40	..	..	90.00	26.20
3. Geology and Mining.	137.43	24.98	809.50	509.50	..	..	43.00	5.00
<b>Total IV—Industry and Mining.</b>	<b>244.38</b>	<b>101.87</b>	<b>4083.50</b>	<b>2375.90</b>	<b>..</b>	<b>..</b>	<b>233.00</b>	<b>131.20</b>

ANNEXURE—IV  
Hill Region, U. P.

(Rupees in lakhs)

1980-81		Anticipated Expenditure 1980-81				Proposed Outlay 1981-82			
Foreign Exchange	M.N.P.	Total	Capital	Foreign Exchange	M.N.P.	Total	Capital	Foreign Exchange	M.N.P.
10	11	12	13	14	15	16	17	18	19
..	..	228.42	76.11	..	..	296.50	83.50	..	..
..	..	..	..	..	..	1.00	..	..	..
..	..	603.00*	532.71	..	..	665.00	590.00	..	..
..	..	430.00	3.15	..	..	515.00	12.72	..	..
..	..	354.75	..	..	..	331.00**	..	..	..
..	..	126.81*	31.04	..	..	135.00	32.48	3.00	..
..	..	15.00	3.03	..	..	20.00	2.71	..	..
..	..	2.02	..	..	..	4.50	2.15	..	..
..	..	225.00*	..	..	..	275.00	..	..	..
..	..	90.40	9.05	..	..	115.00	9.05	..	..
..	..	2075.40	655.09	..	..	2358.00**	732.61	3.00	..
..	..	80.95	21.10	..	..	92.00	34.95	..	..
..	..	71.00	71.00	..	..	2.00	2.00	..	..
..	..	60.00	60.00	..	..	75.00	75.00	..	..
..	325.00	710.00	710.00	..	325.00	800.00	800.00	..	357.00
..	325.00	841.00	841.00	..	325.00	877.00	877.00	..	357.00
..	..	100.00	100.00	..	..	125.00	125.00	..	..
..	..	172.29	53.40	..	..	120.00	100.40	..	..
..	..	290.00	5.00	..	..	57.00	15.00	..	..
..	..	562.29	158.40	..	..	302.00	240.40	..	..

Head of Development/ Department	Actual Expenditure		Proposed Sixth Plan Outlay 1980—85				Approved Outlay	
	1978-79	1979-80	Total	Capital	Foreign Exchange	M.N.P.	Total	Capital
1	2	3	4	5	6	7	8	9
<b>V. Transport and Communication</b>								
1. Roads and Bridges.	1934.00	2225.86	25000.00**	25000.00**	..	16183.00	2500.00	2500.00
2. Tourism ..	211.54	49.08	1235.00**	1011.43**	..	..	90.00	₹ 76.46
<b>Total V—Transport and Communication.</b>	<b>2145.54</b>	<b>₹ 2274.94</b>	<b>26235.00**</b>	<b>26011.43**</b>	<b>..</b>	<b>16183.00</b>	<b>2590.00</b>	<b>2576.46</b>
<b>VI. Social and Community Services.</b>								
1. General Education (excluding Cultural Affairs).	959.28	827.55	9600.00	1358.94	..	4953.28	893.34	180.53
2. Cultural Affairs	4.34	1.75	30.00	..	..	..	4.00	..
3. Technical Education.	33.15	17.85	410.00	256.00	..	..	50.00	30.20
4. Medical and Public Health.	135.49	98.65	4162.00	2448.16	..	1704.20	202.00	92.42
5. Water Supply and Sanitation.	860.80	1516.10	15210.00	1040.56	124.76	14469.44	1570.00	159.82
6. Housing (excluding Police).	74.68	32.71	1947.00	1947.00	..	180.00	84.00	84.00
7. Police Housing	36.64	14.16	663.50	663.50	..	..	15.00	15.00
8. Urban Development.	0.22	1.68	50.00	..	..	..	5.00	..
9. Information and Publicity.	0.30	0.40	15.00	..	..	..	1.00	..
10. Labour and Labour Welfare.	43.70	32.49	375.00	76.90	..	..	50.13	9.80
11. Welfare of Backward classes.	65.99	74.97	750.00	..	..	..	75.00	..
12. Social Welfare	10.73	10.12	150.00	..	..	..	15.00	..
13. Nutrition ..	20.03	14.50	325.00	..	..	200.00	19.00	..
<b>Total VI—Social and Community Services.</b>	<b>2245.35</b>	<b>2642.93</b>	<b>33687.50</b>	<b>7791.06</b>	<b>₹ 124.76</b>	<b>21506.92</b>	<b>2983.47</b>	<b>571.77</b>

\*Includes expenditure against Drought assistance area.

₹ (Rupces in lakhs)

1980-81		Anticipated Expenditure 1980-81				Proposed Outlay 1981-82			
Foreign Exchange	M.N.P.	Total	Capital	Foreign Exchange	M.N.P.	Total	Capital	Foreign Exchange	M.N.P.
10	11	12	13	14	15	16	17	18	19
..	1965.00	2750.00*	2750.00	..	1965.00	2700.00**	2700.00**	..	2068.00
..	..	100.00	76.20	..	..	150.00**	90.00	..	..
..	1965.00	2850.00	2860.20	..	1965.00	2850.00**	2790.00**	..	2068.00
..	397.88	963.93	189.53	..	473.63	1018.00	182.30	..	454.66
..	..	4.00	..	..	..	5.00	..	..	..
..	..	50.00	30.20	..	..	60.00	12.00	..	..
..	60.00	202.00	92.42	..	60.00	260.00	70.69	..	133.00
38.10	1460.18	1691.00*	130.82	38.10	1431.18	1735.00	299.47	86.66	1406.78
..	..	84.00	84.00	..	..	109.00	109.00	..	30.00
..	..	15.00	15.00	..	..	20.00	20.00	..	..
..	..	5.00	..	..	..	5.00	..	..	..
..	..	1.00	..	..	..	1.25	..	..	..
..	..	49.53	9.80	..	..	60.75	10.50	..	..
..	..	75.00	..	..	..	90.00	..	..	..
..	..	14.96	..	..	..	20.00	..	..	..
..	10.00	18.00	..	..	9.00	25.00	..	..	15.00
38.10	1942.06	3173.42	546.77	38.10	1987.81	3408.50	703.46	86.66	2039.44

\*\*Due to necessary changes made at a later stage, the figures do not tally with the figures

Head of Development/ Department	Actual Expenditure		Proposed Sixth Plan Outlay 1980-85				Approved Outlay	
	1978-79	1979-80	Total	Capital	Foreign Exchange	M.N.P.	Total	Capital
1	2	3	4	5	6	7	8	9
<b>VII. Economic Services</b>								
1. Secretariate Economic Services.	3.48	0.10	31.00	..	..	..	4.85	..
2. Other General Economic Services.	..	..	112.12	..	..	..	1.50	..
Total VII—Economic Services.	3.48	0.10	143.12	..	..	..	6.35	..
<b>Grand Total ..</b>	<b>6879.97</b>	<b>7161.63</b>	<b>96945.00</b>	<b>52720.41</b>	<b>213.14</b>	<b>41065.92</b>	<b>8600.57</b>	<b>4793.72</b>

in respect of hill areas given in the respective chapters/statements of State Plan as a whole.



(Rupees in lakhs)

1980-81		Anticipated Expenditure 1980-81				Proposed Outlay 1981-82			
Foreign Exchange	M.N.P.	Total	Capital	Foreign Exchange	M.H.P.	Total	Capital	Foreign Exchange	M.N.P.
10	11	12	13	14	15	16	17	18	19
..	..	4.85	..	..	..	4.50	..	..	..
..	..	1.00	..	..	..	8.00	..	..	..
..	..	5.85	..	..	..	12.50	..	..	..
<b>38.10</b>	<b>4232.06</b>	<b>9583.91</b>	<b>5048.56</b>	<b>38.10</b>	<b>4277.81</b>	<b>9900.00</b>	<b>5478.42</b>	<b>89.66</b>	<b>4464.44</b>

## ANNEXURE-V

*Targets of production and physical achievement-hill-region*

Serial no.	Item	Unit	Five Year Plan 1980-85		1980-81		1981-82
			1979-80 Base year level	1984-85 Terminal year Target	Target	Anticipated Achievement	Target
1	2	3	4	5	6	7	8
<b>I-AGRICULTURE AND ALLIED SERVICES</b>							
1.	Total Foodgrains Production	'000Tonnes	980.986	1750.00	1400.00	1400.00	1485.00
2.	Commercial Crops						
	Oilseeds	„	6.826	35.00	26.00	26.00	28.00
3.	Chemical Fertilizers :						
	(a) Nitrogenous (N)	„	24.900	40.000	31.000	31.000	35.000
	(b) Phosphatic (P)	„	7.400	13.000	10.000	10.000	10.500
	(c) Potassic (K)	„	3.200	7.000	5.000	5.000	5.500
	Total-3	..	35.500	60.000	46.000	46.000	51.000
4.	Area under High yielding varieties	'000 Hect	273.762	415.000	280.000	280.000	350.000
5.	Area under Plant Protection	„	613	870	645	645	740
6.	Soil Conservation Area Covered	„	69.20	124.70	76.40	76.40	85.85
7.	<i>Horticulture</i>						
	(1) Area to be brought under orchards	„	99	129	105	105	111
	(2) Area to be brought under vegetable cultivation	„	21	26	22	22	23
	(3) Control of pests and diseases against Horticultural crops.	„	230	355	255	255	280
	(4) Rejuvenation of old orchards	'000Hect.	84	114	90	90	96
	(5) Area to be developed under potato cultivation.	„	27	32	28	28	29
	(6) Production of fruits	.. '000Tonnes	200	330	220	220	250
	(7) Production of potato	.. „	230	310	250	250	260
	(8) Production of vegetables	.. „	85	130	95	95	100
8.	<i>Irrigation and Flood Control</i>						
	<b>A-Private Minor Irrigation works</b>						
	(1) Masonry wells	.. No.	637	..	667	667	697
	(2) Boring	.. No.	11521	18591	12961	12961	14461
	(a) By small farmers through loan on which rented pumping sets are used.	„	..	..	340*	340*	300*
	(b) By other farmers	.. „	..	..	1100*	1100*	1200*

\*Retete to additional targets

## ANNEXURE-V

*Targets of production and physical achievement-hill region*

Serial no.	Item	Unit	Five Year Plan 1980-85		1980-81		1981-82 Target
			1979-80 Base year level	1984-85 Terminal year Target	Target	Anticipated Achievement	
1	2	3	4	5	6	7	8
(3)	Persian wheels	.. No.	412	412	412	412	412
(4)	Pumping sets	.. ..	10690	15800	11850	11850	13000
	(a) On surface	.. ..	..	..	150*	150*	150*
	(b) On boring	.. ..	..	..	1010*	1010*	1100*
(5)	Private Tube-wells	.. ..	5148	7628	5738	5738	6238
(6)	Guls and Hauz	.. .. Hect.	31425	48925	34925	34925	38425
(7)	Irrigation potentials created	.. '000 hect.	59.00	110.00	71.00	71.00	82.00
(8)	Construction of Hydrant/sprinkler	No.	..	360	60	60	70
<b>B—Minor Irrigation (State)</b>							
(1)	Ground water	.. } '000Hect.	111.87	160.470	118.870	118.970	127.870
(2)	Surface	.. }					
<b>C—Major and Medium—</b>							
	Irrigation Potential Created	.. '000Hect.	56.169	67.669	58.369	57.169	63.179
<b>9. Agricultural Marketing</b>							
(1)	Total no. of markets at Mini level.	No.	15	..	15	15	15
(2)	Regulated Markets	.. ..	10	..	10	10	10
(3)	Construction of Market yards	.. ..	1	6	2	2	2
<b>10. Storage :—</b>							
<b>(1) Owned capacity with</b>							
(a)	State Warehousing Corporation	'000 Tonnes.	43.92	84.42	47.62	47.62	51.64
(b)	Co-operative	.. '000Tonnes.	36.50	62.40	44.00	44.00	47.75
<b>11. Animal Husbandry and Dairy Products.</b>							
(1)	Milk	.. .. '000Tonnes.	312.50	350.00	323.60	323.60	329.80
(2)	Eggs	.. .. Million no.	23.50	32.80	25.75	25.75	27.40
(3)	Wool	.. .. Lakh Kgs.	4.23	6.42	4.37	4.37	5.23
<b>12. Animal Husbandry Programme</b>							
(1)	I. P. D. Projects	.. .. No.	2	3	2	2	3
(2)	Number of Deep Frozen Semen (hill) Stations.	.. ..	2	2	2	2	2
(3)	Establishment of sheep breeding farms.	.. ..	13	13	13	13	13

\*Relates to additional target.

## ANNEXURE—V

Targets of production and physical achievement—hill region—(Contd.)

Serial no.	Item	Unit	Five-Year Plan 1980—85		1980-81		1981-82 Target
			1979-80 Base year level	1984-85 Terminal year target	Target	Anticipated achievement	
1	2	3	4	5	6	7	8
	(4) Sheep and Wool Extension centres	No.	46	74	53	53	60
	(5) Intensive Sheep Development Projects.	„	1	1	1	1	1
	(6) Veterinary Hospitals ..	„	118	143	123	123	133
	(7) Veterinary Stockmen Centres ..	„	427	477	427	427	457
	(8) Pig Breeding Farms ..	„	1	2	1	1	2
13.	Dairy Programmes						
	(1) Fluid Milk Plants (including composite and feeder/balancing Milk Plants in operation.	„	3	3	3	3	3
	(2) Milk Products Factories including creameries in operation.	„	..	..	..	..	..
	(3) Dairy Co-operative unions ..	„	6	6	6	6	6
	(4) Milk Handling lakh litres per day.	Lakh litres	0.06	0.20	0.14	0.14	0.22
14.	Fisheries						
	(1) Fish Produced ..	Quintals	2,832	3,500	2,800	2,800	2,900
	(2) Fingerlings distributed ..	In lakhs	3.659	6.00	5.00	5.00	5.00
	(3) Production of fingerlings						
	(i) Mahaseer ..	No.	17500	50000	17500	17500	20000
	(ii) Trout ..	„	3211	15000	3000	3000	5000
	(iii) Mirror Carp ..	„	35487	75000	25000	25000	40000
15.	Forestry						
	(1) Plantation of quick growing species.	'000 hect.	47.8	54.8	49.4	49.4	51.0
	(2) Plantation of species for Industrial and Economic Importance.	„	93.2	116.3	96.8	96.8	100.4
	(3) Communication						
	(i) New Roads ..	Kms.	1974	2235	1984	1984	1999
	(ii) Improvement of existing roads ..	„	4800	5920	4879	4879	4979
	II—COOPERATION						
	1. Loans distributed ..						
	(i) Short term loans ..	Crores Rs.	9.73	16.50	12.91	12.91	13.50
	(ii) Medium Term Loans ..	„	3.00	3.50	2.65	2.64	2.85
	(iii) Long Term Loans ..	„	0.66	5.00	3.00	3.00	3.50
	2. Agriculture Produce Marketed (Business handled by marketing societies) ..						
		„	5.50	12.00	8.00	8.00	9.00

## ANNEXURE—V

Targets of production and physical achievement—hill region—(Contd.)

Serial no.	Item	Unit	Five-Year Plan 1980—85		1980-81		1981-82 Target
			1979-80 Base year level	1984-85 Terminal year target	Target	Anticipated achievement	
1	2	3	4	5	6	7	8
3.	Retail Sale of consumer goods by urban consumer cooperatives.	CroresRs.	2.44	15.00	3.75	3.75	4.00
4.	Retail sale of consumer goods through cooperative in rural areas.	..	2.33	17.04	4.26	4.26	4.50
<b>III—POWER</b>							
1.	Installed capacity (Micro Hydel schemes.)	KW.	13738.4	15538.4	14038.4	14038.4	14038.4
2.	Transmission lines (33 KV)	.. CKT. Kms.	617.01	1703.01	761	761	911
3.	Rural Electrification						
	(i) Villages electrified .. ..	No.	3610	10954	4197	4197	4954
	(ii) Electrification of Harijan Basties	..	1492	8836	2079	2079	2836
	(iii) Private Tube-wells/Pump set energised.	..	3241	5241	3511	3511	3861
<b>IV—VILLAGE AND SMALL INDUSTRIES</b>							
1.	Small scale Industries ..						
	(i) Units functioning .. ..	..	2225	4955	3055	3055	3455
	(ii) Production .. ..	.. Rs. in lakhs.	77.70	152.70	92.70	92.70	108.70
	(iii) Persons employed ..	No.	25900	55900	31900	31900	38400
2.	Industrial Estates/Area						
	(i) Estates/Areas functioning ..	No.	8	9	9	9	9
3.	Handloom Industry—						
	(1) Production of Handloom cloth	Lakh metres.	15.79	106.00	35.79	35.79	57.29
	(2) Looms to be brought under co-operative fold.	Nos.	150	900	300	300	450
	(3) Registration of new societies ..	Nos.	5	20	8	8	11
	(4) Sericulture						
	(i) Production of Mulberry silk cocoons.	Lakh kgs.	0.62	3.00	2.02	2.02	3.52
	(ii) Production of Raw silk ..	Lakh nos.	0.04	0.34	0.13	0.13	0.23
	(iii) Production of Tusser cocoons	Lakh kgs.	2.00	14.00	4.50	4.50	7.50
<b>V—TRANSPORT AND COMMUNICATION</b>							
1.	Roads and Bridges						
	(i) Motor roads constructed ..	Km.	8017	12187	8817	8817	9617

## ANNEXURE—V

*Targets of production and physical achievement-hill region—(Conld.)*

Serial no.	Item	Unit	Five-Year Plan		1980-81		1981-82 Target
			1979-80 Base year level	1984-85 Terminal Year target	Target	Anticipated achievement	
1	2	3	4	5	6	7	8
	(ii) Reconstruction and Imporvement	Km.	997	2497	1247	1247	1497
	(iii) Bridges constructed	No.	94	244	119	119	149
<b>VI—EDUCATION</b>							
<b>A—Elementary Education</b>							
1—Classes I—V (age-group 6—11)							
(i) Enrolement							
	(a) Boys .. .. .	'000 No.	323	403	327	327	346
	(b) Girls .. .. .	„	205	325	219	219	245
	(c) Total .. .. .	„	528	728	546	546	591
(ii) Percentage to age-group ..							
	(a) Boys .. .. .	%	103	119	103	103	107
	(b) Girls .. .. .	%	68	100	72	72	79
	(c) Total .. .. .	%	86	110	88	88	93
2—Classes VI—VIII (age group 11—14)							
(i) Enrolment							
	(a) Boys .. .. .	'000 No.	131	196	135	135	144
	(b) Girls .. .. .	„	49	109	53	63	67
	(c) Total .. .. .	„	180	305	188	188	211
(ii) Percentage to age-group							
	(a) Boys .. .. .	%	74	90	76	76	80
	(b) Girls .. .. .	%	29	61	31	31	39
	(c) Total .. .. .	%	52	76	54	5	60
<b>B—Secondary Education</b>							
1—Classes IX—X (age-group 14—16)							
(1) Enrolment							
	(a) Boys .. .. .	'000 No.	61	104	64	64	74
	(b) Girls .. .. .	„	20	46	24	24	29
	(c) Total .. .. .	„	81	150	88	88	103

ANNEXURE—V—(Contd.)  
**TARGETS OF PRODUCTION AND PHYSICAL ACHIEVEMENT—HILL REGION**

Serial no.	Item	Unit	Five-Year Plan 1980—85		1980-81		1981-82 Target
			1979-80 Base year level	1984-85 Terminal year target	Target	Anticipated achievement	
1	2	3	4	5	6	7	8
<b>2—Classes XI-XII (General Classes)</b>							
<b>(1) Enrolment</b>							
	(a) Boys	.. .. '000No.	26	45	28	28	32
	(b) Girls	.. .. "	11	23	13	13	15
	(c) Total	.. .. "	37	68	41	41	47
<b>C—Non-Formal (Part time/continuation) class.</b>							
<b>(1) Enrolment</b>							
	(a) Age-group 6—11	.. '000'No.	..	100	20	20	40
	(b) Age-group 11—14	.. .. "	..	15	3	3	6
<b>D—Adult-Education :</b>							
	(i) Number of participants (age-group 15—35).	'000 No.	32	480	75	75	96
<b>(ii) Number of centres opened under</b>							
	(a) Central Programme	.. No.	1348	2400	2400	2400	2400
	(b) State Programme	.. No.	..	800	100	100	800
<b>E—Teacher :</b>							
	(i) Primary Classes I—V	.. No.	15760	16827	16430	16430	16590
	(ii) Middle Classes VI—VIII	.. .. "	5938	7830	6872	6872	7187
	(iii) Secondary Classes IX-X	.. .. "	5818	8298	6218	6218	7058
<b>F—Institutions :</b>							
	(i) Primary Schools	.. No.	6592	7259	6728	6728	6848
	(ii) Junior High Schools	.. .. "	1131	1331	1253	1253	1311
	(iii) Higher Secondary Schools	.. .. "	669	719	694	694	700
	(iv) Degree Colleges	.. .. "	31	31	31	31	31
<b>VII—MEDICAL AND PUBLIC HEALTH</b>							
<b>1—Hospitals and Dispensaries :</b>							
<b>A—Allopathic</b>							
	(a) Urban .. ..	} No.	396	561	451	451	451
	(b) Rural .. ..						
	B—Ayurvedic	.. No.	294	354	294	294	294
	C—Homoeopathic	.. .. "	22	75	27	27	27

ANNEXURE—V—(Contd.)  
**TARGETS OF PRODUCTION AND PHYSICAL ACHIEVEMENT—HILL REGION**

Serial no.	Item	Unit	Five Year Plan 1980—85		1980-81		1981-82 Target
			1979-80 Base year level	1984-85 Terminal year target	Target	Anticipated achievement	
1	2	3	4	5	6	7	8
<b>2—Beds :</b>							
	(a) In urban hospitals/dispensaries	No. } ,, }	4546	6218	4802	4802	4802
	(b) In rural hospitals/dispensaries						
<b>3—Primary Health Centres ;</b>							
	(a) Main centres	.. No.	78	210	84	88	88
	(b) Sub-centres	.. ,, ]	651	1400	930	930	930
<b>VIII—SEWERAGE AND WATER SUPPLY</b>							
<b>1. Urban Water Supply:</b>							
<i>Other towns</i>							
<b>(a) Original Scheme</b>							
	(i) Towns covered	.. No.	49	56	49	49	49
	(ii) Population covered	.. Lakh No.	6.5	8.7	6.5	6.5	6.5
<b>(b) Augmented Scheme</b>							
	(i) Towns covered	.. No.	22	32	24	24	26
	(ii) Population covered	.. Lakh No.	2.6	4.0	2.9	2.9	3.1
<b>2. Urban Sanitation</b>							
<i>Other Towns</i>							
<b>(a) Original Schemes :</b>							
	(i) Town covered	.. No.	10	17	11	11	12
	(ii) Population covered	.. Lakh No.	2.4	4.4	2.6	2.6	3.0
<b>(b) Augmentation Scheme</b>							
	(i) Towns covered	.. No.	1	5	2	2	2
	(ii) Population covered ]	.. Lakh No.	1.6	3.6	2.0	2.0	2.0
<b>3. Rural Water Supply:</b>							
<b>(1) First Priority Problem Villages identified in 1972 Survey</b>							
<b>(a) Piped Water Supply</b>							
	(i) Villages covered	.. No.	4376	7771	4936	4936	5636
	(ii) Population covered	.. Lakh No.	10.94	19.42	12.34	12.34	14.08



## ANNEXURE—V—(Concl.)

## Targets of Production and Physical Achievement—Hill Region

Serial no.	Item	Unit	Five-Year Plan 1980-85		1980-81		1981-82 Target
			1979-80 Base year level	1984-85 Terminal year target	Target	Anticipated achievement	
1	2	3	4	5	6	7	8
<b>(2) Non Scarcity villages falling enroute</b>							
<b>(a) Piped Water Supply</b>							
	(i) Village Covered	.. No.	1458	5063	1648	1648	1998
	(ii) Population covered	.. Lakh No.	3.64	12.65	4.12	4.12	5.00
<b>(3) Total Rural Water Supply</b>							
	(i) Villages covered	.. No	5834	12834	6584	6584	7634
	(ii) Population covered	.. Lakh No.	14.58	32.07	16.46	16.46	19.08
<b>IX—TECHNICAL EDUCATION</b>							
	1. Institutions Functioning (Diploma level).	No.	9	9	9	9	9
	2. Intake capacity (annual)	.. No.	910	980	950	950	980
<b>X—CRAFTSMEN TRAINING</b>							
	1. Number of Industrial Training Institutions/ G. I. T. Is.	No.	18	18	18	18	18
	2. Intake capacity	.. No.	4232	4808	4344	4344	4808
	3. Outturn	.. No.	3360	3840	3480	3480	3840

\*Not available.

## CHAPTER 6

### SPECIAL COMPONENT PLAN FOR SCHEDULED CASTES

The Census of 1971 estimated Scheduled Caste population of U. P. at 1,85,84,916. This accounts for 21 per cent of total population of this State, but it is about 25 per cent of the country's total population of Scheduled Castes.

2. The national objective is of raising the living standard of at least 50 per cent of Scheduled states families by initiating concentrated all out efforts through various development departments. Thus it is proposed to formulate and implement their divisible schemes in such a manner that economic, social and educational benefits flow to these people so that ultimately they may be able to stand on their feet and emerge into the main stream of society. To achieve this economic upliftment of these down-trodden people 50 per cent of these poors will have to contribute their might to make concrete steps for economic upliftment. Additional and permanent sources of income would be ensured through provision of greater employment and such basic amenities of life as housing, drinking water, health-care, electricity, training in handicrafts and giving incentives to involve them in local trades and enhance their efficiency and professional skills.

3. Quantification of allocations for programmes designed for the benefit of Scheduled Castes in State Plan have been stepped up considerably as would be clear from the yearly outlays given below :—

(In Crore of Rupees)

Year	Outlay	Special Component Plan
1979-80 ..	810	28
1980-81 ..	933	119
1981-82 ..	1345	164

4. In Sixth Plan out of total allocation of Rs.9661 crores, Rs.714.60 crores is earmarked for the benefits of Sche-

duled Castes. Besides this, Rs.150 crores as special Central assistance under Special Component plan and Rs.100 crores for food for work programme would be utilised for their economic upliftment. In the planned development, highest priority has been given to agriculture programme animal husbandry, area-development, small and cottage industry, education, housing and other social needs. The number of beneficiaries of Scheduled Castes under different Schemes in Sixth Plan are estimated to be as follows :—

1. Agricultural Production ..	1,00,000
2. Area Development (including SFDA,IRD, DPAP and CADA) ..	14,10,000
3. Antyodaya ..	1,00,000
4. Cane development	20,000
5. Small and Rural Industry	2,00,000
6. Horticulture development and fruit preservation	20,000
7. U.P.Scheduled Castes finance and development Corporation	1,50,000
8. Labour department	1,000
9. Harijan and Social Welfare department	2,50,000
10. Forest department	2,00,000
11. Fisheries department	5,000
12. Soil Conservation	20,000
13. Private Minor Irrigation	40,000
Total ..	25,56,000

5. *Agriculture*—Agriculture is predominant occupation of population of Uttar Pradesh and 55 per cent of the State domestic product originates from agriculture sector in which 77.38 per cent of total work force is engaged, of these 38.8 per cent are Scheduled Castes. Nearly two-third of holdings are quite small and there

is a large percentage of people who fall into the category of landless agriculture labour. It is, therefore, apparent that to improve the lot of Scheduled Caste people which constitute a sizeable number in this category major thrust has to be given in these programmes.

6. *Agricultural development programme* broadly consists of distribution of credit, seeds, manures and fertilizers, plant protection measures, farmers training, soil conservation and other programme of common benefits like, setting up of agro service centres. During Sixth Plan period the endeavour would be to ensure that the demands of various agricultural inputs of small and marginal farmers, especially those belonging to Scheduled Castes and allottees of surplus land are fully met. Out of Rs.163.41 crores earmarked for agriculture sector, benefit of Rs.14.30 crores would specially flow to members of Scheduled Caste.

7. *Minor Irrigation*—Minor irrigation is a basic infra-structure in rural areas for increasing intensity of cropping and agricultural productivity by providing assured irrigation. Minor irrigation organisation is being strengthened and re-oriented in order to serve the needs of small and marginal farmers. The benefit of subsidy to small and marginal farmers is admissible under IRD and SFDA throughout State and under HADA in hill areas. Scheme of strengthening boring organisation would also substantially benefit members of Scheduled Castes as they would be entitled to free boring by departmental staff. Out of Rs.74 crores earmarked for private minor irrigation, Rs.10 crores would flow to these castes. Similarly in regard to State minor irrigation schemes benefits totalling Rs.35 crores would flow to Schedules Castes, out of Rs.264.74 crores. Besides taking-up minor irrigation works on field of individual farmers, it is proposed to make a social investment on development of assured irrigation for Scheduled Caste farmers and offer water at concessional rates to them. This programme will result in making uneconomic holdings viable.

8. *Soil Conservation*—Scheduled Caste families also would be benefitted under scheme of Soil and Water conservation.

The land owned by Scheduled Castes persons would be treated departmentally and entire cost would be recovered from beneficiary, as there is no subsidy admissible under this scheme. The scheduled caste labourers would also get employment in execution of the soil conservation works.

9. Out of total provision of Rs.55 crores for agriculture department, Rs.15 crores are likely to be spent for the benefit of members of Scheduled Castes. Similarly, Rs.3 crores out of Rs.32.65 crores outlay of forest department would flow for their welfare.

10. *Area Development*—The main schemes under this programme are DPAP, CADA, Trysem, I. R. D., P. R. A. D., S. F. D. A., Antyodaya and H. A. D. A. About 50 per cent of beneficiaries from these schemes would be member of Scheduled Castes. The Corporation will also provide 25 per cent as subsidy to Schemes of all occupations, and 50 per cent cost would be made available through financial institutions. Out of Rs.500 crores earmarked for area development, Rs.210 crores would be spent for the benefit of members of Scheduled Castes during the Plan period.

11. Animal husbandry programme consist of upgrading of cattle and poultry population, increase in productivity per animal, provision of health cover for cattle, arrangements for feed and fodder, training and education for better and effective implementation of programmes and better management. Schemes for pig breeding and sheep rearing render benefits almost exclusively to members of Scheduled Castes. Even from poultry development programmes and rearing of heifers about 30 per cent benefit would flow to them. Bulk of benefits from carcass utilisation programme will similarly accrue to these Castes. It has been estimated that benefits of Rs.2 crores, out of a total outlay of Rs.32 crores for 1980-81 would directly flow to scheduled castes. Apart from this, out of Rs.19 crores earmarked for dairying and milk supply, a sum of Rs.1.50 crores is proposed to be earmarked for these classes.

12. *Fisheries*—At present mostly Kewat and Machhuas are traditionally employed

in pisciculture. In the matter of allotment of Gaon Samaj water, preference is given to them. Main scheme is to lease to them on long term basis, village tanks, making of arrangement for bank loans for improving these tanks and providing inputs, training in modern methods of fisheries and supply of fingerlings. In financial terms benefit to Scheduled Castes is estimated at Rs.0.4 crores out of Rs.5.80 crores allocated for this purpose.

13. *Forest*—The Forest department would undertake necessary steps to ensure maximum benefits to Scheduled Castes while implementing the various plantation and social forestry programmes during 1980—85. Thus flow of benefits to these castes is estimated at Rs.8 crores out of Rs.106.82 crores allocated for forestry.

14. *Community Development*—Benefits for Scheduled Castes can be quantified in Panchayat Raj, Pradeshik Vikesh Dal, Rural engineering service, grant to Zila Parishad and blocks for development amounting to Rs.1.45 crores, out of Rs.47 crores allocated for community development programme for Sixth Plan period.

15. *Co-operation*—Important object of Co-operative movement is to improve economic standard of people belonging to Scheduled Castes with particular stress to weaker sections of agricultural community. It is estimated that benefit amounting to Rs.5 crores out of Rs.78 crores earmarked for this sector would yield direct benefit to Scheduled Castes.

16. In the labour contract societies, the representation of Scheduled Castes would be about 50 per cent. These societies will be provided facilities to get work contracts from various development departments. Managerial subsidy to these societies would be in an ascending order. Bulk of benefits from Rickshaw puller societies would also accrue mainly to Scheduled Caste members.

17. All possible efforts would similarly be made to establish new Scheduled Castes societies (Any society in which 51 per cent or more members are of these castes) so that maximum advantage could be taken from National Co-operative Development Corporation.

18. *Major and medium irrigation*—Main thrust of the new works proposed is towards the coverage of areas hereto unserved by irrigation facilities. Endeavours of the department is to see that area of Schedule Castes concentration and small and marginal farmers get their due share from irrigation. However, the benefit can not be quantified in this sector. Similar position prevails in case of schemes of power generation transmission and distribution. However, in the power sector programme of electrification of harijan bastis would be stepped up. By 1979-80 13,958 harijan bastis had been electrified in this State. During 1980-85 a further 21,261 bastis would be electrified. Quantification of Rs.35 crores has been estimated out of Rs.3130 crores allocated to power sector in 1980—85.

19. *Industries*—In industrial sector, efforts would be intensified to provide maximum possible benefits to weaker sections of society during the 1980—85 Plan. Main thrust of programmes relates to leather, shoe making, carpet-weaving and other handicraft industries in which a large percentage of Scheduled Caste artisans are traditionally employed. State Government has already started a scheme of industrial co-operative societies for improving the economic conditions of scheduled caste and landless labourers. A schemes of providing managerial assistance and share capital to industrial co-operatives for harijans, construction of godowns, marketing of shoes, assistance in procurement of raw materials, design development and common facility centres has also been introduced. District industries centres are being established in all districts of the State, in order to provide power, raw material, credit and technical assistance to the entrepreneurs. Moreover, there would be a provision for reservation of seats for those belonging to scheduled castes in all training and educational programmes. Stipends would be provided to those who undergo training in the field of industrial development. An amount of Rs.40 crores has been quantified for the benefit of Scheduled Caste out of the total of Rs.150 crores ear-maked for village and small industries during 1980—85. Amount

and benefit from large and medium industries can not be quantified.

20. *Roads and bridges*—The benefits of construction of roads and bridges will automatically reach the Scheduled Castes also. However, in the special component Plan provision would be made for construction of roads in pockets where concentration of Scheduled Caste population is more. Emphasis would be given in construction of link-roads as a basic part of intra-structural and economic development, which would connect Harijan bastis and villages with main roads. Thus benefit in terms of higher employment and constructional activities and capital assets formation to the extent of Rs.45 crores out of the total outlay of Rs.842.75 crores in the plan period would flow to Scheduled Castes families.

21. *Education and technical education*—Although number of primary and middle schools has risen considerably during recent years, yet problem of drop-outs has been confronting the State. Bulk of drop outs come from weaker sections, especially Scheduled Castes. Various steps have been proposed during Sixth Plan for incentives and environmental improvement in primary and middle schools, adult education centres and farmers functional education centres. Twenty per cent of new primary schools would be opened in areas having concentration of Scheduled Caste population. The benefits of Rs.30 crores would flow to Scheduled Castes out of Rs.290.30 crores allocated for education.

22. Various technical institutions including engineering colleges and diploma institutions provide reservation in admissions to those belonging to Scheduled Castes to the extent of 18 per cent. Thus, the benefits of Rs.3.50 crores would flow to Scheduled Castes out of Rs.16 crores earmarked for Sixth Plan.

23. *Medical and Public Health*—The main thrust of medical and public health programmes would be on the expansion of medical facilities in rural and backward areas and augmentation of existing rural health service. Scheme for establishment of primary health centres and other ser-

vice centres are for everyone, irrespective of caste and creed and it is not possible to quantify the benefits for these classes exclusively. But efforts would be made to open new primary health centres and sub centres in Harijan bastis so that maximum number of beneficiaries belonging to Scheduled Castes get advantage of these facilities. Thus Rs.20 crores has been quantified for these castes out of total outlay of Rs.302.50 crores. Reservation for members of Scheduled Castes in medical education and medical services has already been provided. In training of dais and A.N.Ms., preference is given to Scheduled Castes candidates.

24. *Water supply and sanitation*—This programme is divided into two parts—Water Supply through wells and diggiss and piped water supply. The former is related to the rural development department and the latter to the local self-government department.

25. Under the scheme of rural development department provision of drinking water wells and diggiss etc. in Harijan abadis in the rural areas, benefit of Rs.20 crores would flow exclusively to members of Scheduled Castes. Attempts are being made to make provision of at least one water well/diggi for every Harijan abadi.

26. So far as schemes of piped water supply is concerned a survey in 1972 revealed that there were 33,000 villages having scarcity of potable water. Out of these piped water supply has been arranged in 7000 villages. At least 25 per cent of investment i.e. Rs.75 crores in water supply would be utilised for the benefit of Scheduled Castes during 1980–85 by covering those villages which have high percentage of Scheduled Castes population.

27. *Housing and urban development*—Housing and urban development department deals with housing for all categories of persons, urban development and slum clearance schemes. Eighteen per cent houses, plots and shops etc. constructed would be reserved for Scheduled Castes. As regards improvement of slum areas more than 50 per cent of beneficiaries would be from Scheduled Castes. The

various schemes are being implemented through development authorities, Corporations and municipal boards and U. P. Housing Board. Rs.25 crores has been quantified out of Rs.68.84 crores allocated for the Sixth Plan and Rs.15 crores quantified in urban housing for the benefit of these castes. Similarly, 1,25,000 houses in rural areas are proposed to be constructed out of which roughly 80 per cent houses would go to Scheduled Castes members. Under this scheme, Rs.20 crores has been quantified for these castes. A sum of Rs.2.40 crores has also been earmarked for development of sites under Harijan housing schemes.

28. *Labour and labour welfare*—Under the scheme of labour and labour welfare and craftsmen training 50 per cent and 20 per cent benefits would go to Scheduled Castes respectively. Accordingly, Rs.1.50 crores and Rs.1.10 crores have been earmarked for labour welfare and craftsmen training respectively for the benefit of Scheduled Castes. Scheme of rehabilitation of bonded labour would mainly benefit Scheduled Castes.

29. *Nutrition*—Provisions for nutrition Programme have been made under education department, rural development and social welfare department. Fifty per

cent of the total allocation, i.e. Rs.7.85 crores would go to Scheduled Castes families.

30. *Welfare of Scheduled Castes*—An outlay of Rs.85 crores has been provided for the Sixth Plan exclusively for Scheduled Castes. The schemes falling under this category are being implemented through harijan welfare department. Schemes of this department are broadly of three categories namely, economic development, education, health and housing etc.

31. Apart from the above programmes, programme for all round intensive development of Scheduled Castes based on family oriented and economic improvement would be taken up, in most of the blocks having concentration of Scheduled Castes by various development department. A cluster and saturation approach is being adopted in these areas. Special assistance would also be given to strengthen programmes by Harijan and social welfare department. In 1980-81 this programme has already been started in 82 blocks inclusive of all 38 blocks in which 40 per cent or above population belong to Scheduled Castes. Rs.10.64 crores has been earmarked as a special assistance for these blocks.

## Annexure I

## Special Component Plan for Scheduled Castes

(Rupees in lakhs)

Serial no.	Head of Development/Department	1981-82		1980-85	
		Total	Special Component Plan	Total	Special Component Plan
1	2	3	4	5	6
<b>1 Agriculture production</b>					
(1)	Agriculture Department .. .. .	515	200	5500	1000
(2)	Fruit Utilization } .. .. .	200		2052	} 250
(3)	Horticulture .. } .. .. .	100	30	1650	
(4)	Rural Development .. .. .	65	..	325	
(5)	Cane .. .. .	175	15	2098	80
(6)	L.S.G. (Sewage) .. .. .	15	..	200	..
(7)	Agricultural Research and Education .. .. .	500	..	2850	..
(8)	Marketing (including link Roads) .. .. .	200	20	1366	100
(9)	Storage and Warehousing .. .. .	35	..	300	..
	<b>Total Agriculture</b> .. .. .	<b>1805</b>	<b>265</b>	<b>16341</b>	<b>1430</b>
<b>2</b>	<b>Land Reforms</b> .. .. .	<b>1100</b>	<b>..</b>	<b>6054.89</b>	<b>..</b>
<b>3 Minor Irrigation</b>					
(1)	Private Minor Irrigation .. .. .	625	120	8400	1000
(2)	Ground Water Survey .. .. .	65	..	500	..
(3)	State Minor Irrigation .. .. .	5310	750	26474	3500
	<b>Total Minor Irrigation</b> .. .. .	<b>6000</b>	<b>870</b>	<b>34374</b>	<b>4500</b>
<b>4 Soil Conservation</b>					
(1)	Agriculture Department .. .. .	825	220	5500	1500
(2)	Forest Department .. .. .	404	75	4506	300
	<b>Total Soil Conservation</b> .. .. .	<b>1229</b>	<b>295</b>	<b>10006</b>	<b>1800</b>
<b>5 Area Development—</b>					
(1)	S.F.D.A. } .. .. .	4610	1800	31150	18000
(2)	D.P.A.P. }				
(3)	C.A.D.A. }				
(4)	Trysem }				
(5)	I.R.D. }				
(6)	P.R.A.D. }				

## Annexure I—(Contd.)

(Rupees in lakhs)

Serial no.	Head of Development/Department	1981-82		1980-85	
		Total	Special Component Plan	Total	Special Component Plan
1	2	3	4	5	6
	(7) Rural Development Deptt. (Planning at local level)	1200	600	6350	3000
	(8) H.A.D.A. .. .. .	100	20	1160	100
	<b>Total, Area Development .. .. .</b>	<b>5910</b>	<b>2,420</b>	<b>38 660</b>	<b>21100</b>
6	<i>Animal Husbandary .. .. .</i>	375	40	3200	200
7	<i>Dairying and Milk Supply .. .. .</i>	300	30	1900	150
8	<i>Fisheries .. .. .</i>	155	5	780	40
9	<i>Forest .. .. .</i>	1480	160	10682	800
10	<i>Investment in Agricultural Financial Institution .. .. .</i>	475	..	3000	..
11	<i>Community Development—</i>				
	(1) Panchayat Raj .. .. .	150	15	700	75
	(2) Pradeshik Vikas Dal .. .. .	10	2	150	10
	(3) Rural Engineering Service .. .. .	225	..	1400	..
	(4) Rural Development .. .. .	132	..	1718	..
	(5) Grant to Zila Parishads and Block for Development.	58	12	732	60
	(6) National Rural Employment Programme .. .. .	200	..	12500	..
	<b>Total, Community Development .. .. .</b>	<b>775</b>	<b>29</b>	<b>17200</b>	<b>145</b>
II.	<i>Cooperation—</i>				
	(1) Cooperative Department .. .. .	1030	100	7,800	500
	(2) Coop. Audit Organisation .. .. .	20	..	150	..
	<b>Total Cooperation .. .. .</b>	<b>1050</b>	<b>100</b>	<b>7950</b>	<b>500</b>
III.	<i>Irrigation and Power—</i>				
	(1) Irrigation .. .. .	22600	..	146400	..
	(2) Flood Control .. .. .	2700	..	21800	..
	(3) Power .. .. .	50000	700	313000	3500
	<b>Total Irrigation and Power .. .. .</b>	<b>75300</b>	<b>700</b>	<b>481200</b>	<b>3500</b>



(Rupees in lakhs)

Serial no.	Head of Development/Department	1981-82		1980-85	
		Total	Special Component Plan	Total	Special Component Plan
1	2	3	4	5	6
<b>IV. Industries and Mining—</b>					
(1) Large and Medium Industries	.. ..	3950	..	35028	..
(2) Sugar Industries	.. ..	1000	..	6600	..
(3) Village and Small Industries	.. ..	2300	850	16000	4000
(4) Geology and Mining	.. ..	295	..	2100	..
<b>Total Industries and Mining</b>	.. ..	<b>7545</b>	<b>850</b>	<b>59728</b>	<b>4000</b>
<b>V. Transport and Communication—</b>					
(1) Road and Bridges	.. ..	10500	850	34886	4500
<b>(2) Transport—</b>					
(a) Transport Corporation (Roadways)	.. ..	1425	..	7800	..
(b) Non-Roadways	.. ..	25	..	135	..
(c) Roadways	.. ..	..	..	..	..
(3) Tourism	.. ..	300	..	2000	..
<b>Total Transport and Communication</b>	.. ..	<b>† 12250</b>	<b>850</b>	<b>104821</b>	<b>4500</b>
<b>VI. Education—</b>					
(1) Education Department	.. ..	3159	600	29030	3000
(2) Sports Department	.. ..	100	..	800	..
(3) Documentation Centre	.. ..	1	..	5	..
(4) Cultural Affairs	.. ..	40	..	350	..
<b>Total General Education</b>	.. ..	<b>3300</b>	<b>600</b>	<b>30185</b>	<b>3000</b>
(2) Technical Education	.. ..	210	42	1600	350
(3) Scientific Services and Research	.. ..	65	..	500	..
<b>VII. Public Health, Sanitation and Water Supply—</b>					
(1) Medical and Public Health	.. ..	3850	400	30250	2000
<b>(2) Water Supply and Sanitation—</b>					
(a) L.S.G.	.. ..	7650	1500	51362	7500
(b) Rural Development	.. ..	350	350	2000	2000
<b>Total Public Health Water Supply and Sanitation</b>	.. ..	<b>1180</b>	<b>2250</b>	<b>83612</b>	<b>11500</b>

## Annexure I—(Contd.)

(Rupees in lakhs)

Serial no.	Head of Development/Department	1981-82		1980-85	
		Total	Special Component Plan	Total	Special Component Plan
1	2	3	4	5	6
<b>VIII. Housing and Urban Development—</b>					
<b>1. Housing</b>					
	(1) Housing Department .. .. .	1200	550	6884	2500
	(2) House-sites for landless labourers and housing for rural Pooors :				
	(1) Revenue Deptt. .. .. .	25	20	300	200
	(2) Rural Development .. .. .	300	250	2500	2000
	(3) <i>Non-Plan Buildings—</i>				
	(1) Judicial Deptt. .. .. .	170	..	2400	..
	(2) Revenue Department .. .. .	115	..	1500	..
	(3) Estate Department .. .. .	130	..	3500	..
	(4) P.W.D. .. .. .	125	..	3000	..
	(5) Finance (Sales Tax) .. .. .	35	..	200	..
	(6) Food and Civil Supply .. .. .	12	..	300	..
	(7) Home Police .. .. .	450	..	4500	..
	(8) Home Jails .. .. .	45	..	500	..
	(9) Excise .. .. .	5	..	26	..
	(10) Civil Defence .. .. .	3	..	20	..
	(11) Finance Department (Loans to Govt. Servants)	175	..	1000	..
	(12) Karmik Vibhag .. .. .	7	..	100	..
	(13) Finance (Stamp Registration) .. .. .	3	..	20	..
	Total, Non-Plan Buildings .. .. .	1275	..	17066	..
	Total Housing .. .. .	2800	820	26750	4700
<b>2. Urban Development—</b>					
	Housing .. .. .	1665	160	10197	1500
<b>IX. Other Social Services—</b>					
	(1) Information and Publicity .. .. .	206	..	751	..
	(2) <i>Labour and Labour Welfare—</i>				
	(a) Labour Welfare .. .. .	40	20	304	150
	(b) Employment Exchange .. .. .	8	..	69	..
	(c) Craftsman Training .. .. .	112	22	635	110
	Total Labour Welfare .. .. .	160	42	1008	260

## Annexure I—(Concl'd.)

(Rupees in lakhs)

Serial no.	Head of Development/Department	1981-82		1980—85	
		Total	Special Component Plan	Total	Special Component Plan
1	2	3	4	5	6
(3)	Welfare of Backward Classes .. ..	1000	800	8500	6500
(4)	Social Welfare .. ..	175	45	1600	200
(5)	<i>Nutrition—</i>				
(a)	Education Deptt. .. ..	80	40	720	360
(b)	Rural Development Deptt.				
(1)	M.N.P. .. ..	45	22	480	240
(2)	Non-M.N.P. .. ..	20	10	175	85
(c)	Social Welfare Deptt. .. ..	35	18	200	100
	Total Nutrition .. ..	180	90	1575	785
X.	Economic and General Services .. ..	460	..	3925	..
	TOTAL (State Plan) .. ..	137820	11463	966100	71460
	<i>Central Sector Schemes</i>				
(a)	Special Component Plan .. ..	..	2000	..	15000
(b)	Food for Work .. ..	..	3000	..	10000
	Total Central Sector.. ..	..	5000	..	25000
	Total .. ..	..	16463	..	96460

CHAPTER 7  
AGRICULTURE AND ALLIED SERVICES

(1) AGRICULTURE

(i) *Agricultural Production*

The State of Uttar Pradesh has rich natural resource endowment for the development of agricultural production. By and large, in most part of the State, land is fertile and rich belonging to the alluvial type. So far as water resources are concerned the State of Uttar Pradesh is situated on a water bowl, meaning thereby that the State has vast resources of surface as well as underground water.

2. Judicious development and exploitation coupled with proper maintenance and conservation of these vital natural resources, holds out promising prospects for continued development of agricultural production in the State. From the point of view of performance there has been steady progress in utilization of both surface as well as underground water, and at present about 50 per cent of the net cultivated area has access to one or another irrigation facility. Similarly, concerted efforts are being directed towards augmenting and maintaining soil fertility. Soil and water conservation measures are also being carried out on an increasing scale over the past 25 years on watershed basis with particular emphasis on hilly tracts ; drought prone areas and command areas of major irrigation projects.

3. One of the essential pre-requisites of continued agricultural development would be the development of suitable technology for maximising productivity and employment per unit of area through continuous research and development. Such research has to be coupled with arrangements for its transfer to vast numbers of individual and independent farmers in the State.

4. Infra-structural support created so far for crop husbandry in the State, has enabled total production of foodgrains in the State to go up to 231 lakh tonnes in the year 1978-79. But in 1979-80 immediately following this all time high production,

total foodgrain production sagged to 161 lakh tonnes. This deterioration took place under the impact of one of the most serious droughts that the State has experienced in many decades. This is an unmistakable signal to the planners as well as crop husbandry specialists that all out efforts must be made to stabilize production level at an optimum level, through judicious utilization of such infra-structural facilities as irrigation, soil and water conservation, dry farming technology, sound soil and water management practices, augmenting vegetative cover to ensure ecological balance etc. The basic emphasis in the planning for the agricultural sector in the State during the Sixth five year Plan period should essentially be to sustain growth and also to take steps to ensure that stability is ensured under adverse conditions or natural calamities, like droughts and floods. All possible efforts should, therefore, be directed towards consolidating the production capacity that has been reached till now. Future strategy should be planned from this firm base.

5. In Planning for agriculture production in a State like Uttar Pradesh, an important factor that needs to be kept in sharp focus is that of the total number of holdings in the State over 80 per cent fall in the category of small and marginal land-holdings. As such, it becomes the duty of the State to ensure that the fruits of development in the form of increased production and productivity reach all categories of farming community on an equitable basis. Many studies in the past have revealed that fruits of development in crop husbandry have largely accrued to the well-to-do class rather disproportionately. This trend will have to be arrested through the development of effective technology for the small and marginal farmers and for dry farming areas. This factor adds an important dimension to the projected growth in the crop husbandry sector, that of growth with distributive justice.

## PAST PERFORMANCE AND PRESENT STATUS OF AGRICULTURAL PRODUCTION

6. *Area, Production and Productivity*—The figures in the time series reveal that highest ever foodgrain production was recorded in the year 1978-79. Incidentally during the same year average productivity was also the highest. However, due to serious drought conditions the production of foodgrains during the following year came down to 161 lakh tonnes as against 231 lakh tonnes of 1978-79.

7. *Growth rate*—Over the period 1950-51 to 1978-79, agricultural production advanced at the average compound rate of 2.18 per cent. Area under crops increased at the rate of 0.43 per cent per annum and productivity at 1.73 per cent per annum during the same period.\*\*

8. *Problems in increasing the crop production*—One of the main problems confronting the State is that the agricultural production mechanism is still highly vulnerable to weather aberrations. As such there are years of good crop followed by years of drought and floods. Main reasons of low crop production in the State are as under :—

(i) *Drought*—It is well known that it is the *kharif* crops which are mostly vulnerable to drought. A major part of irrigation waters are used for *rabi* cereals, particularly for wheat followed by sugarcane and potato. Paddy is still mostly grown under un-irrigated and poorly drained conditions, which is the main reason for such a poor rate of growth in a production of rice. Long duration paddy crop is being grown in un-irrigated areas where sufficient rain water is accumulated for transplanting. This is mostly available during August-September. Only tall varieties are being grown because 30 to 45 cm. water is accumulated in such fields, sometimes during August to September. The dwarf varieties cannot withstand submergence. All out efforts are being made to replace long duration paddy with short or

medium duration only wherever feasible, so that *rabi* crops can be sown well in time.

(ii) *Floods*—Floods are a recurring feature in the State though the extent of damage is variable. In flood prone areas, it is necessary to provide assured drainage and irrigation facilities in order to ensure double multiple cropping. Since these areas are usually undulating and it may be difficult to have canals, it is possible to instal diesel operated pumps fitted on trolleys. Boring could be done in these areas and the outlets kept closed during flood situation. As flood waters recede, pumping sets could be connected to the outlets for irrigation. Since seed becomes the first casualty in flood situation, it is essential to plant for buffer stocking of seeds for such areas.

(iii) *Post harvest technology*—Appropriate post-harvest technology for threshing and storage is not yet fully developed and adopted by cultivators. As *rabi* constitutes a major part of the year's harvest, it is necessary to promote manufacture of threshers of different specifications.

(iv) *Credit support*—In order to finance agricultural operations as per production targets main reliance is laid on co-operatives and commercial banks. On the basis of past performance it is observed that desired level of credit support in the shape of long, medium and short term loans is not being uniformly provided.

## CROP PRODUCTION

9. *Foodgrains*—In foodgrains, high yielding varieties of wheat have been mainly responsible for boosting production of foodgrains. This increase has not been uniform throughout the State and was mostly accelerated after 1960 as shown by the figures of compound growth rates for production and productivity of total foodgrains, rice and wheat for two periods, i.e., first from 1950-51 to 1960-61 and

\*Annexure I.

\*\*Annexure II.

second from 1950-51 to 1978-79 shown in the following table :

Crops	Period I		Period II
	1950-51 to 1960-61	1950-51 to 1978-79	
	1	2	3
<i>Rice</i>			
Production ..	..	5.28	3.13
Productivity ..	..	3.66	2.09
<i>Wheat</i>			
Production ..	..	2.51	5.16
Productivity ..	..	0.74	2.33
<i>Foodgrains</i>			
Production ..	..	1.67	2.18
Productivity ..	..	0.74	1.73

10. Highest crop yields of cereals and pulses were obtained in 1978-79 when the total production of foodgrains touched on all time high at 231.10 lakh tonnes. There has been steady increase\* in foodgrains production from 1976-77 to 1978-79 but, as indicated earlier, there was a sharp decline during 1979-80 due to unprecedented drought conditions.

11. *Trends in Productivity in main crops*—The increase in yield of foodgrains is partly due to diversion of additional area under cultivation from cultivable waste, mostly sub-marginal lands, and partly due to increase in productivity through the introduction of high yielding varieties programme.

12. Unfortunately 1979-80 was an extreme drought year and average of almost all the crops declined.\*\*

13. The per hectare yields of rice and jowar were very low during 1965-66 and 1979-80 owing to extreme drought conditions that prevailed in the State during these years.

14. *Cash Crops Oilseeds*—Oilseeds are cultivated in an area of about 37 lakh hectares in Uttar Pradesh. This is contributed by five major oilseed crops namely groundnut, rapeseed mustard, sesamum, linseed, castor and non-traditional crops viz. soyabean, safflower and sunflower which have also been introduced in this State.

15. Area and productivity of almost all the oilseed crops have declined during the period 1974-75 to 1978-79 except soyabean where the increase\* has been of the order of 175 per cent in area and 42 per cent in productivity.\*

16. *Cotton*—During 1976-77 to 1979-80 the area under cotton varied from 23,000 hectares to 41,000 hectares. Cultivation of cotton is mostly confined to the few western districts of the State. No definite trend in productivity of cotton is visible.

17. *Jute*—In view of the special habitat needed for the cultivation of jute the area under this crop has remained confined to about 10,000 hectares during the last 4-5 years. The productivity per hectare is also more or less static.

18. *Physical Programmes*—For achieving the above-noted increases in production, programmes implemented were, promotion of irrigation facilities, application of balanced fertilizers and manures, use of high yielding varieties seeds, introduction of improved agricultural practices, soil and water conservation measures and an usar reclamation programme.

19. In terms of physical measures progress recorded may be judged from the following table. The last column indicates the proposed targets also for the five years of the Sixth Plan.

Serial no.	Programme	Unit	Actuals			Proposed target
			1977-78	1978-79	1979-80	1980-81
1	2	3	4	5	6	7
1	High yielding Varieties :					
	(a) Paddy ..	,000 ha.	1,800	2,364	2,186	2,500
	(b) Wheat ..	Do.	5,300	5,800	5,192	5,800
	(c) Maize ..	Do.	32	43	32	45
	(d) Jowar ..	Do.	3	2	1	10
	(e) Bajra ..	Do.	30	3	6	10
	Total ..	Do.	7,165	8,212	7,417	8,365

\* Annexure III.

† Annexure IV,

@ Annexure V.

\* Annexure VI.

1	2	3	4	5	6	7
2	Fertilizer Consumption :					
	(a) Nitrogenous (N)	.. .. '000 tonnes	648	772	756	1,000
	(b) Phosphatic ( P2.05 )	.. .. Do.	139	207	182	250
	(c) Potassic (K20)	.. .. Do	73	79	72	110
	Total	.. ..	860	1,058	1,010	1,360
3	Soil sample analysed	.. .. Lakh no.	7.90	7.92	10.84	11.00
4	Plant Protection (Area covered)	.. .. Lakh ha.	134.56	156.78	163.91	178.00
5	Gobar Gas Plants installed	.. .. No.	5,000	2,860	4,345	10,000

20. *Crop Production Potential* :—  
*aims for the Sixth Plan*—At the national level, it is being visualized that in the next 3 to 5 years the aim of irrigated farming should be to harvest up to 3 tonnes of rice, 3 tonnes of wheat and one tonne of summer moong from one hectare of land every year. The first and the foremost requirement to achieve this realizable objective in the near future would be to identify a specific number of crop varieties which could translate these projected production goals into reality in the time frame of 3 to 5 years. In view of the past performance, it will not be unrealistic for the State to aim at production of 1.5 tonnes of rice, about 2 tonnes of wheat and 0.5 tonnes of moong from one hectare of land in a year under irrigated agriculture.

21. In the background of what has been stated in the earlier sections regarding natural resources endowment of the State and the marked change in trends since the mid 60's, it is evident that the State should aim at a higher rate of growth of production from field crops than what has been achieved so far. This is within technologically feasible limits and is a matter of the greatest urgency for the State in view of the need to raise *per capita* incomes in the State to an acceptable level. In order to achieve this, the agricultural sector is of vital significance as about 50 per cent of the State domestic product originates in this Sector. While the rate of growth for agriculture sector is aimed at 4 per cent at the national level, the State proposes to aim at a growth rate of not less than 5.5 per cent during the Sixth Plan.

22. *Strategy*—In order to achieve the above objective of proposed 5.5 per cent per annum growth rate in agriculture, the strategy will be as under :—

(i) To increase intensity of cropping especially in Bundelkhand and Eastern regions by adopting programmes of dry farming, mixed farming and inter-cropping.

(ii) To promote ecological security essential for sustained agricultural advance by paying greater attention to the care of soil fertility, water quality, etc.

(iii) Effective utilisation of every drop of water available both in irrigated and in rainfed areas.

(iv) Coverage of fallow area by sowing suitable crops, depending on the type and time of availability of the land.

(v) Conservation of all farm produce through safe storage and appropriate post-harvest technology.

(vi) To bring about a satisfactory scientific management of land and water.

(vii) Continuously to identify and analyse constraints and deficiencies prevailing in the crop production sector with a view to bring about substantial increase in productivity.

23. *Crop Production Programmes*—The base level production for the Sixth five year Plan, 1980-81 to 1984-85 has been assumed at 214.00 lakh tonnes on the basis of an average of 3 years, 1976-77 to 1978-79. According to the guidelines circulated by the Planning Commission, this Sector will receive highest priority and a national growth rate of 4 per cent per annum is envisaged. As against this, the State has set its targets at 5.5 per cent growth rate as discussed above. Consistent with this, the target of foodgrains production for Uttar Pradesh comes to about 279 lakh tonnes for 1984-85, on the

assumed base level of 214 lakh tonnes.

24. The total population of the State, according to the Census of 1971, was 83.3 million. The rate of growth of population in this State is about 1.9 per cent per annum. With this rate of growth, the population by 1984 would be 112.0 million. This, in terms of adults, would be 95.20 million.

25. The total requirement of foodgrains for human consumption would be 187.29 lakh tonnes in 1984-85. The details of foodgrains requirement are projected as under :—

Serial no.	Item	Lakh tonnes		
		Cereals	Pulses	Total
1	2	3	4	5
(1)	Human consumption	157.76	29.53	187.29
(2)	Cattle food	15.78	2.95	18.73
(3)	Provision for seed	15.78	2.95	18.73
(4)	Storage losses	7.89	1.47	9.36
(5)	Reserve for loan year	7.89	1.47	9.36
(6)	Marketable surplus	7.89	1.47	9.36
	Total	212.99	39.84	252.83

26. Thus, in view of the needs of the State, the proposed targets of Agriculture

Production for the Sixth five year Plan are as follows :

*Targets for the Last Year of the Sixth Plan, 1984-85.*

Serial no.	Foodgrains	Area in '000 hectares Production in '000 tonnes Av. Yield : Quintal per ha.		
		Area	Production	Average yield
1	2	3	4	5
	Rice	5,300	7,700	14.53
	Juar	600	550	9.17
	Bajra	1,000	850	8.50
	Maize	1,200	1,100	9.17
	Kharif pulses	250	350	14.00
	Other cereals	600	240	4.00
	Total, Kharif	8,950	10,790	12.06



1	2	3	4	5
Wheat	.. .. .	7,400	13,000	17.57
Barley	.. .. .	700	800	11.43
Gram	.. .. .	1,600	1,600	10.00
Peas	.. .. .	400	1,000	15.00
Arhar	.. .. .	600	1,000	16.67
Masoor	.. .. .	300	200	6.67
Rabi pulses	.. .. .	2,900	3,800	13.10
Total, Rabi	.. .. .	3,150	3,750	11.91
Total pulses (Kharif Plus Rabi)	.. .. .	11,000	12,200	15.64
Total Foodgrains	.. .. .	19,950	27,990	14.03
Groundnut	.. .. .	500	400	8.00
Till (pure)	.. .. .	100	55	5.50
Castor	.. .. .	5	5	10.00
Rape seed mustard (Pure)	.. .. .	445	320	7.19
Lin seed (pure)	.. .. .	150	60	4.00
Total oilseeds (pure)	.. .. .	1,200	840	7.00

27. The main strategy to attain the required production levels would comprise, among others : increase in irrigation, increase in gross cropped area and cropping intensity as well as judicious use of full package of inputs. Emphasis would also be placed on improving rainfed farming to bring about greater stability in production and increase in productivity. For increasing productivity per hectare, it has to be ensured that the existing irrigated areas attain their maximum productivity as well as the gross area under irrigation is also raised, as quickly as possible.

28. *Physical Programmes*—The details of various physical programmes to be adopted in the Sixth Plan are described below.

29. *Seed*—Foodgrains production dominates agriculture and is the focal point of State's agricultural development. About 75 per cent of total cropped area is devoted to foodgrains. Higher yields have resulted from the use of high yielding seeds together with improved cultural practices, intensive use of inputs, viz. fertilizers, pesticides and irrigation. The impact of seed is best measured by the results of the

total package itself and it may be said that it accounts for 15 per cent to 20 per cent of increase in productivity recorded.

30. *Programme for Sixth Plan*—As present hardly 1.5 per cent of the total *rabi* requirements of seeds and 3 per cent of the *kharif* seeds are being distributed. Efforts will be made to saturate the maximum area with improved seeds and also introduced hybrids in small millets. It is also proposed to replace gradually late paddy by early paddy varieties. It is also proposed to distribute about 3.00 lakh quintals of quality seeds (1.1 lakh quintals *kharif* seeds and 1.9 lakh quintals *rabi* seeds) by the end of the Sixth Plan. The yearly targets of seed distribution by the Agriculture Department are as below :

(Lakh Quintals)

Year	Targets
1	2
1980-81	1.49
1981-82	1.55
1982-83	1.61
1983-84	1.67
1984-85	1.73

31. The crop-wise targets of seed production by the Agriculture Department are given below :

*Certified Seed Production Programme*

(Qty. in Quintals)

Name of Crops	Average production of last 3 years (Base year)	Targets				
		1980-81	1981-82	1982-83	1983-84	1984-85
1	2	3	4	5	6	7
1. Paddy .. ..	54,993	57,193	59,481	61,807	64,334	66,907
2. Maize .. ..	296	308	320	333	346	360
3. Jowar .. ..	39	31	28	25	23	21
4. Bajra .. ..	291	303	315	328	341	355
5. Moong .. ..	101	105	109	119	118	123
6. Urdi .. ..	297	309	321	334	147	361
7. Arhar .. ..	382	397	413	450	447	465
8. Til .. ..	27	28	29	30	31	32
9. Groundnut .. ..	261	271	282	293	305	317
10. Soyabean .. ..	156	162	168	175	182	189
Total .. ..	56,843	59,107	61,466	63,921	66,474	69,130

32. Besides the above, a special programme to promote production of oil-seeds and pulses is in vogue. The quantities proposed to be distributed during Sixth Plan period is given here under :

(Quantity in Quintals)

Year	Oilseeds	Pulses
1	2	3
1980-81 .. ..	10907	40814
1981-82 .. ..	13843	43302
1982-83 .. ..	16868	45155
1983-84 .. ..	19770	46155
1984-85 .. ..	23470	48675
Total .. ..	84848	224201

33. *Special measures proposed to be taken up for pulses*—The State is fully conscious of the urgent need of evolving a multi-dimensional strategy for stepping up the production of pulses. Such a strategy

should not only be able to arrest the declining trend in the production of this critical commodity in high demand, but it should also lead to substantial increase in the availability of pulses in the years to come. This implies that efforts have to be organized to achieve a target of an increase in pulses production from the present level of 23.65 lakh tonnes to 37.00 lakh tonnes by 1984-85. Accordingly, in the projected production pattern of foodgrains in the year 1984-85, productivity of pulses has been kept at 14 quintals per hectare. On the basis of past experience, it might appear to be a somewhat difficult task to accomplish. The following measures are proposed to ensure achievement of this target :

(i) Directing all efforts towards technological break-through in development of high yielding quick maturing varieties of pulses.

(ii) Large scale multiplication of breeders, foundation and certified

seeds through a combined efforts of State agricultural farms, the State Seeds Corporation, and the National Seeds Corporation.

(iii) Pre-sowing treatment of seeds with Rhizobial culture in the new areas to be taken up.

(iv) To minimise private farmer's risks in cultivation of pulses, and increase use of manure, pesticides, etc. and provision of input subsidy and institutional finance at concessional rates.

(v) Laying out large scale demonstrations of recommended package of practices for effective dissemination of technology among farmers.

(vi) High priority to development of dry-land farming technology for cultivation of pulses.

(vii) Cultivation of summer moong on an ambitious scale, with adequate provision of inputs like quality seeds, water, short-term credit, etc.

(viii) Assuring pulse producers a remunerative price for their produce.

34. The object of the above measures

would be to make cultivation of pulses competitive and remunerative, as a result of which pulse crops will not be elbowed out from areas newly brought under irrigation. It is necessary at the national level to provide necessary policy and financial support for achieving a major impact in this area.

35. *Fertilizers and Manures*—Uttar Pradesh has achieved very positive results in crop production by the use of high yielding varieties, creation and utilisation of irrigation potential, and higher consumption of fertilizers. A record production of 114.50 lakh tonnes of wheat and 59.64 lakh tonnes of rice was also achieved during the year 1978-79. In attaining higher production, fertilizer use has been recognised as a 'key-input'. During the year 1978-79, a record fertilizer consumption of 10.58 lakh tonnes was achieved as against consumption of 4.64 lakh tonnes during the year 1973-74. The consumption of fertilizers even during the drought year 1979-80 was 10.00 lakh tonnes.

36. The year-wise target of fertilizers consumption for the Sixth Plan period would be as follows :

(In thousand tonnes)

Year	N	P	K	Total
1	2	3	4	5
1980-81	1,000	250	110	1,360
1981-82	1,100	266	104	1,470
1982-83	1,200	290	120	1,610
1983-84	1,300	310	130	1,740
1984-85	1,400	350	150	1,900

37. Due to global crisis in the supply of petrol and petroleum products, it is quite probable that there may be an adverse impact on the indigenous production as well as the import of chemical fertilizers. In that case, there might be a short-fall in the projected consumption figures of 19 lakh tonnes by the terminal year of the Sixth Five Year plan. Efforts will have to be made for popularising the practice of green manuring to make the likely shortfall in the availability of che-

mical fertilizers. During the year 1980-81, a target of 13 lakh hectares for green manuring has been laid down. It is proposed to progressively increase the area under green manuring during the Sixth Plan period with the target of 25 lakh hectares during the last year of the Plan, i.e. 1984-85.

38. *Rural Compost*—The object of the scheme is to utilise maximum available organic waste in the villages by converting them into good quality manure.

39. The targets of ensuring Sixth five year Plan are given in the following table :

<i>Rural Compost</i>			(lakh tonnes)
Year			Production of Rural Compost
1980-81	..	..	890
1981-82	..	..	900
1982-83	..	..	910
1983-84	..	..	920
1984-85	..	..	930

40. *Gobar Gas Plants*—The progress in setting up of Gobar Gas Plants in the past years remained as under :

Year	Target	Plants set-up	
1	2	3	
1974-75	..	2,000	344
1975-76	..	5,000	1,430
1976-77	..	10,000	9,946
1977-78	..	10,000	5,000
1978-79	..	10,000	2,865
1979-80	..	10,000	4,345

41. It is proposed to achieve a target of 50,000 plants by the end of the Sixth Five Year Plan. Year-wise targets are given in the following table :

*Target of Godebar Gas Plant*

Year	Gobar Gas	
1	2	
1980-81	..	10,000
1981-82	..	10,000
1982-83	..	10,000
1983-84	..	10,000
1984-85	..	10,000

42. *Town Refuse Composting Scheme*—The object of the Scheme is to persuade

local bodies to take up scientific composting from available organic city waste, night-soil and slaughter house waste, etc. to maximise compost production to meet the nutritional requirement of the plants to some degree and improve the soil conditions for higher agricultural production.

43. In the Sixth Plan, it is proposed to cover all the local bodies and achieve a target of 15.5 lakh tonnes of Town Compost Production by strengthening of staff and transportation.

44. The target for the Sixth Five Year Plan is given in the table below :

*Urban Compost*

Year				Urban Compost
	1	2	3	2
1979-80	..	..	..	13,00,000
1980-81	..	..	..	13,50,000
1981-82	..	..	..	14,00,000
1982-83	..	..	..	14,50,000
1983-84	..	..	..	15,00,000
1984-85	..	..	..	15,50,000

45. *Soil testing*—The soil testing programme in the State was launched in 1961-62 with the help of few soil testing laboratories on small scale. At present there are 11 Regional, 46 district level and 10 mobile soil testing laboratories working under the State Department of Agriculture. Two laboratories (one of Fertilizer Corporation of India) Gorakhpur and one Indian Explosives Ltd., Kanpur also cater to the needs of farmers locally 23 laboratories of Agricultural Institutions and 3 laboratories of Cane Department were also assigned the work of soil testing in 1975-76 and the operational area for each laboratory was demarcated in such away as to avoid duplication and overlapping. Non-departmental laboratories are given the responsibility of analysing the soil samples of the block in which they were located.

46. Soil testing Programme target during Sixth five year Plan are given as under :—

(No. in lakhs)

Serial no.	Year	No. of samples to be analysed		Remarks
1	2	3		4
1	1980-81	..	11.00	
2	1981-82	..	11.00	Preference will be given for usar and problematic areas.
3	1982-83	..	11.00	
4	1983-84	..	11.00	
5	1984-85	..	11.00	

47. *Plant Protection*—Plant protection targets proposed for the Sixth Plan period are as follows :—

('000 hectares)

Item	1980-81	1981-82	1982-83	1983-84	1984-85
1	2	3	4	5	6
1. Seed Treatment .. ..	4,450	5,000	5,625	6,250	6,250
2. Field Rats .. ..	7,120	8,000	9,000	10,000	10,000
3. General Pest .. ..	1,780	2,000	2,250	2,500	2,500
4. Intensive Plant Protection measures ..	3,650	4,000	4,500	5,000	5,000
5. Weed control .. ..	890	1,000	1,125	1,250	1,250
Total ..	17,800	22,000	22,500	25,000	25,000
6. Plant Protection Training in simple methods of Plant Protection (lakh no.) ..	700	750	800	850	850

48. *High Yielding Varieties Programme*—The targets for coverage under High Yielding Varieties Programme during the Sixth Plan will be as follows :—

(Lakh hectares)

Crop	Target				
	1980-81	1981-82	1982-83	1983-84	1984-85
1	2	3	4	5	6
Paddy .. ..	25.00	27.00	28.50	33.00	37.50
Maize .. ..	0.43	0.50	0.75	1.00	1.25
Bajra .. ..	0.15	0.10	0.60	0.80	0.25
Jowar .. ..	0.05	0.40	0.15	0.20	1.00
Total Kharif ..	26.65	28.00	30.00	35.00	40.00
<i>Rabi</i>					
Wheat .. ..	58.00	60.00	63.00	65.00	68.00
GRAND TOTAL ..	83.65	88.00	93.00	100.00	108.00

49. *Programme for the Development of Scheduled Castes/Scheduled Tribes*—Keeping in view the National objectives of raising the living standard of the poorest section of the society and removal of unemployment through time-bound programmes, various schemes have been launched, which would directly or indirectly benefit the scheduled castes population. It has been a conscious endeavour to extend benefits of planned development of the State to this section of the population in ample measure. Under various schemes being implemented, due consideration is given to extend benefits to this section of society. A brief description of schemes, which directly or indirectly benefit the scheduled castes is given as under :—

(1) There are 147 seed multiplication farms in the State on which foundation and certified seeds are produced. A large number of labourers are employed to produce these seeds. It is estimated that about Rs.18 to 20 lakhs are being shared by this section of society.

(2) From soil testing facilities about 40,000 cultivators of this group are taking advantage.

(3) Plant Protection measures are also being extended to these groups.

(4) Under various pulses and oil-seeds production programmes, a size-

able amount is being shared by scheduled castes, by way of subsidy on demonstration and inputs.

(5) Bhoomi Sudhar Nigam has been established in this State to undertake reclamation of *usar* on Gram Samaj land with the help of village labourers who mostly belongs to scheduled castes. The land will be distributed to landless Harijans of the village after reclamation.

(6) A new scheme for supply of agricultural inputs for economic development of scheduled castes farmers has been included from the Annual Plan, 1981-82.

(7) An outlay of Rs.980.64 lakhs is proposed for the special component plan for scheduled castes/scheduled tribes.

50. *Employment Generation*—It is difficult to estimate with precision the increase in employment potential that can be generated through implementation of various crop production programmes. However, for working out estimates of additional employment, three important programmes have been considered. These are multiple of cropping, increase in irrigated area and the area brought under high yielding varieties. The details of estimated potential of manpower generated by these programmes is as under :—

Area—Thousand hectares  
Manpower—Thousand Man years

Year	Area cropped more than once		Net irrigated Area		Area under High Yielding varieties		Total manpower required	
	Area	Manpower required	Area	Manpower required	Area	Manpower required		
1	2	3	4	5	6	7	8	
1978-79	..	6819	1364	8892	1629	8212	1384	4377
1979-80		6950	1390	9000	1649	7417	1250	4289
1980-81	..	7230	1446	8800	1612	8365	1410	4468
1981-82	..	7340	1468	9300	1704	8800	1483	4655
1984-85	..	9700	1940	9800	1795	10800	1820	5555

51. An outlay of Rs.223.91 crores has been proposed for agriculture production sector for the Sixth Plan period.\*

(ii) **Cane Development**

52. Trends in cane development and production usually exercise considerable influence on farmers incomes in view of the great value of this cash crop. This sector accounts for a large part of agricultural production in U. P. Ups and downs in cane production affect production of *Khandsari* sugar and *gur*, which have a sizable impact on the consumers' price index.

*Objectives and Strategy for the Sixth Plan 1980-85*

53. Basically the activities of cane development are aimed at increasing per hectare yields, percentage recovery of sugar and stabilising sown area under cane with a view to fully meeting the raw material requirements of the sugar, *khandsari* and *gur* industries.

54. The basic strategy with a view to achieving the above objectives during the Sixth Plan, 1980-85 consists of the following ingredients :-

(i) Use of improved, healthy and fresh seed material.

(ii) Better care of the ratoon crop which accounts for nearly 50 per cent to 55 per cent of the cane area.

(iii) Application of higher doses of nitrogenous fertilizers.

(iv) Adequate protective measures against various diseases, pests or plant pathogens.

(v) Provision of other infrastructural facilities including link roads for ensuring better cane marketing and management.

(vi) Provision of adequate irrigation facilities, especially by utilization of underground water and better water management.

(vii) Effectively orienting the role of sugarcane research towards the short and long-term problems of cane development of the State in general, in particular towards the evolution, testing and multiplication of seed material.

(viii) Evolution and dissemination of improved package of practices through sound extension and training programmes.

55. The above strategy is proposed to be implemented through three sets of models related to different levels of existing yields in various parts of the State :

(a) Under the first model, improved crop husbandry like hoeing of sugarcane crop, use of soil-turning implements control of weeds, moisture conservation with proper water management through levelling and bunding of fields, improved irrigation techniques, use of organic manures, better yield by cultivation of approved varieties at existing fertilisation level are proposed in the districts of Meerut, Bulandshahr, Bijnor, Muzaffarnagar, Saharanpur, Moradabad, Rampur, Pilibhit, Naini Tal, Lakhimpur, Deoria and Gorakhpur.

(b) The second model envisages implementation of all programmes of model one plus 25 per cent additional nitrogen consumption in the districts of Bareilly, Etah, Budaun, Shahjahanpur, Sitapur, Bara Banki, Gonda and Bahraich.

(c) The third model embodies all programmes of model two with 33 per cent increase in fertiliser use, use of necessary quantities of pesticides, proper balance between early, mid and late maturing varieties, construction of inter-village link roads and provision of irrigational support in the districts of Aligarh, Mathura, Hardoi, Faizabad, Jaunpur, Azamgarh, Sultanpur, Varanasi, Ghazipur and Ballia.

56. With these aims in view, cane development schemes have been formulated for which active co-operation of cane grower's, co-operative cane unions, cane councils and sugar factories would be enlisted. The U. P. Sugarcane Research Council would be the instrument for providing healthy nucleus seed material of improved sugarcane varieties.

57. *Targets for Sixth Plan, 1980-85-* At present, the contribution of this State is only 25 per cent of total sugar production

in the country. It is proposed that this contribution be increased to 30 per cent. Thus, the target for sugar production of this State has been proposed to be 21.50 lakh tonnes by the end of the Sixth Plan.

58. In order to produce 21.50 lakh tonnes of sugar by the end of Sixth Plan, the actual crushing capacity of sugar factories with normal working of 130 days duration and with 9.5 per cent sugar recovery would be around 1.74 lakh tonnes TCD per day respectively.

59. During the Sixth Plan, 1980-85, the requirement of sugarcane for production of 21.50 lakh tonnes of sugar would be 226.20 lakh tonnes.

60. Normally about 28 per cent of sugar cane produced in the reserved areas of State is consumed for production of crystal sugar, 55 per cent for *gur* and *khandsari*, and the remaining 17 per cent for seed and chewing, etc.

61. With the increase in daily crushing capacity of sugar factories, their consump-

tion of sugarcane is estimated to increase to about 30 per cent. The total sugar cane production by the end of the Sixth Plan is estimated to be 754 lakh tonnes.

62. During the year 1979-80, the sugar cane production in the State was only 471 lakh tonnes. The target level of sugar cane production of 754 lakh tonnes by the end of 1984-85 exceeds base level production by 283 lakh tonnes, which denotes 9.8 per cent yearly growth rate.

63. During the year 1979-80, an outlay of Rs.143.15 lakh for Plan schemes was provided against which Rs.121.416 lakhs were spent. An additional amount of Rs.377.88 lakhs was spent on continuing non-Plan schemes. During the year 1980-81, an outlay of Rs.144.00 lakhs for Plan schemes and Rs.357.700 lakhs for non-plan schemes has been provided.

64. For the Sixth Plan, 1980-85 an outlay of Rs.2098.00 lakhs has been provided. Basic targets and level of achievements are briefly summed up as below :

Serial no.	Item of Development	Units 1979-80	Base year level	1980-81	1981-82	1980-85
1	2	3	4	5	6	7
1	Sugar Cane area .. ..	Lakh ha.	12.33	12.81	7.18	15.06
2	Average yield .. ..	Tonnes/ Hect.	38.20	46.00	47.00	50.00
3	Sugarcane production .. ..	Lakh Tonnes.	471	589	620	754
4	Sugar production .. ..	Do.	9.96	76.80	17.66	21.50
5	Distribution of Chemical fertilizers :					
	(a) Nitrogen .. ..	'000 tonnes	66.00	65.30	71.20	94.90
	(b) Phosphate .. ..	"	12.00	7.00	7.10	7.50
	(c) Potash .. ..	"	4.00	3.50	3.50	3.50
	Total .. ..	'000 tonnes	82.00	75.80	81.80	105.90
6	Area covered through distribution of fertilizers.	'000 hectares.	12.33	12.81	13.18	15.06
7	High yielding varieties seed distribution	Lakh tonnes.	2.18	2.15	2.20	2.40
8	Storage capacity to be added through construction of manure godowns by co-op cane unions.	'000 Tonnes	127.60	129.28	132.08	140.08



65. The average per hectare yield of sugar cane during 1979-80 was only 38.2 tonnes. This yield level is proposed to be increased by implementation of intensive development programme under different plan schemes to 50 tonnes per hectare by the end of 1984-85.

66. In view of above proposed average yield per hectare for 1984-85, the area under sugar cane would be 15.06 lakh hectares by the end of Sixth Plan.

67. *Non-Plan Programmes and their Support to Development Programmes*—The following Non-Plan schemes are being implemented in the department under which only the cost of establishment and office contingencies are provided :

- (1) Establishment of Cane Commissioner, U. P.
- (2) Cane Commissioner (Supervisory staff).
- (3) Reservation and Bonding staff.
- (4) Sugar Cane and Sugar Inspectorate.
- (5) Development and intensification of sugar cane cultivation.
- (6) Intensification of manuring facilities.
- (7) Creation of few temporary posts for Co-operative Sugar Factories.
- (8) Cane development in sugar factory areas.
- (9) Study of operation and impact of intensive sugar cane production programmes.
- (10) Intensive sugar cane production.
- (11) Intensive cane protection activities on the lines of package programmes in sugar factory areas.

68. Thirty-five revenue districts of the State are concerned with sugar cane cultivation and 89 sugar factories are in operation. Officers and staff provided under the above mentioned non-Plan schemes are looking after the development of sugar cane, the timely marketing to sugar factories, implementation of the provisions of U. P. (Sugar Cane Regulation and Supply) Rules, licensing of *khandsari* units. The other essential development programmes such as improving rural transport, communications,

education, health, etc., are carried out from funds of cane development councils/cane unions.

69. *Schemes to be implemented during the Sixth Plan, 1980-85*—The following continuing plan schemes with certain modifications are being proposed to be implemented during Sixth Plan beginning with 1981-82 :

(1) Scheme for strengthening Plan cell in the office of Ganna Ayukta.

(2) Scheme for Cane Development in new sugar factories completed/proposed during Fifth Plan period.

(3) Scheme for intensive cane development in 16 kms. radius of sugar factory areas.

(4) Scheme for production of foundation cane seed.

(5) Scheme for subsidising expenditure on transport of cane seed.

(6) Scheme for cane development in Uttar Pradesh.

(7) Scheme for subsidising U. P. Sugar Cane Research Councils.

(8) Scheme for Cane Growers' Institute.

(9) Scheme for providing cane protection appliances to growers on subsidised rates.

(10) Scheme for controlling pest epidemics through ground and aerial operations.

(11) Scheme for intensification of manuring facilities.

70. In addition to the above, the following new schemes have also been proposed:

(1) Scheme for construction of minor drains in sugar factory areas under Gandak Command of Gorakhpur and Deoria (Padrauna Charge) Districts.

(2) Scheme for intensive cane protection programmes.

(3) Scheme for construction of inter-village link roads on contributory basis.

(4) Scheme for reclamation of *usar* land in areas of sugar factories.

(5) Scheme for evaluation of average yield and production at regions/districts.

(6) Scheme for publicity and public training pertaining to sugar industry and cane development.

(7) Scheme for development of sugar cane in new sugar factory areas during Sixth Plan.

(8) Scheme for provision of supervisory staff for additional regions/districts.

(9) Scheme for cane development in non-reserved areas.

71. *Employment Generation*—The proposed new schemes will generate additional employment potential during the Sixth Five-Year Plan period 1980–85, as under :

	Employment Potential	
	Mandays	No. of posts
(1) Scheme for construction of inter village link roads on contributory basis..	5,61,454	..
(2) Scheme for publicity and public training pertaining to sugar industry and cane development.	..	638
(3) Scheme for provision of staff for development of sugar cane in areas of 13 new sugar factories.	..	508
(4) Scheme for provision of supervisory staff for additional 2 regions and 3 new districts.	..	23
(5) Scheme for provision of staff for non -reserved areas in 18 districts.	..	468
(6) Scheme for evaluation of average yield and production at regional and district levels.	..	..

72. *Special Component Plan*—During 1980-81, a sum of Rs.9 lakhs has been quantified under following Plan schemes for the benefit of scheduled castes/scheduled tribes.

Amount  
quantified  
for 1980-81  
and  
onwards

(In lakh rupees)

(1) Scheme for providing cane protection appliances to growers on subsidised rates.	0.70
(2) Scheme for subsidising expenditure on transport of seed cane.	0.20
(3) Scheme for production of foundation seed cane.	1.80
(4) Scheme for intensive cane development around 16 kms, radius of sugar factories.	2.80
(5) Scheme for Cane Development in U.P.	3.50

Total .. 9.00 lakhs

73. A sum of Rs.80.00 lakhs and Rs.15.00 lakhs have been earmarked for the uplift of 5,000 families of scheduled castes and scheduled tribes during Sixth Plan, 1980–85, for development of 50,000 hectares of cane area.

74. *Outlay and Programmes for Hills*—An outlay of Rs.75.00 lakhs for the Sixth Plan 1980–85 has been earmarked for the hill region of this State. Scheme-wise proposals are as under :

Outlay in  
1980–85

(In lakh Rupees)

(1) Scheme for cane development in new sugar factory areas of Fifth Plan period.	10.00
(2) Scheme for intensive cane development in 16 km. radius of sugar factory.	27.50
(3) Scheme for production of foundation seed cane.	13.00
(4) Scheme for subsidising expenditure of transport of seed cane,	2.10
(5) Scheme for providing cane protection appliances to growers on subsidised rates.	1.50
(6) Scheme for controlling sugar-cane pests through ground and aerial operation.	1.50
(7) Scheme for intensification of manufacturing facilities.	1.70
(8) Scheme for construction of inter-village link roads in sugar factory areas on contributory basis.	17.70

Total .. 75.00

(iii) *Horticulture*

75. Geographical and meteorological conditions prevailing in different parts of the State are most congenial for successful cultivation of various horticultural crops—fruits, vegetables, vegetable seeds, potato, ornamental and flowering plants, spices, paan, etc. Various schemes for development of these crops have been prepared, allotting them requisite priorities in respect of specific areas.

76. *Strategy for horticultural development*—The following steps are proposed to be taken during the Sixth Plan period.

(i) Increasing area under horticultural crops.

(ii) Enhancing productivity of these crops.

(iii) Increasing cropping intensity and diversification of cropping patterns.

(iv) Greater use of inputs, and their scientific applications.

(v) Developing storage, processing and marketing facilities to ensure reasonable price to the producer.

77. Some of the main programme for the Sixth Plan are discussed below :

78. *Increasing area under fruits*—It is proposed to bring under fruits an additional area of 1,10,000 hactres during the Sixth Plan period in the plains districts of U. P. Necessary arrangements will be made to provide technical guidance for laying out orchards, selection of suitable varieties, and to supply healthy planting materials, grafts, seedlings, etc. of genuine varieties. Quick growing fruits like papaya banana, pineapple, grapes, etc. will be given special attention. With a view to provide necessary technical guidance to the growers, extension staff in the form of mobile teams are proposed to be provided. 105 such mobile teams are proposed in the various districts.

79. In order to make fruit cultivation remunerative latest scientific knowledge about technical operations has to be communicated to growers. The existing ex-

ension staff in the districts is too inadequate, as it has to attend to manifold jobs related to fruits, vegetables, potato, supply of planting material, enforcement of U. P. State Fruit Nursery Act and Cold Storage Act, etc. There is no extension staff at the block level. It is, therefore, proposed to provide an A. D. O. (Horticulture) in every block in the 48 mains districts of the State.

80. *Conservation of mango tracts in the State*—Uttar Pradesh is the premier mango producing State in the country. Choicest commercial varieties of mango are extensively grown in not merely scattered mango orchards in every part of the State but more particularly in certain compact areas. There is an immense wealth of varieties and germ plasm in these areas. However, these valuable tracts are not being given due attention for protection and constant upgrading. It is, therefore, necessary to safe-guard these belts by declaring them as special areas or belt and frame special rules for their protection and development.

81. It is proposed to declare the following areas as mango belts :

*Name of district :*

- |                |    |                                     |
|----------------|----|-------------------------------------|
| 1. Varanasi    | .. | Madaudth and Chiraigoan.            |
| 2. Lucknow     | .. | Kakori, Mal, Malihabad, Rahimabad.  |
| 3. Unnao       | .. | Hasanganj, Auras, Miaganj, Safipur. |
| 4. Hardoi      | .. | Sandila, Shahabad.                  |
| 5. Farrukhabad | .. | Kaimganj.                           |
| 6. Moradabad   | .. | Amroha.                             |
| 7. Saharanpur  | .. | Behat.                              |

82. *Establishment of fruit nurseries*—With a view to multiplying planting material, 64 nurseries and 2 multi-purpose farms have so far been established in the plains. Considerable difficulty is experienced in transporting planting material because it causes delay and heavy casualties raise costs as well. Since further increase in area under fruits will be more in the interior rural areas, this transport difficulty is likely to become more acute. It is, therefore, proposed to establish additional 20 nurseries at the headquarters of development blocks during the Sixth Plan.

83. *Proper base for research and training on the problems of fruits growing to*

*provide technical support to the programme*—At present there are two horticultural experiment and training centres at Saharanpur and Basti catering to the problems of the Western and Eastern regions of the State. Variations in agro-climatic and soil conditions exist within each region also and these require separate attention. It is, therefore, proposed to establish Horticulture Experiment and Training Centre at Jhansi, to serve the Bundelkhand region, and 3 sub-centres (at Agra to work under Saharanpur, and 2 at Deoria and Allahabad under Basti). These centres will have full facilities for research work by way of equipment and staff in various disciplines.

84. *Vegetable Development*—Present area of vegetables in the State is estimated at 5.10 lakh hectare. The objective is to increase this area to 12.10 lakh hectare by 2000 A. D. The likely areas where vegetable cultivation will be extended will be kitchen gardens, green belts surrounding cities, large towns, tahsil and block headquarters and river beds. Special areas marked out for concentrating efforts for vegetable cultivation will be in the vicinity of big towns like Delhi, Lucknow, Kanpur, Varanasi, Meerut, Bareilly, and other towns with population over one lakh. Efforts will also be made to increase area under bulb crops, like onions, which will meet the requirements of the State. White onions grown in the State can help to meet the demand of dehydration units. Likewise, garlic production, when increased, can meet the demand of the processing industry for preparing garlic powder and garlic tablets for use by pharmaceutical and medicinal industries both for internal use and for exports.

85. At the end of the Sixth Plan period it is proposed to meet about 6 per cent of the total requirement of vegetable seed for which following quantity of different seeds will be multiplied for distribution through various agencies.

Category of Seed	Quantity (Quintals)
1. Breeder seed .. ..	9.00
2. Foundation seed .. ..	261.00
3. Certified seed .. ..	10,480.00

86. *Establishment of seed production farms*—At present 9 vegetable seed production farms with an area of 140 hectare are established in the State. About 1500 quintals of foundation seeds of vegetables are being produced at full capacities at these farms against the requirement of 4280 quintals. It will, therefore, be necessary to bring additional area under vegetable seed multiplication farms so that adequate quantity of foundations seed could be produced and distributed for multiplications in an area of 200 hectare during the Sixth plan period.

87. *Seed Processing*—Processing of seed constitutes an important item in seed raising. Seeds certified by the seed certification agency, have to be processed, packed and tagged by certification agencies before they are distributed to growers. There are 2 vegetable seed processing plants in the State at Lucknow and Basti. One more processing plant will be required to be established in the Western region of the State.

88. To implement the above programme, the following schemes are proposed during the Sixth Plan period.

1. Establishment of foundation vegetable seed farm over an area of 200 hectare.
2. Raising of certified seed (creation of 5 mobile teams).
3. Establishment of one processing plant.
4. Creation of 5 mobile teams for kitchen gardening in KAVAL towns.
5. Creation of effective organisational set-up at headquarters and regional level.
6. Establishment of seed testing laboratory.

89. *Potato Development*—Uttar Pradesh is a premier potato growing State in the country. Starting as a deficit State, both in respect of seed and ware potato, State has made notable progress in increasing area and production which touched 3.00 lakh hectare and 45 lakh tonnes respectively (about 40 per cent of the area and 50 per cent of production in the whole country). It is expected that with increase in irrigation facilities another 25,000

hectare would come under potato by the end of the Sixth Plan.

90. *Establishment of potato farms*—For raising 60 lakh quintals of certified seed about 2 lakh quintals of foundation seed will be required against which only 40,000 quintals is being raised every year.

Five units of potato farms, of 40 hectare each, will be established for multiplication of disease free potato seed. At these units 40,000 quintals is being raised every year. This will be further multiplied in two stages at Government nurseries and gardens and at private growers holdings and will produce 2 lakh quintals of certified I and 10 lakh quintals of certified-II seed.

91. *Spices Development*—Schemes for extension of spices and condiments cultivation (coriander, fennel, cumin, kalaunji, onion garlic, ginger and turmeric) is operating in the districts of Deoria, Gorakhpur, Basti, Azamgarh, Ghazipur, Ballia, Jaunpur, Gonda and Bahraich. The extension measures have resulted in increased production and supply of these cash crops. It is proposed to extend this scheme to cover 6 more districts of the eastern and the central region viz. Bara Banki, Rae Bareli, Sultanpur, Sitapur, Lakhimpur-Kheri and Pilibhit and also the five districts of Bundelkhand region (Lalitpur, Jhansi, Jalaun, Banda and Hamirpur).

92. It is proposed to provide subsidy on the cost of seed and fertilizers at the rate of 25 per cent and 33-1/3 per cent respectively to small and marginal farmers as it is available to the growers of districts where the scheme is already in operation.

93. *Paan*—Paan is a cash crop requiring to be grown under green house conditions. It needs attention for protection against the ravages of fungal and other diseases and insect pests. It is proposed to undertake extension work for developing and improving this crop in the State. For this purpose, a Paan experiment and Extension Centre is proposed to be set up at Mahoba in Hamirpur district. The Centre will be equipped with suitable equipment and staff to tackle various problems relating to its cultivation starting with the col-

lection of various strains and varieties, to select really promising types possessing desirable characters of productivity, quality and resistance to diseases and pests, and to standardise the package of practices including preparation of suitable type of land, manurial and water requirements, and plant protection measures. Staff and contingencies will also be provided for extension work on this crop.

94. *Development of Government Gardens*—Additional facilities to develop existing Government Gardens for making them models of ornamental gardening are required for improving irrigation facilities, repairing of roads, making grills at proper places, fencing and raising of boundary walls, providing lawn mowers and other necessary implements, making of new chick houses, earth work for improving waste lands, purchase of cement pots, benches, construction of ponds for amphias etc. are also proposed in the Sixth Plan.

95. *Development of Bee-keeping*—At present there are 4 bee-keeping training centres, 2 in hills and 2 in plains. However, these centres suffer greatly from lack of suitable and adequate staff and accommodation facilities. These will be improved in order to achieve proper technical standards and align the training programme to newer knowledge.

96. *Statistics*—The following programme is proposed to be taken up during the Sixth Five-Year Plan.

(a) Area of horticultural crops (fruit, and vegetables) will be recorded by the Revenue Department and will be maintained and published by the Directorate of Agriculture. Under this programme the following important crops will, be taken up.

(i) Mango, guava, apple, citrus, banana, jack-fruit, and papaya.

(ii) Tomato, potato, onion, garlic, sweet-potato, turmeric, ginger and chillis amongs vegetable and spices.

(b) Yield per unit area of important fruit and vegetable crops will be determined by conducting crop-cutting surveys.

(c) Monitoring cell will also work under the statistical section. This scheme will be extended during the Plan period.

(d) Project formulation cell will be extended. This cell will help in the preparation of Plan schemes. I. A. R. S. have given an estimate for the crop cutting surveys Rs.2.50 lakhs per crop per year. Therefore estimated expenditure for eight crops will be about twenty lakhs of rupees per year. The total expenditure during the Sixth Plan will be approximately Rs.1 crore.

97. *Strengthening of the Directorate, Regional and District Offices*—Prior to the creation of a separate Directorate of Horticulture, there was only skeleton staff in various districts of the State. The position did not change materially in respect of field and office staff in these institutions. With greater concentration of efforts for horticulture development, work load has also increased considerably. For better supervision and effective implementation of various schemes it is essential that adequate provision is made for making up deficiencies in the organisation.

98. *Financial requirements*—An outlay of Rs.1650 lakhs is proposed for the Sixth Plan period.

99. *Fruit Utilization Programme for Hill*—The hill districts of U. P. are situated in the northern part of the State adjoining the international boundaries of Nepal and Tibet. The agro-climatic and soil conditions of the hilly region are congenial for growing almost all the sub-tropical and temperate fruits, vegetables, potato, spices, and horticultural crops.

100. With a view to intensify horticulture development work in the hill areas of the State, a separate Directorate of Fruit Utilization was created in the year 1953. Since then a number of programmes have been launched by the Directorate with the result that the estimated area under horticulture which was only 2513 hectares in 1951 has now developed to 98950 hectares by the end of 1979-80. Similarly, much work has also been done in the field of vegetable and potato cultivation. Consequent to the above, the present annual

level of fruit and vegetable production has gone up to 2 lakh and 0.85 lakh tonnes respectively which was only 3800 tonnes and 1500 tonnes in 1953.

101. Horticulture is the only industry which can improve economic conditions of a large part of the people of the hills. In order, therefore, to achieve this objective, various facilities are being extended to growers to encourage them to develop larger area under fruits, vegetables and potato cultivation and to diversify production by including such crops as turmeric, ginger and other spices.

102. In order to make genuine and true to type planting material available to the growth, the department has so far established 106 Government farms, orchards and nurseries in different parts of the hill region. These farms raise quality fruit plants and vegetable seeds under technical staff, for distribution to growers within and outside the State at reasonable prices. Six potato farms have also been established in hill which produce disease free seed for distribution to growers.

103. In order to encourage growers to plant new orchards and assist them in various horticultural operation, like digging of pits, manuring, layout selection of site etc., 146 horticultural-cum-plant protection mobile teams have been established in the hill areas. Similarly, 25 community canning-cum-training centres are functioning in hill Areas. These centres imparts training to house-wives and other interested person in the simple method of home-canning and also pack fruits and vegetables in a limited quantity for domestic consumption.

104. Till 1979-80 an amount of Rs.429.23 lakhs has been distributed as loan for horticulture development on favourable terms and conditions. Conditions are more liberal in selected blocks of schedule tribes wherein 50 per cent subsidy is available on full and satisfactory utilization of loan. Similarly for growing mushroom in the private sector hill growers are being given long-term loan facilities. Till 1979-80, a sum of Rs.7.80 lakh had been distributed to growers and 131 mushroom production units had been

established, in which about 75,000 kg. of mushroom is being produced per annum.

105. With a view to make the planting material available to the growers at reasonable cost, the department has been subsidizing cost of transportation of fruit plants, vegetable seeds, potato seeds up to the nearest block or the V. L. W. headquarters situated by the road side.

106. In view of the fact that the economic condition of hill growers is not sound and they are not able to bear the high cost of insecticides and pesticides required for the control of pests and diseases, the department has been carrying out plant protection operations on 50 per cent subsidized rates. The growers are also being given a set of horticultural tools on 50 per cent subsidized cost for carrying out various operations such as pruning, grafting and budding, etc.

107. With a view to meet the growing demand of the technical workers needed for implementing various horticultural programmes a Mali training centre has been working in Chaubattia (Almora) since the First five years Plan. A refresher's training centre has also been functioning in Talwari (District Chamoli) where departmental extension workers are being imparted a refresher's course on latest horticulture techniques. Besides, to apprise growers of latest horticultural know-how, the department has been organising 3 days training camps at various places.

108. The Horticultural Experiments and Training Centre, Chaubattia (Almora) has been playing a very important role in solving various problems of growers, and in introducing development of new varieties of fruits, vegetables etc. To cope with the local problems of temperate and sub-tropical fruits and vegetables, 4 sub-stations viz. Jeolikote (Naini Tal), Srinagar (Garhwal), Pithoragarh and Dunda (Uttar Kashi) have been established. These centres are functioning under direct supervision of the Chaubattia centre.

109. During the Sixth Plan, the following objectives and strategy are proposed :

1. To increase area under horticultural crops.

2. To develop dry fruit cultivation in remote areas.

3. To increase productivity of existing plantations through better management practices.

4. To link production with storage, processing and marketing facilities to ensure economic returns to the growers.

5. To reduce the disparities of income of cultivators especially small and marginal farmers, by diversification of horticultural crops for better and immediate returns.

110. Out of 39 schemes proposed the main programmes Plan period are described briefly below :

111. *Subsidy on transportation of fruit plants vegetable seed and seedling etc.*—Under this programme 100 per cent subsidy will be given to growers on transport cost of about material from the source to the nearest block headquarters or the VLW headquarters, situated by the roadside. During the Sixth Plan an outlay of Rs.27.38 lakhs has been provided for.

112. *Subsidy on control of pests and diseases of horticultural crops*—It is proposed to continue 50 per cent subsidy towards plant protection measures during the Sixth Plan period as well. An outlay of Rs.16.57 lakhs has been earmarked.

113. *Establishment of the orchards for distribution to growers*—Under this programme model orchards are being developed. These orchards will be maintained by the department till the bearing stage and then these will be leased out to the local growers in blocks of 2 acres each. These orchards have not been fully developed as yet hence it is proposed to continue this scheme. An outlay of Rs.5.76 lakhs has been proposed.

114. *Mushroom cultivation and training in Hill region*—This programme will be continued with an outlay of Rs.30.06 lakhs for the Plan period 1981-82.

115. *Distribution of long-term horticulture loan*—An outlay of Rs.462 lakhs has been proposed for extending long-term loaning facilities to growers.

116. *Subsidy on distribution of long-term horticultural loan*—On satisfactory

and full utilisation of horticultural loan amounts, 1/6th, or 1/4th part of principal is exempted. Accordingly, an outlay of Rs.4.67 lakhs is proposed towards subsidy.

117. *Strengthening of existing farms, orchards and nurseries*—At present 106 Government farms, orchards and nurseries are functioning in the hill areas which produce quality planting material for distribution of growers. Some of these institutions are big orchards like Chaubattia, Dunagiri (Almora), Bharsar (Pauri) and Ramgarh, etc., which are mostly old and require renovation of water channels, tanks, fencing, terracing etc. and other improvements, so as to increase their production capacity. During the Sixth Plan an outlay of Rs.45.97 lakh has been earmarked.

118. *Diversification of horticultural crops*—Climatic conditions of hill areas are suited for production of ginger, gladiolus, turmeric etc. Incomes of common farmers can be improved by adopting cultivation of these crops. This was started in Fifth Plan is being continued during the Sixth Plan as well. An outlay of Rs.27.50 lakhs has been proposed.

119. *Production of improved quality of fruit plants and other planting materials*—In order to increase the production capacity of various farms and nurseries already established in the hill areas during the past Plan periods, it is necessary to carry out all round improvements and maintain these institutions on modern scientific lines. An outlay of Rs.82.55 lakh has been earmarked for this purpose for the Sixth Plan.

120. *Establishment of Community Canning-cum-Training Centres*—Twenty-five existing centres will continue during Sixth Plan. In addition to these, 10 more centres are proposed in major fruit growing areas, to meet a growing demand. An outlay of Rs.29.77 lakhs has been proposed.

121. *Encouragement on intensification of vegetable production in tribal blocks of Hill district*—These scheme is being continued during the Sixth Plan period on existing pattern. Under this programme, demonstration of vegetable cultivation are conducted in the 9 tribal blocks of hill

region so that the tribal people may be encouraged to develop larger areas under vegetable cultivation. An outlay of Rs. 2.50 lakhs has been proposed.

122. *Buildings*—It is a well known fact that there is a great scarcity of residential buildings in hill areas. Most horticultural institutions are situated in far-flung area where no residential facility is available in the near vicinity for the staff. In order to overcome this problem it is necessary to provide residential facilities to the staff. Accordingly, an outlay of Rs.61.69 lakhs has been proposed.

123. *Strengthening and expansion of horticulture-cum-plant protection services*—Presently services of 146 horticulture plant protection mobile teams are available in the 8 hill districts of the State. The area under horticulture has been developed considerably and the services of more such teams are required for the newly developed compact areas. Accordingly during the Sixth Plan 50 additional horti-cum-plant protection mobile teams have been proposed, with Rs.145.27 lakhs.

124. *Strengthening of horticulture experiments and training centre at Chaubattia*—This centre has been playing a very important role in conducting researches on various aspects of pests and diseases relating to horticultural crops and in evolving methods of control against these pests and diseases. Successful results of experiments are passed on to growers for applying in their fields. Apart from this the centre has also been developing new varieties of fruits, flowers, etc. In order to strengthen the centre a provision of Rs.10.50 lakhs has been made.

125. *Scheme for marketing intelligence*—In order to provide proper marketing facilities to growers, it is proposed to provide a full fledged marketing section. Necessary staff with a few vehicles have been proposed along with requisite equipment, etc. An outlay of Rs.110.78 lakhs has been proposed.

126. *Establishment of collection-cum-grading-cum-packing centres*—The production of fruits in hill areas has increased considerably. In the absence of proper collection-cum-grading and packing centres.



growers do not get reasonable cost of their produce. It is proposed to construct collection-cum-grading-cum-packing centres in suitable areas in a phased programme, along with minimum of staff required. An outlay of Rs.91.45 lakhs has been proposed.

127. *Construction of trans-shipment centres*—In order to store hill fruits and vegetables for a short period, it is proposed to construct three trans-shipment centres at Kathgodam, Dehra Dun and Muni-ki-Reti from where various horticultural produce could be sent out to suitable mandies or cold stores. The project will cost Rs.479.00 lakhs during Sixth Plan period.

128. An outlay of Rs.2.052 lakhs is proposed for Sixth Plan. A complete list of schemes and the outlay proposed has been included in the G. N. 2.

(iv) *Extension and farmer's training*

129. The Community Development programme aimed at initiating a process of economic and social development in rural areas. A need, therefore, was felt to create a cadre of suitably trained workers at various levels to man the programme down to the grass root level. In course of time 21 extension training centres were established in the State. These centres have been equipped and strengthened to meet the need of pre-service, in-service and higher training of village level workers, in-service training of panchayat sewakhs and orientation course of block level officers. Training of rural youths under farm mechanic course is also being run at work shops of these centres. The composite training centre at Bakshi-ka-Talab organises orientation training courses of various officials and non-officials in rural development and agriculture production programmes. Farmers training and education programme has also been taken up in 21 districts of the State. Of late a printing press has also been set up at Bakshi-ka-Talab training centre for producing literature relating to agriculture and allied subjects for the use of trainee farmers. This large organisation is supervised at the headquarters by a section under the Agriculture Production Commissioner.

130. In view of the new and wider concept of integrated rural development including multi-level and block level planning Antodaya, S. F. D. A., D. P. A. P. etc. and the need for greater capacity for decentralised planning emphasis in the training need to be shifted Extension workers and officers of all levels have to be technically more equipped to guide farmers and also to undertake systematic project formulation, implementation, monitoring and evaluation. In view of these changing needs strengthening and expansion of existing training centres and their conversion into regular centres of research and experimentation is called for. These centres should actively assist in evolving programmes and strategies suitable to the field.

131. In order to provide the training support in the above context an outlay of Rs.340 lakhs has been proposed for the Sixth Plan period (1980—1985). This includes Rs.325 lakhs for the Agriculture Sector and Rs.15 lakhs for rural development sector. The main schemes proposed for the Sixth Plan period are described briefly below :

1. Establishment of the State Institute of Training and Research for Rural Development at Bakshi-ka-Talab, Lucknow, and 5 Regional Institutes of Rural Development at Rudrapur (Naini Tal), Gazipur, Richnouri (Agra), Faizabad and Lucknow for subserving the following objectives :

(i) To undertake and assist in the organisation of training and study courses, conferences, seminars and work shops for top level administrators and people representatives.

(ii) To aid, promote and co-ordinate field research projects.

(iii) To analyse and propose solutions of specific problems encountered in the planning and implementation of rural development programme in different regions.

(iv) To prepare suitable agricultural extension material in simple language for the benefit and guidance of the farmers and extension workers.

(v) To collaborate with Agricultural Universities Directorate of

Agriculture and other development departments for promoting extension programmes.

(vi) To provide consultancy service in agricultural and rural development. For the aforesaid schemes a total outlay of Rs.22 lakhs has been proposed for Sixth Plan.

132. Strengthening and upgrading of the 10 remaining E. T. C.'s for higher and specialised training to village level workers and other extension workers in the context of new demands and requirement of the field, to up-date their technical competence and professional knowledge. An outlay of Rs.10.00 lakhs for the Sixth Plan has been provided for the scheme.

133. Strengthening of State headquarters with adequate technical staff, for providing regular guidance and make effective evaluations of the training programme in the State. An outlay of Rs.10.00 lakhs for 1980-85 is provided for this scheme.

134. Out of an outlay of Rs.325 lakhs an outlay of Rs.275 lakhs for continuing and Rs.50 lakhs for the new schemes has been proposed for the Sixth Plan period (1980-85).

(v) *Agricultural Marketing*

135. Agricultural Marketing is an integral part of agricultural production planning. It is an established fact that efforts towards increasing agricultural production cannot be sustained for long unless farmers are ensured remunerative prices and a fair deal in the disposal of their produce. Improvement of existing marketing system will, therefore, have to keep pace with the plans for increased agricultural production.

136. *Role of Marketing Organizations*—It was in the year 1957-58 that the State Agricultural Marketing Organisation was strengthened with a view to carry out investigations and surveys on different aspects of agricultural marketing for introducing remedial measures wherever necessary. Market intelligence work relating to prices, arrivals, movement and storage of agricultural produce was also assigned to this organization on the recommendations of the Thapar Committee on

Agricultural Prices (1953) and Report of the F. A. O. on Policies to support and stabilize Agricultural Prices and Incomes in Asia and Far East (1958).

137. In order to ameliorate conditions of the farming community through elimination of malpractices and introduction of conditions of orderly marketing in various markets of the State, regulation of markets under the U. P. Krishi Utpadan Mandi Adhiniyam, 1964 was initiated in the year 1965-66. Till now, 251 main markets and 366 subsidiary markets have been brought under the ambit of the said Adhiniyam. The Rajya Krishi Utpadan Mandi Parishad was established in July 1973 in accordance with the provisions of U. P. Krishi Utpadan Mandi (Sanshodhan) Adhiniyam, 1973. The Mandi Samitis under the overall control of the Mandi Parishad, are making all out efforts to ensure enforcement of provisions of the Adhiniyam, and their activities include development of modern market yards, construction of link roads, culverts, etc. A separate Directorate of Agricultural Marketing, under the administrative control of a Director of Mandis and *ex-officio* Joint Secretary (Agriculture) was created in July, 1976, so as to ensure proper co-ordination with the Mandi Parishad and Mandi Samitis with the overall scheme of bringing about improvements in marketing of agricultural produce. The functions of this Directorate may be summarised as below :—

(i) Collection of market intelligence and dissemination thereof to the Economic and Statistical Adviser, Government of India, and to other authorities concerned.

(ii) Market research which includes study of agricultural commodities survey, market trends, market charges, arrivals, sales, storage, distribution, etc.

(iii) Marketing development, which includes fixation of local standard grades, commercial and agmark grading.

(iv) To impart training to functionaries engaged in the development of markets.

(v) To help development and construction of modern market yards.

138. *Physical Achievements*—Construction of 38 principal market yards and 1 subsidiary market was completed by March 31, 1980, and 30 principal market yards were handed over to the Mandi Samitis concerned after completion of works. In regard to the remaining 8 principal markets, steps are being taken to hand over these markets shortly. In addition to this, construction work is in progress in 43 principal markets, and 22 subsidiary markets/hats and painths. Land has also been acquired in another 14 principal markets and 9 subsidiary markets/hats and painths, where construction work would be started shortly. Efforts are being made to acquire land in quite a few other markets, which would be taken up for construction as soon as land becomes available. A network of link roads has been constructed around these market yards. Construction of culverts on link roads is being done by the Rural Engineering Department, and 3620 culverts were constructed till March 31, 1980. Another 3380 culverts are scheduled to be constructed by March 31, 1981.

139. Brick pavement on link roads is being done by Public Works Department, and 70 kms. of link roads were paved with bricks till March 31, 1980. More work on roads is in progress.

140. *Goals and Objectives of the Sixth Plan (1980—85)*—The long term objective of provision of orderly marketing condition in all regulated main or subsidiary markets and primary rural markets (*hats/painths*) in the State are sought to be served through : construction of modern and suitably developed market yards ; development of rural roads linking each village with the nearby assembling centres ; development of existing mandies so as to provide certain basic facilities for orderly marketing right at the door of the farmer or within a negotiable distance of 5—10 kms. from his village (particularly in the Eastern and Hill districts of the State, which are economically backward and where the existing marketing facilities are comparatively not well developed). It is proposed to take up following programmes in the Sixth Plan period (1980—85).

141. Under continuing schemes, it is proposed that 11 principal markets and 50

subsidiary market yards be constructed in the economically backward districts of eastern U. P., apart from the development of 10 principal market yards in the hill region of the State. In addition to this, it is anticipated that brick pavement on 2,587 kms. of *kachcha* link roads already constructed under 'Food for Work' Scheme by the Mandi Samitis, and construction of 3,380 culverts on these roads would also be completed by the Public Works Department and Rural Engineering Department respectively, during the Sixth Plan period (1980—85).

142. A new scheme for the strengthening of existing markets Training Centre is also proposed so as to provide better facilities for imparting training to Market Secretaries, Accounts staff of Mandi Samitis, Amins and Auctioneers, as also field staff of the Department.

143. The Sixth Five Year Plan (1980—85) includes an outlay of Rs.1366.00 lakhs, as per details given below under the State Scheme :—

Item	Outlay in Sixth Plan 1980—85 (In lakh Rupees)
<b>A. CONTINUING SCHEMES</b>	
(1) Scheme to provide grants-in-aid to Rajya Krishi Utpadan Mandi Parishad for acquiring land and construction of Market Yards of regulated markets of economically backward districts of eastern U.P.	72.00
(2) Scheme to provide grants-in-aid to Rajya Krishi Utpadan Mandi Parishad for construction of culverts and brick pavement on link roads.	1189.42
(3) Recurring expenditure on diesel jeep at the head quarters of Directorate of Agricultural Marketing. <i>Hills—</i>	0.98
(4) Scheme for grants-in-aid for development of regulation of markets in hill areas.	100.00
<b>‡B. NEW SCHEMES (Plains)</b>	
(5) Scheme for strengthening the Agricultural Marketing Training Centres.	3.60
Total	1366.00

144. *Central Plan*—Under the Central Sector Scheme of assistance for the development of selected regulated markets, sub-markets and primary rural markets, it is anticipated that Central assistance amounting to Rs.295.00 lakhs would be made available to the Mandi Parishad for the development of 41 principal market yards and 75 subsidiary market yards during the Sixth Plan period (1980—85).

(vi) *Storage and Warehousing*

145. For scientific storage of agricultural produce and other notified commodities, the U. P. State Warehousing Corporation was established by the State Government in the year 1958 under Agricultural Produce (Development and Warehousing) Corporations Act, 1956. Later on, this Act was repealed and replaced by Warehousing Corporations Act, 1962. This Corporation is a statutory body and its shares are held by the U. P. Government and the Central Warehousing Corporation in equal proportions.

146. *Fifth Five Year Plan—A Review*—During the Fifth Five Year Plan, it was envisaged that the Corporation would construct a capacity of one lakh M. T. with a cost of Rs.2 crores which was to be subscribed by the two shareholders in equal proportions. Against this target, the Corporation constructed a capacity of 4,12,627 M. T. by the end of 1977-78 itself, at a cost of Rs.1033.47 lakhs which is a record achievement in the field of construction of warehouses. During the period 1974-75 to 1977-78 the Corporation received Rs.64.25 lakhs from the State Government towards its share capital and an equal amount was received from the Central Warehousing Corporation. The remaining funds were arranged by the Corporation partly from its own resources and partly from loans taken from State Bank of India under an A. R. D. C. scheme.

147. *Construction Programme during 1978-79 and 1979-80—Targets and Achievements*—During 1978-79, against the target of constructing a capacity of 1.45 lakh M. T. at an estimated cost of Rs.290 lakhs, the Corporation constructed a capacity of about 2.14 lakh M. T. at a cost of R.779.93 lakhs which included the cost of land and interest on borrowings, etc. The Corpo-

ration received a sum of Rs.80 lakhs towards its equity during 1978-79. During 1979-80 against the proposed capacity of 40,000 M. T. the Corporation has completed a capacity of 1,29,285 M. T. A cold storage with a capacity of 4,000 M. T. has been constructed at Sahibabad Mandi at a cost of approximately Rs.50 lakhs.

148. *Programme for Sixth Five Year Plan (1980—85)*—The State Government have decided that the Warehousing Corporation would provide warehousing facilities at regulated market yards where land has been acquired or is to be acquired. The Corporation proposes to construct a capacity of 4 lakh M. T. during the Sixth Five Year Plan period at a cost of approximately Rs.10 crores, as per details given below :—

Year	Capacity Proposed to be constructed M.T.	Estimated cost of construction (Rupees in crores)
1	2	3
1980-81	80,000	2.00
1981-82	80,000	2.00
1982-83	80,000	2.00
1983-84	80,000	2.00
1984-85	80,000	2.00
Total	4,00,000	10.00

149. In order to complete the targetted programme, it is proposed that the two shareholders should subscribe at least 50 per cent as equity, and that the remaining 50 per cent be raised by the Corporation from Financing Institutions. The Year-wise break-up will be as under :—

Year	(Rupees in lakhs)		
	Share/Capital to be contributed by the two share holders equally	Loan from financing Institutions	State Government share of contribution to be provided in the Plan
1	2	3	4
1980-81	100	100	50
1981-82	100	100	50
1982-83	100	100	50
1983-84	100	100	50
1984-85	100	100	50
Total	500	500	250

*(vii) Sewage Utilisation*

150. The application of sewage water on land for irrigation purposes is the cheapest method of gainfully utilising wastes. In sewage utilisation schemes, treatment and disposal of sewage is accompanied by utilisation of manurial ingredients of sewage for better yields of crops.

151. By the end of the Fourth Plan, 50 sewage utilisation schemes were completed covering an area of 11,833 hectares of land for sewage farming. During the Fifth Plan, 7 more sewage utilisation schemes had been completed covering 1,352 hectares of land for irrigation. Thus at the end of 1977-78, 57 sewage utilisation scheme had already been completed covering 13,185 hectares of land for sewage farming. By the end of 1979-80 cumulatively a total of 66 schemes had been completed covering an area of 16,500 hectares of land under sewage farming. In the year 1980-81, 4 more schemes have been proposed to be completed with an allocation of Rs.12 lakhs.

152. An outlay of Rs.200 lakhs has been allocated for sewage utilisation schemes for the Sixth Plan 1980-85. This outlay would be utilised for completing remaining works of ongoing schemes and for taking up some new schemes. Proposals of new schemes will be framed in consultation with local bodies. It is targetted that during the Sixth Plan 24 new schemes will be completed raising the total to about 22,500 hectares of land be put under irrigation.

*(viii) Agricultural Research, Extension and Education*

153. In order to undertake research, experiment with development techniques and transmit new ideas to field departments responsible for assisting the farmers, three Agricultural Universities have so far been established in the State of Uttar Pradesh, (i) at Pantnagar for dealing with agriculture of western and hill regions ; (ii) at Kanpur for the central and the Bundelkhand regions ; and (iii) at Faizabad for the eastern region. The achievements and future plans of the various Universities are given below :

2. *G. B. Pant University of Agriculture and Technology, Pantnagar, Naini Tal*—At present the University is operating about 60 research projects, including 24 big projects being funded by outside agencies viz. I. C. A. R., I.D.R.C., PL-480, I. A. E. A. (Vienna), C. S. I. R. (India), B. R. B. C., Department of Science and Technology, U.G.C., U. P. Government, Hill Development Board.

154. Some salient achievements in research are described below :

(a) The University has been in the forefront in research on crop improvement, by way of developing several new varieties which are high yielding, more resistant to pests, diseases, or are in other ways superior to existing ones. The recently developed new varieties are ;

Wheat—UP115, UP262 and UP-368 ;

Rice—Prasad ;

Maize—Tarun, Navin and Sweta ;

Soyabean—Ankur, Alankar and Shilajit ;

Lentil—Pant L406 and Pant L234 ;

Bold seeded Bengal gram Pant G114 ;

Arhar—UPA120 ;

Forge crops—IS 4776 (sorghum), UPO 94 and UPO 160 (oats), UPC 528 (cowpea), and UPB 101, UPB 102 and UPB 103 (berseam).

(b) New varieties of pulses like Bengal gram, urd, peas, arhar and mung and tomato, brinjal, chillies, peas, french bean, cauliflower and potato in vegetables are in the pipe line. Suitable varieties of sugarbeet for different agro-climatic conditions have been identified. Package of practices for high tonnage of sugarbeet has been developed. Sugarcane varieties suitable for Tarai have been isolated. Triticale has shown promise in the hills and in areas having dry condi-

tions and development of suitable triticale varieties is underway.

(c) Along with the development of new and better varieties cultural practices for these varieties have also been evolved through experimentation so that when a new variety is released to farmers, a complete package of practices can also be recommended. The package includes specifications for sowing, cultivation, irrigation, weed control, protection from pests and diseases. New and improved tillage implements which raise crop yields and reduce costs of production have been developed and demonstrated. Research on reducing the loss of food-grains at the time of harvest and subsequently is in progress. New cereal and pulses varieties are being evaluated for their nutritional quality and cooking characteristics. Crop-response, fertilizer application correlations are being worked out to provide a basis for fertilizer recommendations. In collaboration with the State Government and other Agricultural Universities of U. P., soil mapping of the entire State is in progress. Research work on forestry, particularly on quick-growing species of fuel and fodder trees has been initiated at the Ranichauri Hill Campus. Plant protection control schedules for diseases and insects of soyabean crop have been developed. Technical knowhow for the commercial production of soyamilk and several other products have been perfected.

(d) In the area of livestock research, for the last eight years a large cross-breeding programme in cattle has been underway. Sahiwal is being crossed with Jersey, Friesian and Red Dane, with the ultimate objective of determining which cross is the best for local conditions and for evolving a new breed from such crosses. To date a large number of Sahiwal-Jersey F<sub>1</sub> animals have been produced, their lactation yield is 50 per cent better than the Sahiwal (2700 vs 1800 litres milk/lact.) and age at first calving is 6 months earlier (27 vs 33 months). With a view to augmenting feed sup-

plies, an alkali spray treatment of straws to enhance their digestibility and platability has been evolved, which can be adopted on farms without any special equipment.

(e) Very significant research has been conducted on the physiology of the buffalo and on control of important livestock diseases and also on disease problems of exotic and cross-bred animals. Various diet combinations have been worked out. Artificial induction of lactation has given encouraging results. Extensive studies have been carried out on toxicity of insecticides with reference to domestic animals, and work has been done on residual level of pesticides in various feed materials and the rate of degeneration of pesticides after spraying. For meat animals, method of partial castration has given promising results with respect to weight gain. Procedures for keeping cow bull semen for longer duration have also been evolved. Encouraging results have been achieved in embryo-transplant in goats.

(f) Induced breeding of all types of Indian and exotic carps in ponds has been accomplished, so that an assured supply of fish fingerlings is available for farmers in the region. Composite fish culture in farm tanks has proved to be capable of producing up to 4,000 kg. fish per year. Package of practices for composite fish culture has been developed.

(g) In the field of agricultural engineering development has been undertaken on fertilizer technology and usage, soil and water engineering equipment for rice cultivation, pulse crop threshers, manually operated diggers and graders. Equipment for treatment of food and feed-stuffs, and for byproducts utilization, have also been developed.

(h) Studies on microbial insecticides, factors influencing sporulation in milk preservation, physiological and biochemical investigations on uptake, transport and metabolism of micro-nutrients in crop plants, and hormonal induction for reproduction

of fish have been conducted and encouraging results have been obtained.

(i) Studies on nutritional quality and acceptability of improved varieties of pulses and rice have shown encouraging results.

(j) During the Sixth Plan 1980-85, the University would, while continuing with its present programmes of teaching, research and extension, also endeavour to reorganize itself and strengthen its capabilities to play a more dynamic role not only in extension through the subject matter specialists located in twenty districts of five Divisions of the State assigned to it, but would also establish live linkages with various on-going development programmes of the Government on the one hand and farmers and entrepreneurs of various categories on the other. The objective would be to identify specific problems of technology, delivery of services, extension, and management faced by them, so as to develop and offer appropriate packages for implementation of development programmes. It is also envisaged that the University would participate more actively in integrated rural development programmes by augmenting its expertise in relevant areas like agriculture and rural development management, human and economic geography, and techniques of data processing for monitoring and evaluation.

(k) In this context, besides strengthening the faculty, the University would coordinate with the State and Central Governments for finding and demonstrating viable solution to location specific problems. It would organise unidisciplinary as well as multidisciplinary Technology Clinics for which basic infra-structure already exists, even as a wide variety of field problems also are already being noticed of.

(l) For obvious reasons, the main emphasis of the University will have to continue in relation to basic and adaptive research without which it would be impossible to sustain the

continuous thrust for development, higher productivity and augmentation, diversification and dispersal of employment opportunities.

(m) Development of new crop varieties suitable for different agro-climatic regions and resistant to pests and diseases, developing suitable agro-techniques for their management including soil and water management, fertilizer use, plant protection procedures etc. would constitute the main thrust of these researches. Location specific experimentation and evaluation of recommendations for the same are proposed to be carried out. Research work will be concentrated particularly in respect of crops and programmes relating to : (i) wheat, (ii) rice ; (iii) oil seeds ; (iv) pulses ; (v) millets ; (vi) maize ; (vii) sugarcane ; (viii) soyabean ; (ix) sugarbeet ; (x) triticale ; (xi) vegetable and fruit crops, and floriculture. As far as animal husbandry is concerned, concentrated attention will be paid to problems of management and of establishment of optimal relationships between forage/fodder and livestock population of various qualities and categories.

155. It is proposed to consolidate the results of the very considerable research already undertaken in this as well as other Universities and research institutions, to evolve practical solutions to problems of deteriorating eco-system of the Himalayas, irrigation, pre-harvest and post-harvest technology for small and marginal farmers, and development of packages for increasing returns to producers from horticulture. It is also intend to develop and demonstrate the viability of sugar production based on sugarcane. Reorientation of the Home Science College is proposed by setting up strong design and production and market research cells for promoting greater participation of rural women in income earning activities. The Food and Nutrition wing of this College will also become a centre for research, training and extension during the Sixth Plan period, with active participation and collaboration of the State Government, the ICAR, and

UN/FAO, two already approved projects of national importance, one relating to agricultural research and another for agricultural communication will get off the ground.

156. *C. S. Azad University of Agriculture and Technology, Kanpur*—Research activities in agriculture (at Kanpur) are being carried out in its ten well developed departments and have led to the identification of several superior varieties of crops in cereals, legumes, oil-seeds, millets, cotton and tobacco. Among cereals, a new strain KR-5-142, suitable for rainfed situation in rice : K-7410 (Shekhar) and KML-7406 (Bithoor) in wheat ; K-226, K-252 and K-273 in barley and a composite R-4 in maize are recent outstanding developments. In legumes, high yielding varieties K-468 and K-850 in gram, and K-851 in moong, and powdery mildew resistant *Rachna* pea have recently been released for cultivation. Among oil-seeds, KR-5610 (Shekhar) in rai, *Chandra* in groundnut, and K-65 in safflower are other recent contributions. In millets, *Nirmal ragi* which is tolerant to blast and gives 60 per cent higher yield than T-36 B, has been recently recommended to growers. A new American cotton strain CA-7 has been developed. Research achievements in horticulture include : all round development in *aonla*, *loquat*, mango, *litchi*, *ber*, *bel* and *papaya*. Drying of cut-flower techniques has been developed. Research work on vegetable crops has resulted in identification of many superior varieties like F-4780 (*Kufri Badshah*) and F-3797 (*Kufri Bahar*) in potato, selections 202-9 and 202-14 in round and 301-64 and 304-48 in long brinjal ; Kannur selections 1, 2, 3, 6, 7 in tomato ; K-5412-8 and Chaman in chilli ; Rajni 7010 7015 and 7023 in Dolichos bean and KS-123 in table pea.

157. Eighteen package of practices for salt affected soils have been developed. Gypsum or pyrite application @ 40–60 per cent of G. R. has been found optimum for reclamation of such soils. Rhizobium culture for various leguminous crops have been developed. Significant achievements in agronomical researches include multiple and relay cropping ; intercropping with autumn planted sugarcane ; multiple cropping with sugarcane ; com-

panion cropping of mustard with potato, and intercropping of arhar with summer mung. Physiological researches have enabled identification of boron tolerant wheat genotypes like K-7413, K-857 and Raj 821. Ascorbic acid has been found to increase the yield of wheat, maize, mung and gram by 10 to 15 per cent. Salt tolerant genotypes of paddy, i.e. Cauvery, Saket 3 and IR-8 have been identified. Work under leaf protein project revealed that *Chenopodium album* L. (*bathua*) and *Trianthema monosperma* L. (*Patharchata*) weeds can very well be utilised for the production of leaf protein concentrate. Chemical control measures of important pests and diseases have been developed. Integrated technique for rodent eradication particularly the use of anti-rodent capsules have been evolved. Simple technique for cultivation of tropical and sub-temperate mushroom on paddy straw has been developed.

158. Breeding programme of Sahiwal cows resulted in the decrease of age at first calving, length of service period, dry period, calving interval increase in lactation length, milk and herd averages gain in weight and growth rate. A hybrid strain of poultry Azad-70 was developed.

159. The credit requirement of small and marginal farmers were studied and banks have been requested to modify their loaning policy accordingly.

160. Research activities in veterinary science and animal husbandry (at Mathura) have resulted in many significant achievements for improvement of cattle wealth. These include surgical treatment of many cattle diseases ; successful preservation of buffalo semen for breeding in rural areas ; development of technique of differentiating cow and buffalo meat ; nutritional improvement of straw by urea molasses treatment ; nutritional improvement of concentrate mixture by adding urea ; protein replacement by sun-dried poultry dropping in the diets of buffalo heifers ; development of new industrial by-products like barley *chuni* and *kasni* seed livestock feeding and development of barley as substitute for poultry feed in place of maize.

161. Significant achievements in the extension education and training were



made for transfer of latest farming technology through publication of extension literature, organizing exhibitions, *Kisan Melas*, special kharif and rabi crop days, radio broadcasts and television, technical seminars, workshops, film shows and cultural programmes. The university provided training to farmers and the officers of the development departments, on campus and through correspondence courses and through camps at the demonstration fields. Some important extension schemes were run like lab-to-land programme, soil health-care, rodent control, and adoption of villages under plant protection umbrella. In the Veterinary Faculty at Mathura, the salient features of the extension programmes consisted of training and demonstration in the selected villages, ambulatory clinical service facilities, posting of students at Sadar hospitals, National rural service programme, and soil testing.

162. During the Sixth Plan period, it is proposed to develop educational research and extension activities and infra-structural facilities to support the above programmes. The educational activities will be developed by opening new departments, e.g. Soil Conservation and Water Management, Agri. Biochemistry, Agri. Engg., Home Sciences, Seed Technology and Physical Education, by strengthening the existing academic programmes and by creating associated educational activities. Development of Research activities will include strengthening of research on crop production specially on oil-seeds and pulses and livestock production including fodder and forage production and improving the facilities for research in the various research departments of the colleges and by implementation of new research schemes. Moreover, agricultural research would be concentrated on the problems and technology suitable for small and marginal farmers.

163. As regards the development of extension education activities, it is proposed to establish field extension units at the headquarters and at the district level in the area of responsibility of the University for effective transfer of latest agricultural techniques developed by this University.

164. *College of veterinary science and Animal Husbandry, Mathura*—The college had been affiliated to the Agra University for the award of graduate and post-graduate degrees. Consequent upon the creation of Chandra Shekhar Azad University of Agriculture and Technology, it became one of its twin campuses in July, 1975. It has been the pioneer institute in the country to institute M.V.Sc. and Ph.D., courses in all the disciplines of veterinary sciences and animal husbandry.

165. At Mathura, in order to develop a more comprehensive graduate and post-graduate teaching programme in the 13 post-graduate and 4 under-graduate departments of the college, it is proposed to strengthen the newly established departments of extension, dairy science and poultry science. It is also proposed to establish new departments of livestock production and management, veterinary public health and epidemiology, and virology. The quality of the veterinary graduate students produced will considerably depend on the practical training in the clinical subjects, hospital practice and ambulatory clinical service. Efforts are, therefore, being made to strengthen the veterinary hospital and ambulatory clinical service as well. A well-equipped laboratory for electron microscopy will be established to provide facilities for research workers and post-graduate students. In order to provide more practical training in animal husbandry, instructional farms attached to the college will be strengthened. It is proposed to establish a piggery unit at the instructional farm. In order to develop the fishery industry in the State, it is considered necessary that training facilities for this speciality are created.

166. To facilitate intensive research work on various aspects of livestock production, it is necessary to strengthen and expand the existing Livestock Research Station and various Departments. A research unit in semenology for study, preparation and use of frozen semen in cattle, buffaloes and other animals will be established. Besides a feed processing unit is proposed to be established to prepare complete and balanced feeds for different categories of farm animals, including poultry, at a cheaper cost by inclusion of

agro-industrial by-products and other animal wastes of the different university farms. For providing facilities to the post-graduate students and research workers provision for a well-equipped isotope laboratory has been made.

167. At present there is no unit of extension at this campus. It is proposed to establish a unit of extension, including farm advisory service, farm training programme, correspondence courses, staff development courses, and a communication centre. Provision has been made for "Learn while you Earn" programme for students and livestock breeders at the campus. District level animal disease laboratories will be established along with the 12 existing district extension centres.

168. A detailed project for animal production and health coverage on the pattern of Anand will be established at two centres, one near Mathura and another at Kanpur in the milk zone areas. It is also necessary to provide residences for both technical and non-technical staff since this university is a residential university and this campus is six kilometres away from the town. Provision for additional staff (non teaching) and other essential facilities has also been made to cope with the increased work load and other requirements.

169. With the creation of new departments, new faculties and expansion of the existing departments, new buildings are necessary to accommodate them. Already the existing building space is insufficient as per the norms of the I. C. A. R. and an extra laboratory space of more than 5,500 sq. ft. animal genetics and breeding, and animal gynaecology and reproduction, are temporarily located in an old building. These departments have to be provided with modern laboratory facilities.

170. *Narendra Dev University of Agriculture and Technology, Faizabad*—The University was established on 10th October, 1975 for education and research work particularly in agriculture and allied sciences, and for undertaking field extension programmes. The University proposes to establish a fullfledged College of agriculture with 20 departments, having undergraduate and post-graduate teaching

facilities and by integrating basic sciences and humanities departments in the College promoting an inter-disciplinary approach in teaching, research and extension.

171. During the Fifth Plan mono-crop research stations transferred by the State Government were strengthened. These stations were also converted into multi-crop research stations. In Rice I.E.T. 2,232 variety which was found promising for rainfed upland conditions and Sarjoo 52 with long bold grain, moderate resistance to bacterial blight and 15 per cent higher yield potential than Jaya, were released for general cultivation in irrigated areas. Research was also conducted on different aspects of crop husbandry, varietal characteristics, plant protection, fruit and vegetable cultivation.

172. Promising varieties of wheat, maize, gram, pea, mustard, their suitable agronomic techniques and pest control measures have been identified for eastern U. P. conditions.

173. The 4 research stations transferred from the State Government do not represent various agro-climatic and socio-cultural conditions of the entire eastern region. Therefore, proposals for strengthening the existing stations and establishing new research stations during the Sixth Plan period have been made so that research on different farming system prevailing in the region may be carried out.

174. The University is conducting regular training programmes for the benefit of extension personnel and farmers. The Directorate of extension of the University proposes to establish Krishi Gyan Kendras, animal diseases investigation centres, and designs for various communication media for the use of extension personnel for accelerating technology transfer.

175. While detailed programmes of each University will be worked out in due course, priorities will be fixed after taking into account present status and future needs of different regions and disciplines. An aggregate outlay of Rs.2,850 lakhs has been proposed for Agricultural Research and Education during the Sixth Plan period, 1980–85.

## (2) LAND REFORMS

176. National and State Plans have laid considerable emphasis on land reforms, right from the First Five-Year Plan. As set forth in the national plans, the objectives of the land reforms policy have been, firstly, to remove such motivational impediments to agricultural production as arise from the agrarian structure inherited from the past, and secondly, to eliminate all elements of exploitation and social injustice within the agrarian system so as to move towards greater equality of status and opportunity to all sections of the population.

177. The process of land reforms in Uttar Pradesh was started in 1950 with the enactment of a very progressive measure at that time, the Uttar Pradesh Zamindari Abolition and Land Reforms Act, 1950 under which the Zamindari in the bulk of the State was abolished from the first day of July, 1952. Land Reforms in U. P. have been carried out in three phases. In the first phase, the main aim was to abolish Zamindari and Jagirdari tenures, or such feudal or semi-feudal rights over land as were primarily acquired through extra-economic and political sanctions during the colonial rule. In this phase, the reforms were intended to curb or eliminate a functionless and parasitic class of landlords which was economically isolated from the production system and morally rootless on account of its identification with colonialism. The second phase in land reforms aimed at creating basic conditions to increase agriculture production by consolidating the scattered holdings. This part of land reform has covered about three-fourth cultivated area of the State. The third phase of land reforms pertained to imposition of ceilings on land holdings, which sought to attack not just the principle and practice of unearned income (non-cultivating landlordism), but sought also to eliminate the right to hold land beyond certain socially acceptable limits. As such, ceiling laws offend not only against the desire to own property but also cramped the commercial drive of a big farmers and has been strongly resisted by various means.

178. In the Sixth Five Year Plan an attempt will be made to undertake such

reforms as will make further land available for distribution to the tillers of the soil. The attack through land reforms measures will be mainly on absentee landlordism, collusive transfers with a view to evade ceiling laws, tendency on the part of the urban rich to buy land, and restoration of land which has been alienated from the tribals and other weaker sections. Specifically, the following policy measures are to be considered for implementation during the Plan period :

(a) There are roughly 46 lakhs share-croppers in U. P. who have got lease lands from other cultivators. Although land is leased out by all categories of farmers, it is seen that a significant portion is leased out by farmers who have more than 4 hectares of operational holdings. The names of the share-croppers and other category of lease holders will be registered in the revenue records on such holdings with a view to provide to them security of tenure and to regulate the rent. This will benefit about 15 lakh share-croppers.

(b) The existing provision regarding land alienation from weaker sections will be made more stringent and specific legal provisions will be made to enable state administration to restore lands to them through executive action.

(c) All out efforts will be made to trace benami or clandestine transfers of land made to friends, relatives or other persons, real or imaginary, through fictitious or collusive transactions and to get them declared null and void. This will enable processes to be initiated to distribute such lands among the poor.

(d) Financial institutions will be persuaded to advance credit to the new allottees of land. Fifty per cent subsidy will be made admissible to them on the same terms as to scheduled tribes under the Small Farmers Development Agency. After recognising thousands of small farmers and share-croppers, it will be necessary to provide them with ancillary services of bullocks, credit, extension and

marketing. Special organisations will be created in a few districts, on a pilot basis, to look after these activities.

(e) It has been noted by various observers that the existence of organisations of share-croppers and landless labourers would have facilitated better implementation of land reforms. Such organisations cannot, however be built up simply by issuing executive instructions. In the absence of strong peasants organisations, the next best arrangement is to associate committees of beneficiaries with the implementation of land reforms. Such Committees could be established at the block level. The specific schemes proposed for the Sixth Plan are being enumerated in subsequent portions of this chapter.

#### *Consolidation of holdings*

179. Consolidation of holdings besides being an important instrument of land reforms is also one of the pre-requisites for successful agricultural planning. Consolidation provides a corrective to the ill-effects of sub-division and fragmentation of holdings and also helps to rectify land records.

180. Consolidation of land holdings was first taken up in U. P. in 1925-26 through the agency of Co-operative Societies. In 1939, U. P. Consolidation of Holdings Act was passed which contained provisions for voluntary consolidation

through regular staff of Revenue Department. After the abolition of Zamindari in the State, the scheme was taken up as integral part of land reforms, and the U. P. Consolidation of Holdings Act, 1953, was enacted which contained provisions for compulsory consolidation.

181. Initially the total area of the State requiring consolidation was estimated to be 146 lakh hectares. Out of this, by the end of Fourth Five Year Plan, transfer of possession had been effected over an area of 115.34 lakh hectares at a cost of Rs.52 crores. The progress during the first and subsequent Five Year Plans is given in the table below :

#### *Progress of Consolidation of Holdings during the Five Year Plans.*

Period	Area consolidated (in lakh hectares)	Total cost (in lakh rupees)
First Five Year Plan	0.76	77.26
Second Five Year Plan	21.06	691.30
Third Five Year Plan	45.61	1120.40
Three Adhoc Plans	21.53	1045.03
Fourth Five Year Plan	26.38	2311.24
	115.34	5245.23

182. During 1974-75 to 1979-80 an area of 26.23 lakh hectares was consolidated at a cost of Rs.44.19 crores. The year-wise break-up of outlays, expenditure, targets and achievements is given in the table below :—

#### *Progress during 1974—80*

Year	Outlay (in lakh rupees)	Expenditure (in lakh rupees)	Physical target	
			Fixed in lakh hectares	Achieved in lakh hectares
1	2	3	4	5
1974-75	713.00	719.67	5.78	5.78
1975-76	676.00	658.21	4.85	4.85
1976-77	750.00	683.61	4.44	4.44
1977-78	775.00	743.11	4.83	4.07
1978-79	775.00	771.04	3.75	3.60
1979-80	850.00	844.50	3.80	3.59
Total	4539.00	4419.64	27.45	26.33

183. Thus by the end of 1979-80 total delivery of possession was effected over 141.67 lakhs hectares.

184. Shortfall during the last two years has been due to unprecedented floods all over the State in 1978-79 and severe drought (particularly in Banda district) in 1979-80. Banda district accounted for 16 per cent of the total target of the State.

185. *Proposals for Five-Year Plan 1980-85*—Formerly villages having 60 per cent consolidable area were included in the scheme, but this percentage has now been reduced to 40. Consequently many villages of the State formerly excluded from the scheme have now become eligible. The State Government has also decided to re-consolidate 25 tahsils of 23 districts which were taken up at the initial stage when the scheme was introduced and the cultivators could not get full benefits. Rectangular chaks were not formed, more than one chak was allotted at scattered places, every chak was not provided with chak road and irrigation gul from State

irrigation works. No provision was made for sector and inter-village roads. There was popular demand for re-consolidation in these tahsils and the State Government ultimately acceded to it. This work will, therefore, continue during the Plan period. The consolidable area of these 25 tahsils is estimated at 16.72 lakh hectares. The villages which were initially left out from the scheme will also be simultaneously covered. Two tahsils, viz. Kairana and Musafirkhana were taken up for re-consolidation during 1979-80, and six more tahsils namely Sardhana, Dadri, Chhibramau, Mohanlalganj, Faizabad and Azamgarh have been taken up during 1980-81. The total area of the State requiring consolidation as earlier estimated at 146 lakh hectares would go up considerably.

186. It is proposed to bring an additional area of 19.50 lakh hectares under consolidation operations at a cost of Rs.51.20 crores so as to reach a level of 61.17 lakh hectares as per details given below :

*Outlays and Targets for VI Plan(1980-85)*

Financial year	Financial outlay (in lakh rupees)		Physical targets (in lakh hectares)	
			Additional	Level
7			3	4
Level by end of 1979-80	..	..	..	141.67
1980-81	..	..	890.00	145.47
1981-82	..	..	973.00	149.32
1982-83	..	..	1027.00	159.22
1983-84	..	..	1085.00	157.17
1984-85	..	..	1145.00	161.17
Total	..	5120.00	19.50	161.17

187. The target of 19.50 lakh hectares proposed for 1980-85 includes about 6.00 lakh hectares falling in the Command Area of Sharda Sahayak, Gandak and Ramganga Irrigation projects. Consolidation in these area would be taken up in co-ordination with the Area Development Schemes.

188. *Financial Assistance to the allottees of ceiling land*—The scheme of financial assistance to allottees of ceiling sur-

plus land would be drafted keeping in view the national policy adopted for the plan, which gives priority to Schemes for development of the scheduled castes/scheduled tribes, improvement in the economic lot of the backward and weaker sections of society, and the landless labourers.

189. The scheme for financial assistance to the allottees of surplus land was introduced in the year 1977-78 by the Gov-

Government of India as a Central Sector Scheme, under which an amount of Rs.250 per hectare was admissible as grant for short-term assistance for purchase of seed and fertilisers, etc., and an amount of Rs.500 per hectare was admissible as long-term assistance for development of land. Half of the long-term assistance was provided as loan and the other half was provided as grant. The entire amount was provided by the Government of India. A sum of Rs.118.00 lakh was provided by the Government of India as financial assistance since 1977-78, of which an amount of Rs.94.96 lakhs had been utilised till the end of 1979-80.

190. The pattern of assistance has, however, been revised in 1979-80. The new pattern utilises single type assistance at the rate of Rs.1,000 per acre per allottee. The funding of the scheme will now be on sharing basis, the State Government will have to bear 50 per cent of total expenditure while the other 50 per cent will be borne by the Government of India. The change in the pattern of assistance was made rather late in the year 1979-80, and as a result a sum of Rs.3.30 lakhs only could be utilised against the provision of Rs.14 lakhs. The shortfall is partly attributable to the unprecedented drought also. The State share of the financial assistance was provided in 1979-80 by way of loan. However, with a view to give greater benefit to weaker sections of Society it is proposed to convert this loan assistance also to a grant.

191. The area declared surplus so far is 2.79 lakh acres, out of which 2.22 lakh acres area has already been settled. Thus, the area of ceiling surplus land remaining unsettled is 23,000 acres which is involved in court cases. Efforts have been made recently to expedite disposal. At times, the area declared surplus by the lower courts gets reduced under orders of appellate courts and High courts. Allowing for a margin for such variations, it is anticipated that 20,000 acres of land would be available for settlement from 1981-82 to 1984-85. Calculating financial assistance at the rate Rs.400, about Rs.80.00 lakhs will be required for providing assistance to 20,000 allottees of land. A provision of Rs.80.00 lakhs has accordingly been made in the Sixth Plan 1980-85.

192. *Special Survey regarding effects of Land reforms*—A large number of land reform measures have been taken by the Revenue Department but no through survey has been under taken so far to study the effects of such measures. Generally the land reforms measures aimed at increase in the agricultural production and equitable distribution of land, security of tenure, regularisation of rent, allotment of Gaon Sabha and ceiling land to the landless and small peasants, restrictions on sale of land, ban on alienation of land by scheduled tribes, bar on sub-tenancy, etc. With a view to make the present provisions of law more effective and to bring up the present legislation in conformity with present-day concepts of land reforms, it is proposed to undertake a survey on matters connected with various land reforms legislations. The expenditure involved is estimated at Rs.500 lakhs.

193. *Financial assistance to the allottees of Gaon Sabha land*—Up to the end of May 1980, six lakh hectares of agricultural land vested in the Gaon Sabha and one lakh hectares of agricultural land declared surplus under the Ceiling Act has been allotted to about 20 lakh persons. Approximately 70 per cent of the allottees belong to the scheduled castes and scheduled tribes. Allottees of ceiling land were given financial assistance at the rate of Rs.1000 per hectares, Rs.500 in the form of grant and the rest in the form of loan recoverable in five years.

194. There has been no scheme to help the allottees of Gaon Sabha land, although the bulk of new allottees belong to this category. It is, therefore, proposed that during the remaining four years of the Sixth Plan, the allottees of Gaon Sabha land be given subsidy and other facilities on the same scale as is applicable to the scheduled tribes in the SFDA, DPAP, IRD etc. districts, i.e. they will get 50 per cent subsidy on loans to be advanced by financial institutions. It is proposed to cover four lakh allottees during the period 1981-85. The likely expenditure on this scheme will be Rs.3.00 crores.

195. *Development of U. P. Survey and Land Reform Training Institute*—Uttar Pradesh Survey and Land Reforms Train-

ing Institute, Hardoi is the only institution of its kind which imparts training in land records and survey operations from Supervisor Kanungos up to fresh recruits to the I.A.S. The residential accommodation available at the Institute is only for 60 trainees, and will be expanded to accommodate 150. The training schedule will be expanded to include land reforms public grievances agrarian relations, and consolidation. In addition to the officers of Revenue Department, allied Departments like Block Development, Irrigation, Police, etc. will also be given training. This Institute will also run in service courses. New equipment will have to be purchased, staff will be increased and stipends will be paid to trainees. The total expenditure on the expansion of the Institute during the Plan period will be Rs.4.71 crores, including expansion of 14 affiliated Lekhpal Training Schools in the State.

196. *Establishment of Documentation and Evaluation Unit in the Board of Revenue*—The need for constant upgrading of knowledge on land reforms, agrarian relations, agrarian tensions, tenancy and other related matters is unquestioned. Therefore, a documentation cell will be established in the Board of Revenue which will collect information about aspects of agrarian problems from all over the country. The evaluation cell will carry out evaluation studies of various programmes which are being implemented through the Board of Revenue. This will help the Government in taking suitable corrective action. The total expenditure on the establishment of documentation-cum-evaluation cell will be Rs.36.89 lakhs.

197. *Discovering cases of benami transactions etc.*—The present Ceiling law entitles a person to retain 18 acres of irrigated land with him and to hold 15 acres of irrigated land in addition to the said limit when he has three major sons (two hectares for each adult son). It is everybody's experience that in the face of this law, which is in force since 1960, a good number of big farms have come to exist. This state of affairs is mostly due to *benami* and bogus transactions in the names of servants, etc. and fictitious persons. It has to be discovered as to which level, under whose

orders, and by which instrument the names of the co-sharers in big holdings come to be recorded. When the *locus standi* and basis of each name in a big holding is ascertained further action to correct the records by expunging the fictitious and illegal entries, will be facilitated. To start with, a drive will be launched to scrutinize the entries of big farmers in 4 districts. The expenditure incurred during the year 1981–84 would be Rs.10.00 lakhs.

### (3) MINOR IRRIGATION

198. Irrigation works having culturable commanded area of 2000 hectares or less are classed as minor irrigation works. Two agencies of the State Government are mainly involved in the construction of minor irrigation works. The Minor Irrigation Department is concerned with privately constructed masonry wells, persian wheels, pumping sets, small tubewells and minor storage works. These works are constructed by the beneficiaries themselves with the assistance of loans and subsidies, and are also maintained by them. The Irrigation Department is responsible for construction, maintenance and operation, at State cost, of larger capacity tubewells (State tubewells), lift schemes, Hill channels, tanks and bundhis. The State tube-wells, private tubewells, pumping sets and open wells utilise underground water. Up-to-date knowledge of availability and state of exploitation of underground water resources is necessary to ensure optimum utilisation of resources. This information is made available through the Ground Water Investigation Organisation of the State.

#### (a)—Ground Water Investigation Organisation

199. This organisation was created in the year 1970. It is responsible for groundwater resources prospecting for determining the quantity and quality of underground water. The organisation prepares district and blockwise groundwater availability and utilisation reports and updates them from time to time. The department carries out exploratory drillings and chemical analysis of water samples to establish their suitability for irrigation and drinking water needs.

200. During the Sixth Plan period, water level observation will be taken up by this organisation on 2,500 hydrograph stations of the State annually. Blockwise technical evaluation of groundwater availability of groundwater will be carried block in all districts, and on its basis block wise reports on availability of groundwater will be published. Approval of projects by the Agricultural Refinance and Development Corporation for construction of minor irrigation works requires support from these appraisal reports.

201. Ground-water availability will also be assessed by exploring the sub-surface geological configuration with the help of geo-electric surveys. Electrical logging techniques will be employed to ascertain the correct lithological succession and chemical qualities of ground-water. Samples will be collected from various parts of the State and analysed for their suitability for agricultural use and districtwise report will be published.

202. Exploratory drilling will be done with the help of rig machines in various parts of the State, and strata samples will be obtained and mechanically analysed. Hydrological properties and water yielding capacity of aquifers will be determined by conducting pumping tests. On successful exploration, they will be converted into production tubewells. Based on the recommendations of this organisation, Government has taken decision to construct State tube-wells of 15000 to 18,000 gallons per hour discharge in the Bundelkhand region.

203. To relieve drought conditions, blast wells are being constructed by the Minor Irrigation Department in the rocky terrain of Bundelkhand Vindhyan plateau. Technical assistance for selection of suitable construction sites in the region keeping in view of ground-water availability, is being provided by this organisation.

204. Ground-water availability will also be assessed in the different areas by employing latest scientific techniques in the field of ground-water hydrology, such as nuclear technique, photogeology, remote sensing, ground-water modelling, computer programming etc. In addition, field studies will also be made to improve

the design of minor irrigation works, standardization and designing of hand operated pumps, and selection of suitable pumps, so that irrigation facilities may be made available to small and marginal cultivators at minimum cost.

205. The necessity of imparting technical guidance and consultancy services is also on the increase for successful implementation of various programmes of the Minor Irrigation Department, Irrigation Department, Nalkoop Nigam, Jal Nigam, PICUP and other similar organisations and developmental agencies. In parts of the State, specially in the western region, several blocks are heading towards the state of depletion due to uncontrolled exploitation of groundwater resources. In such areas, demarcation of productive zones will be done on the basis of micro-surveys and special studies. The States also facing the critical problem of salinity in areas of Agra, Mathura and Aligarh districts. Efforts are being made to delineate suitable areas for construction of irrigation wells as well as to assess the possibilities of blending of saline ground-water with a fresh surface water and its utilization in the agricultural sector.

206. *Schemes proposed for the Plan (1980-85)*—The organisation is at present operating a centrally-sponsored scheme for research and development which the central government is contributing only till the year 1980-81. A new project for research and development, by employing advanced techniques for improving standard practices of groundwater exploitation in Uttar Pradesh costing Rs.243 lakhs has therefore been included in the State Plan. An outlay of Rs.500 lakhs is proposed for the sixth Plan 1980-85.

207. At present there are 7 rigs in this organisation which are inadequate. Purchase of 4 more rigs, one each in 1981-82, 1982-83, 1983-84, 1984-85 is proposed, at a cost of approximately Rs.18 lakhs for each rig.

*(b)—State Minor Irrigation*

208. State Minor Irrigation works can broadly be classified under three main components namely State tubewells, minor lifts schemes and other minor works.



209. The position of irrigation potential created and utilised in previous plan

periods is shown in the table below :—

Year	Irrigation potential created in Lakh Hects.	Utilisaion in Lakh Hects.	Percentage of Utilisation	
			In respect of the same year	In respect of previous year
1	2	3	4	5
1977-78 .. .. .	23.80	13.00	55	..
1978-79 .. —.. —..	24.96	14.00	56	59
1979-80 .. .. .	26.66	15.00	56	60
1980-81 (Anticipated) .. .. .	26.36	17.00	60	64
1981-82 (Proposed) .. .. .	30.16	19.00	63	67

210. (i) *State tubewells*—At the end of Fifth Plan, 1974–78, there were 14,560 State tubewells in operation. The num-

ber of tubewells in operation at the end of different plan periods is given in the following table :—

Period	Cumulative No. of State Tubewells in operation
Pre-Plan .. .. .	2,305
End of 1st Plan .. .. .	4,260
End of 2nd Plan .. .. .	6,668
End of 3rd plan .. .. .	8,235
End of Fourth Plan .. .. .	12,447
End of Fifth Plan .. .. .	14,560
End of 1978-79 .. .. .	15,283
End of 1979-80 .. .. .	16,707
End of 1980-81 (Anticipated)	18,357
End of 1981-82 (Proposed Target).	20,107

211. The number of State tubewells in different stages of construction at the

end of 1979-80 is shown in table below :—

Year	Number of T.W. drilled	Pumpsets installed	Pump houses constructed	Number of T.W. energised	Number of T.W. in operation
1	2	3	4	5	6
End of 1977-78 .. .. .	17391	15179	16440	15522	14560
End of 1978-79 .. .. .	18670	17600	17813	16491	15283
End of 1979-80 .. .. .	19967	17932	18262	17884	16707
End of 1980-81 (Anticipated)	21345	19346	19770	19534	18357
End of 1981-82 (Proposed Target)	22767	20940	21370	21284	20107

212. From the above table it would be seen that in 1980-81; 1,378 numbers tubewells are expected to be drilled including 328 numbers under the World Bank

programme. Of these 1650 are expected to be energised, including 250 under the World Bank programme. During the year 1981-82, 1422 State tubewells are

proposed to be drilled, including 250 under the World Bank. The backlog between drilling and energisation will thus be

reduced leading to better utilisation of investment on this programme, in the Sixth Plan, as noted below :—

Years	Drilling of state tubewells	Energisation of state tubewells
1	2	3
1980-81(Anticipated) .. ..	1378*	1650
1981-82 (Proposed) .. ..	1422*	1750
1982-83 (Proposed) .. ..	1400	1500
1983-84 (Proposed) .. ..	1500	1500
1984-85 (Proposed) .. ..	1500	1500
Total .. ..	7200	7900

213. The loss of working hours is on account of various factors\*. The State tubewells as designed at present are expected to irrigate an area of 120 hectare annually and run for at least 2500 hours on an average. With the increase in demand of irrigation water, this area is proposed to be reduced to 100 hectares now.

214. *Physical programmes and outlays*—An outlay of Rs.264.74 crores has been proposed for State minor irrigation works for the Sixth Plan 1980—85. Actual expenditure during the Fifth Plan, 1974—78, was Rs.94.38 crores and in subsequent two years 1978-79 and 1979-80 was Rs.33.34 crores and Rs.35.08 crores respectively. Programmewise Sixth Plan outlays are shown below :

Name of Programme	(Rupees in lakhs)				
	Sixth Plan outlay 1980—85	1980-81 Approved outlay	1981-82 Proposed outlay	1982-83 Proposed outlay	1983-84 Proposed outlay
1	2	3	4	5	6
1. State Tube Wells .. ..	23124	4113	4650	4740	4800
2. Minor Lift Schemes .. ..	200	60	50	40	30
3. Other Minor Works .. ..	3150	515	610	670	670
Total .. ..	26474	4688	5310	5450	5500

215. Programmewise physical targets proposed for the period 1980—85 Plan are

given in the following table :

Name of Programme	(000 ha.)				
	Sixth Pan 1980—85	1980-81 Target	1981-82 Proposed Target	1982-83 Proposed Target	1983-84 Proposed Target
1	2	3	4	5	6
1 State Tube Wells .. ..	790	165	175	150	150
2 Minor Lift Schemes .. ..	15	3	3	3	3
3. Other Minor Works .. ..	10	2	2	2	2
Total .. ..	815	170	180	155	155

\*Annexure IX

216. The utilisation of Rs.231.24 crores on various programmes of construction and energisation of State tubewells during the Plan period 1980-85. An expenditure of Rs.41.13 crores is anticipated during 1980-81 and an outlay of Rs.44.00 crores is proposed for the year 1981-82 to implement the programme of construction and energisation of State tubewells.

217. (ii) *Minor Lift Schemes*—An outlay of Rs.2.00 crores has been proposed for completion of on-going schemes taken up during the Fifth Plan 1974-78, and during the subsequent two years 1978-79 and 1979-80. No provision has been made for new scheme as such schemes are incurring heavy losses. An amount of Rs.125 lakhs was spent on these works during 1979-80. An expenditure of Rs.60 lakhs is anticipated during 1980-81 and an outlay of Rs.50 lakhs has been proposed for the year 1981-82 on this programme.

218. (iii) *Hill Channels*—An outlay of Rs.28.00 crores is proposed for construction of these works during the Sixth Plan 1980-85. It is proposed to extend the construction of hill channels and hydrams in the Hill region to provide more irriga-

tion facilities in this region. An expenditure of Rs.356.80 lakhs was incurring during 1979-80 and anticipated expenditure for 1980-81 is Rs.445 lakhs. An outlay of Rs.540 lakhs has been proposed for 1981-82 on this programme.

219. (iv) *Bundhis and Tanks*—A provision of Rs.3.50 crores has been made for construction of Bundhis and tanks for the benefit of arid areas in the Bundelkhand region of the State. There is great demand for this type of works in this region in absence of any other source of irrigation as rivers of these areas are not perennial and ground-water exploitation is not feasible in most of the area. An expenditure of Rs.86.25 lakhs was incurred during 1979-80. Anticipated expenditure during 1980-81 is Rs.70 lakhs and a similar outlay has been provided for the year 1981-82.

220. (v) *Financial losses on State tubewells*—The details of expected gross receipts working expenses, interest charges and net receipts for the year 1979-80, 1980-81, 1981-82 and anticipated for the Plan period 1980-85 are shown in the table below :

Item	(Rupees in lakhs)			
	1979-80	1980-81	1981-82	1980-85
1	2	3	4	5
1. Gross Receipts .. .. .	890.00	1000.00	1100.00	6000.00
2. Working Expenses .. .. .	2911.25	2868.72	3136.00	16278.72
3. Interest charges .. .. .	1169.47	1396.61	1518.40	8758.41
4. Net Receipts .. .. .	(—)3190.72	(—)3265.33	(—)3554.40	(—)19037.13

221. One of the main reasons of such excessive losses from operation of State tubewells is poor utilisation of potential created due to shortages of power. Efforts are being made to improve the power supply position for tubewells and lift irrigation schemes by preferential allocation. The State tubewell organisation is also being geared up to ensure that defective tubewells are repaired promptly. The difficulties of maintaining open channels

are being minimised by changing to underground pipe lines. Tubewell utilisation is also proposed to be improved by suitable changes in cropping pattern to be brought about by intensive extension work. Even with power supply constraints, it is proposed that with the above measures, the level of utilisation should rise from about 2000 hours annually at present to about 2500 hours annually within the next few years.

222. The utilization of potential created by State minor irrigation works is also sought to be improved by making necessary changes in the present management system as well as intensifying agricultural extension work. To formulate future programmes scientifically and to obtain the active participation of the people for its implementation in the context of existing socio-economic institutional and managerial patterns it is contemplated that the management of State tubewells be transferred to the local bodies who would keep a close watch on the operational aspects of Minor Irrigation Works. Delegation of appropriate financial powers to Zila Parishad and other local bodies would also have to be considered.

223. *Irrigation Rates for State Tubewells*—Up to 1975-76, the irrigation rates for State tubewells were based on volumetric system. In 1974-75, water rates were fixed at 6,000 gallons per rupee from November to June and 12,000 gallons per rupees from July to October, in order to encourage paddy irrigation. During 1975-76 while water rates for the period of November to June were left unchanged, rates for paddy irrigation were reduced further from 12,000 gallons per rupee to 16,000 gallons per rupee between July to October. From April 1, 1976 two part tariff was introduced under which an annual fixed charge of Rs.21.00 per acre of commanded area was levied in addition to irrigation charges as applicable to canal irrigation. These rates have been further revised from April 1, 1977. Fixed charges of Rs.21.00 per acre has been withdrawn and water rates have again been brought to the previous level of 6,000 gallons per rupee from November to March and 16,000 gallons per rupee from July to October. With this simplification and reduction in

water rates, utilisation of potential of State tubewells is expected to increase.

224. (vi) *World Bank Project*—Under the World Bank Aid programme, the work of construction of State tubewells commenced in the year 1979-80, 500 numbers of State tubewells are proposed to be constructed as shown in the table below :

Items	1980-81	1981-82
1. Drilling of tubewells ..	328	172
2. Energisation of tubewells	172	328
Total ..	500	500

225. (vii) *Schemes in the southern Plateau areas*—In this category only bundhis and tanks in the southern plateau areas in Bundelkhand are taken into account. The provision of Rs.3.50 crores has been made for construction of bundhis and tanks for drought affected areas in Bundelkhand regions of the State where great demand for construction of such works exist as the area is arid without other sources of irrigation. The bundhis are provided by constructing small bundhis on local drainages and water is stored during monsoon which is discharged just before sowing of *rabi* crops. The emergent land is fertile and damp which gives a good *rabi* crop. Similarly tanks are provided by constructing small bunds in the rocky areas and irrigation of *rabi* is done through *gul* system.

226. (viii) *Special Component Plan*—Ten per cent of the State tubewells are proposed to be sited in areas having preponderance of Schedule caste holdings. An outlay of Rs.280 lakhs has thus been earmarked during the year 1980-81 and an outlay of Rs.320 lakhs has been proposed during the year 1981-82. The total outlay provided for the Plan period 1980-85 is Rs.16 crores.

*(c) Private Minor Irrigation*

227. Within the current institutional framework of family farms and unequal land distribution, one obvious solution towards improving and strengthening the agricultural base of the small farmer is to develop his land and water resources. Providing a small farmer a source of irrigation, say a well, would enable him to reach the threshold of economic viability by converting his dry farming unit of 1 hectare into irrigated agriculture with possibility of multiple cropping. Further, irrigation prospects would induce him to go in for appropriate land levelling and land shaping so that his entire land would be in a position to receive water from his well. Both these improvements are of substantial nature, which need to be financed through a credit agency since the small farmer would have no resources of his own.

228. Surface water lift irrigation schemes are playing a very useful role at sites where available surface water cannot be used for irrigation through construction of flow irrigation schemes due to topographical limitations.

229. Ground-water development forms the bulk of the minor irrigation programme. It is essentially and mostly a people's programme, implemented primarily through individual efforts and partly through community efforts, with

finances obtained from private and institutional sources. The programme thus imposes very little burden on the public exchequer. Private minor irrigation programme has been playing an extremely important role in agriculture production. By providing timely and adequate irrigation to the crops.

230. The main reasons for the sub-optimal utilisation of the potential created by minor irrigation works has been the inadequate availability of power. Besides diesel has also become scarce and there is little evidence of either of these constraints being removed in the near future. As a result, the strategy will be revised to incorporate specific targets for construction of masonry wells, borings, persian wheels and washer pumps etc. which deploy animal power.

231. *Progress in previous Plans*—Irrigation potential created by private minor irrigation is calculated on the basis of revised norms for annual irrigated areas and depreciation at a rate of 2.5 per cent per annum. The achievement in terms of utilisation of irrigation potential is reckoned as hundred per cent of the irrigation potential created in case of private minor irrigation schemes.

232. Progressive physical achievements relating to important items of private minor irrigation programme are given below :

Item	1950-51	1960-61	1968-69	1973-74	1977-78	1979-80
1. Masonry wells .. ..	6.24	6.96	11.23	10.06	10.65	10.87 (1000 Nos.)
2. Pumpsets .. ..	0.10	0.04	1.06	1.96	3.26	5.03
3. Tubewells (Pvt.) .. ..	0.03	0.05	1.20	3.53	6.23	7.46
4. Private energised Pumpset/T.W. ..	N.A.	N.A.	0.66	2.16	2.79	3.39
5. Irrigation potential created by Private Minor Irrigation works (ha.)	14.44	16.35	35.37	37.12	52.79	64.87

233. *Physical Target for the Sixth Plan 1980-85*—The Sixth Plan envisages creation of additional potential of 29.15

lakh hectare through construction of the following works :

Item	Unit	Level by the end of 1979-80	Target for five years 1980-85		Proposed Total at the end of Plan
			Additional	Total	
1	2	3	4	5	
1. Masonry well (including) Blast well	.. Nos'	1086890	35000	1121890	
2. Borings	.. "	1324824	628600	1953424	
(a) Boring of small Marginal farmers	.. "	N.A.	60000	..	
(b) Boring of other farmers	.. "	N.A.	568600	..	
3. Persian wheels	.. "	465149	17500	482644	
4. Pumping sets	.. "	503447	480100	983547	
(a) On surface	.. "	N.A.	66500	983547	
(b) On Borings	.. "	N.A.	413600	..	
5. Private Tube well (including Hydrams)	.. "	745682	217500	963182	
6. Bundhis	.. Hectare	914397	34000	963397	
7. Gul and Hauz	.. "	31425	17500	48925	

234. Year-wise generation of additional irrigation potential will be as below :

**Additional Potential (thousand hac) Net area**

Year	Surface- water	Ground- water	Total
1980-81	23	592	615
1981-82	26	569	595
1982-83	26	549	575
1983-84	25	540	565
1984-85	25	540	565
Total	125	2790	2915

235. The total financial requirements are assessed as below :

Item	No. projected	Cost per unit	Total Cost (in crores)
1	2	3	4
Masonry well	35000	5000	17.50
Borings	628600	3000	188.58
Rahats	17500	1500	2.63
Pump sets	480100	8000	384.08
Private Tube-well	217500	15000	326.25
Bundhis	34900	1500	52.35
Gul and Hauz	17500	9800	17.15
Blast wells, Hydrams, Check Dams	..	..	11.46
Total	..	..	1000.00

It is not yet assessed as to how far private firms would be able to finance this project, and how far institutional or Governmental funds will be

needed. An outlay of Rs.74 crores has been provided for Sixth Plan duration (1980-85). The details of Plan outlay and its year-wise break-up are as follows :

(Rupees in lakhs)

Serial no.	Item	1980-81	1981-82	1982-83	1983-84	1984-85	Total (1980-85)
1	2	3	4	5	6	7	8
<i>Financial outlay</i>							
1	Establishment including Training Contingency.	80.35	95.00	160.00	160.00	160.00	655.35
2	<i>Equipment Machinery</i>						
2	Construction of Godowns ..	102.00	121.00	511.00	511.00	574.00	1819.00
3	G.M.F. Loan .. ..	37.71	50.00	250.00	250.00	250.00	837.71
4	Subsidy .. ..	274.69	309.00	1000.00	1023.00	1096.00	3672.69
5	Work, Blast well, chek dam, plain and hydrams in hill.	45.25	50.00	125.00	125.00	140.00	485.25
	Total ..	540.00	625.00	2046.00	2069.00	2120.00	7400.00

236. It is proposed that in some less developed districts in the eastern and the Bundelkhand regions, wells and tubewells may be constructed by Government from public sector funds as in these areas flow of institutional credit to farmers is not likely to take place.

237. Contribution by various agencies is estimated to be as follows :

	(Rs. in crores)
(i) Private investment .. ..	493.50
(ii) Institutional, Investment ..	450.00
(iii) State Plan outlay towards subsidies and construction work.	36.50
(iv) Central Sector Programme subsidies	20.00
Total ..	1000.00

238. *Development of irrigation in Hills*—The irrigation facilities extend to under 10 per cent of the cultivated areas in the Hill areas of the State. The State Irriga-

tion works account for 2.5 to 3 per cent and the balance 7 per cent is on account of private irrigation. Most of the private irrigation works are old and have fallen into disuse because of want of repairs. The actual irrigated area is thus only 5 to 6 per cent of the cultivated area. It is necessary to renovate existing works and accelerate the construction of new works to cover about 28-30 per cent of the cultivated area with irrigation facilities. Lift irrigation will need to be provided for higher terraces.

239. The State minor irrigation works are confined to 20 hectares at the lower limit while the private minor irrigation works are confined to 2 hectares. There is thus no agency to execute irrigation works in the range of 2 to 20 hectares. Strengthening of existing organisations is therefore necessary to take up the construction of irrigation schemes for this range as well. This organisation can also look after the maintenance of these work. The

physical programme for hill, is a below :—

Serial no.	Name of Scheme	Phasing of potential					Total
		1980-81	1981-82	1982-83	1983-84	1984-85	1980—85
A.	Ground Water Masonry well Persian wheel Boring and Tube well.	8.20	7.15	6.13	5.12	5.10	31.70
B.	Surface water :						
	1. Hill Channel and Hauz ..	3.50	3.50	3.50	3.50	3.50	17.50
	2. Hydrum ..	0.30	0.35	0.37	0.38	0.40	1.80
	Sub-Total ..	3.80	3.85	3.87	3.88	3.90	19.30
	Grand Total ..	12.00	11.00	10.00	9.00	9.00	51.00

240. *Hydrums*—Hydrum works on the principle of hydraulic ram or water hammer. The energy of a large quantity of water with small head is used to lift the small quantity of water to a greater height. The discharge of water is thus reduced proportionally to the head of delivery of water. Irrigation facilities are being provided through forty-four units out of sixty-nine units taken up so far. The remaining units are expected to be put in operation during the coming *rabi* season of the year 1980-81. Installation of 80 additional hydrum schemes has been taken up in hand now.

241. The hydrum schemes are being constructed at a cost of Rs.12,000 per hectare with an average cost of a scheme as Rs.60,000.00. Intensive cropping has to be quickly developed in areas of hydrum schemes.

242. *Tapping of ground-water in difficult areas*—There are several difficult areas in the State which are devoid of irrigation facilities. Purchase of rigs for ground water exploitation in such areas is necessary. Provision of 32 blasting units for blasting of wells has been made for five districts of Bundelkhand, part of Varanasi, Allahabad and Mirzapur districts.

243. *Spatial planning and regional imbalances*—For better spatial planning, *shajra* maps of each gram sewak circle of the State are being prepared giving details of all existing private minor irrigation works and State works showing their command areas. Apart from identifying areas which have

no irrigation works, exact information regarding size and location of such areas in the command of State irrigation works which receive only one or two waterings will have to be collected to prepare a Plan for providing additional irrigation facilities. Preparation of detailed *shajra* sheets will form the basis for micro-planning at the village and village level worker circle level, which in turn will be integrated into a comprehensive master plan of each block and district. These Plans would have to be related to region, watershed and command area master plans. These will also take into account provision of the district plans being prepared by the Irrigation Department.

244. *Special component Plan*—The benefits of the programme in the past have largely gone to the big farmers. Small farmers with holdings between 1 to 2 hectares, marginal farmers with holding up to 1 hectare in general and scheduled castes and tribal farmers in particular have not been benefitted to the extent it was desirable. Special measures would be necessary to re-orient the programme in favour of small and marginal farmers, scheduled castes and tribal farmers. The following measures are proposed :

(a) For scheduled castes, the rate of subsidy should be 75 per cent of the estimated cost.

(b) Like the small and marginal farmers, scheduled castes and tribals do not have enough resources to construct their own wells and tubewells,



the State Government may get their works constructed through appropriate agencies.

(c) The scheme of individual borings operated by commonly hired pump sets on group basis should be encouraged to the maximum extent possible. These borings may be subsidised to a suitable extent.

(d) The condition of minimum holding for small irrigation wells may be removed and all these members of scheduled castes and tribals who want to have a well should be provided with one on priority basis.

245. *Stepping up Rural Electrification*—The rural electrification programme proposed to be taken up during the next Plan will replace to some extent existing diesel pump sets. The total number of tube wells and pump sets envisaged to be energised will be about 2.5 lakhs.

246. *Strengthening of the minor irrigation organisation*—Minor irrigation programme is looked after by a number of departments and agencies. Finances for the programme are also obtained from various sources such as public sector funds, institutional investment and the private resources of the farmers themselves. Institutional investment is obtained from different types of banks and the ARDC. Besides, there are several central sector programmes such as SFDA, DPAP, IRD., etc., under which minor irrigation forms an important component. Part of the programme such as public tubewells, lift irrigation projects, etc. is executed through autonomous Corporations. The achievement under the programme is intimately related to the progress attained under the rural electrification sector as well as the stability of power supply. It is thus obvious that there must be close co-ordination among all the agencies and sectors concerned, and that the programme must be actively monitored in its totality if it is to be accelerated at the pace visualised.

247. The important aspects of the programme requiring active monitoring and co-ordination would include—

(a) Physical and financial progress.

(b) Flow of institutional investment, removal of constraints and measures for improvement.

(c) Stepping up of rural electrification programme and measures for assured supply of electricity for irrigation.

(d) Adequacy of arrangements for surveys and investigations.

(e) Pin-pointing of deficiencies and undertaking of measures for improving planning, design, execution, maintenance, operation and utilization of minor irrigation works.

(f) Taking steps for proper selection and pricing of pump sets and provision of after sales service and repair facilities within easy reach of the farmers.

(g) Acceleration of the ground-water development programme in the command areas with a view to increasing the intensity of irrigation as also controlling water logging and salinisation.

(h) Planning timely procurement and assured supplies of key materials and equipment required for the programme.

(i) Taking special steps for orienting the programme towards weaker sections including small farmers, backward communities, scheduled castes and scheduled tribes, etc.

(j) Providing technical guidance to farmers relating to surveys, planning, design, execution, maintenance and utilisation of works particularly the private works belonging to the individual farmers or groups of farmers.

248. The above aspects have to be monitored in relation to the totality of the programme which includes several categories of schemes implemented through a number of agencies.

249. The Minor Irrigation Organization responsible for surveys, planning and execution of surface and ground-water schemes will need to be adequately strengthened to remove, the present deficiencies, which have been identified.



#### (4) SOIL AND WATER CONSERVATION

254. For sustained growth of agricultural production, it is essential to conserve and efficiently manage land and water resources. In fact, an efficient soil and water management programme provides a sound base for stepping up production and bringing about ecological balance. For proper use of land resources, soil and land use inventories need to be built up urgently through the latest techniques developed for this purpose. It is on the basis of such inventories that future land use Planning and management should be taken up in varying conditions of the different regions of the State.

2. A comprehensive soil and water conservation programme would lead to increased production, stabilise agricultural production, diversify agricultural pursuits through mixed farming, and be instrumental in restoring much needed ecological balance and in reducing environmental pollution.

255. *Objectives*—The primary objective of the soil and water conservation programme in the State is—

(1) to protect the agricultural land and reduce soil erosion and water losses, and

(2) to reclaim denuded and degraded land through integrated watershed development.

256. *Problem areas*—No detailed survey to estimate the problem areas requiring soil conservation measures has been undertaken in the State. According to rough estimates, at present about 39 lakh hectares of land in the State is under different erosion conditions, viz. mild, moderate, moderately severe and very severe, which is in need of soil and water conservation measures. In addition to above, land use survey by the Forest Department reveals that about 3.14 lakh hectares of severely eroded area and 8 to 10 lakh hectares of mild to moderately eroded area in the Hill region requires urgent attention in this regard.

257. In plains, erosion generally starts from the banks of the rivers and their tributaries and extends upwards in the

tableland in the form of gullies. Problems of ravine erosion are more common on the banks of Jamuna and Gomati and their tributaries. The problem of sheet and gully erosion is quite common in the Bundelkhand region. The total ravinous land in the State is estimated to be about 12 lakh hectares.

258. Problems of salinity and alkalinity, according to rough estimates, exist in about 11 lakh hectares in the plains of U. P., particularly in the South Western parts of the State.

259. Average annual area affected by floods has now reached the level of 36 lakh hectares, as against about 19 lakh hectares average during 1953–73.

260. To deal with the problems of soil erosion, different programmes, according to the stage of erosion and nature of problems, are taken up, a brief description of which is given below :

<i>Nature of Problem</i>	<i>Programme</i>
1. Mildly eroded areas.	Contour bunding, construction of water disposal structures and practice of land levelling and water management techniques.
2. Moderate eroded areas.	Contour bunding construction of check dams and <i>kachha pucca</i> surplus structures and levelling.
3. Severely eroded areas.	Broad-based contour bunding, plantation of orchards and afforestation, construction of check dams, water harvesting, submerged bundhies, and <i>pucca</i> surplus structures.
4. Very severally eroded areas particularly in hilly terrains.	Construction of bench terraces, surplus structure, check dams, risers, planting of orchards and afforestation.
5. Saline and alkaline soils.	Use of gypsum and pyrites.

261. *Strategy for the Sixth Plan 1980-85*—Keeping in view the objectives, the main strategy of the soil and water conser-

vation programmes during the Sixth Plan will be :—

(1) To reorganise the soil conservation programme on watershed basis.

(2) To prepare a composite plan in watershed areas comprising of soil conservation, irrigation, agronomical and horticultural programmes, fodder and pasture development and afforestation.

(3) To intensify the land resources survey through satellite imagery and aerial photo interpretation for fixing up priority watersheds and delineating salinity and erosion problems.

(4) To prepare project plans on the basis of detailed soil and land use-survey of the watersheds.

(5) To lay greater emphasis on soil and crop management of individual farms to improve their productivity. This will include preparation of soil fertility maps of the watershed, laying out suitable demonstrations, reclamation of soil affected by salinity and emphasis on the production of oilseeds and pulses.

(6) To ensure people's participation right from planning to implementation to a greater extent.

(7) To ensure co-ordination with Irrigation Department in the watershed areas for installing State tube-wells and other minor irrigation works.

#### SCHEMES OF AGRICULTURE DEPARTMENT

The following schemes are proposed to be taken up :

262. *Soil and Land Use Survey*—This scheme was started in 1977-78 as centrally sponsored scheme but since 1979-80 it has been transferred to the State Plan sector. Ten soil survey units are operating, with an assigned annual target of 30,000 hectares per unit for survey and preparation of soil and land use capability maps etc. By 1979-80, about 6.19 lakh hectares had been surveyed and classified. It is proposed to survey an area of about 12 lakh hectares during the Sixth plan in plains, and 0.80 lakh hectares in hills. The outlay proposed for the above scheme during the Sixth plan is Rs.107.72

lakhs for plains and Rs.10.64 lakhs for hills.

263. *Remote Sensing Soil Survey*—Aerial photo interpretation work has enabled categorisation and delineation of ravine lands, table lands, peripheral lands, shallow, medium and deep ravines and gully bottom lands. A regular scheme of remote sensing with the help of aerial photographs and satellite imagery was sanctioned in 1979-80 with the following objectives :

(1) To prepare watershed atlas of the State delineating land use pattern, erosion and salinity hazards.

(2) To prepare watershed maps for each soil conservation unit.

(3) To interpret the large size aerial photographs for planning soil water conservation works as a substitute to *shajra* maps.

(4) To impart preliminary training to field workers in quick interpretation and use of aerial surveys.

264. It is proposed to cover 20 lakh hectares of problem area under this scheme. The financial outlay required would be Rs.21.10 lakhs.

265. *Strengthening of soil conservation training centres*—There are five soil conservation training centres in U. P., three in plains (Mauranipur, Muzaffarabad, and Ramman Khera) and two in Hills (Majhkhali and Pauri Garhwal). About 1,000 workers are annually trained at these centres. It is expected that about 200 new units in command areas and 36 new units in the agriculture department will come up during the Sixth plan period. The additional units will increase the requirement for training of 330 officers, 1,416 senior and 5,900 junior assistants. To cater to the additional requirement of training, it is proposed to strengthen these training centres suitably. The financial outlay proposed during 1980-85 is Rs.55.01 lakhs for plains and Rs.56.00 lakhs for the hill areas.

266. *Soil and Water conservation in plains*—This covers levelling and contour bunding operations, while in high

erosion areas, afforestation is also undertaken but to a limited scale because of non-availability of funds for community lands. During 1979-80 about 45,000 hectares were covered under the scheme. With the integrated watershed management methodology, it is proposed to cover an area of 2.28 lakh hectares with the existing 45 units. Establishment of 6 additional units is proposed for the Sixth Plan. With these additional units the proposed target for the Sixth Plan would be 2.6 lakh hectares. According to the existing pattern, for the proposed 6 additional units, with one Divisional Soil Conservation unit for 6 S.F.D.A. districts, 333 new posts will be required. The proposed outlay for the Sixth Plan is Rs. 1891.16 lakhs.

267. *Scheme of Soil and Water Conservation in Hill areas executed by the agricultural department*—At present there are 20 sub-divisional and 3 divisional soil conservation units operating in the eight districts of hill Areas. The working pattern of the soil and water conservation in Hills has been reorganised to treat the area on integrated watershed treatment basis. The treatment includes renovation of risers and terraces, levelling of fields, diversion channels for safe water disposal, development of irrigation channels and systematic construction of water storage tanks, diggies, Gadhera stream control, afforestation, fodder and pasture development, contour cultivation and strip cropping, etc.

268. The present capacity of the existing units is 7000 hectares per year. Keeping in view the huge problem of covering about 6 lakh hectares problem areas it is proposed to establish 20 new soil survey units and five divisional units during the Sixth Plan. Two posts of Joint Directors one each in Kumaun and Garhwal Division are also proposed to be created during Plan. During the Sixth Plan it is proposed to treat about 52.5 thousand hectares. The financial outlay proposed for the entire Plan period is Rs.1,365 lakhs.

269. *Scheme for Reclamation and Stabilization of Ravinous Areas*—The ravinous land is mostly situated on the

banks of rivers Yamuna, Chambal, Sengar, Betwa, Sai and Gomti in the districts of Agra, Etawah, Kanpur, Jalaun, Hamirpur, Rae Bareli, Sultanpur and Pratapgarh. Ravine reclamation scheme was wholly financed under Central sector up to 1978-79, and during 1979-80 it was transferred to the State sector Plan. During the two years 1978-79 and 1979-80, about 5364 hectares area was covered under ravine reclamation scheme, out of which 2605 hectares of table land was protected, 739 hectares of shallow and medium ravinous land was reclaimed through terracing and 1851 hectares of deep ravines through engineering structures and 70 hectares of deep ravine through afforestation were stabilized.

270. Since the cost of reclamation is very high, subsidy at the rate of 50 per cent will be provided for the reclamation of work on individual fields. On community lands the reclamation will be carried out wholly at Government cost.

271. During the Sixth Plan, it is proposed to cover about 14,300 hectares of area under the ravine reclamation scheme, and the financial outlay proposed is Rs.425 lakhs.

272. *Scheme for Reclamation of alkaline land*—Uttar Pradesh according to rough estimates has about 11.5 lakh hectares of alkaline and saline land. The scheme for reclamation of alkali soils was initiated as a Centrally sponsored scheme in 1976-77 in 5 districts of U. P. which was extended later on to 34 districts and was transferred to the State Plan sector from 1979-80. This scheme provide subsidy to the extent of 75 per cent to farmers owing land up to 3 hectares and 50 per cent to others. The area treated during 1979-80 was 18,852 hectares. It is proposed to take up reclamation programme in the problem area of one lakh hectares during the Sixth Plan which requires 5 lakh tonnes of gypsum and pyrites. The proposed financial outlay during the Sixth Plan is Rs.689 lakhs.

273. *Scheme of reclamation of eroded land*—At first there were three user reclamation and one demonstration farms in U. P. which later on were converted into demonstration-cum-seed multiplication

farms covering 11 blocks. These farms do not have, adequate irrigation facilities, drainage and roads which adversely affect the productivity of these farms. These farms have about 1,900 hectares of gross cropped area with a cropping intensity of about 140 per cent. During the Sixth Plan it is proposed to raise the cropping intensity to 150 per cent. It is proposed to reclaim annually 100 hectares of additional area, besides on-farm development programmes will also be taken up on these farms. Buildings for residences, stores implement sheds etc. are also proposed to be constructed. The proposed financial outlay during the Sixth Plan is Rs.148.50 lakhs

274. *Maintenance of soil conservation work*—Since the introduction of soil and water conservation programme in the State, by the end of 1979-80, an area of about 23.14 lakh hectares of eroded land has been treated with necessary soil and water conservation techniques. The area treated earlier with contour bunding has been extensively damaged. This area as well as the treated area having community works needs repair and maintenance. According to the provisions of the Soil Conservation Act, the maintenance of soil conservation works is the responsibility of the beneficiaries. If the beneficiary fails to maintain the works, it can be taken up departmentally and cost thereof, is recovered as areas of land revenue. The community works are the responsibility of the State for their proper functioning. At present there is no provision for maintenance of these works. With the increased area covered under soil and water conservation from 3.47 lakh hectares to 23.14 lakh hectares, the present staff needs strengthening. It is proposed to provide an additional sub-unit consisting of one soil conservation Inspector and 5 Assistant Soil Conservation Inspectors to all the 83 working soil conservation units. These units will look after the maintenance of the works already completed. Thus during the Sixth Plan, 83 Soil Conservation Inspectors and 415 Assistant Soil Conservation Inspectors would be required with an additional 150 Assistant Soil Conservation Inspectors. These sub units will

cover about 7 lakh hectares area annually. The total outlay proposed for the Sixth Plan is Rs.55.50 lakhs for plains and Rs.66.36 lakhs for Hills.

275. *Strengthening of headquarters staff*—With the steady expansion of the organisation and diversification of efforts in various fields, the responsibility of headquarters staff have increased manifold. The expenditure under Soil Conservation Schemes has increased from Rs.3.91 crores in 1970-71 to Rs.11.64 crores in 1979-80.

276. As such it is proposed to strengthen the department by the creation of four cells viz., (i) Technical audit cell, (ii) Evaluation cell, (iii) Planning and monitoring cell and (v) Publicity cell. The financial outlay proposed for strengthening of headquarters staff during the Sixth Plan is Rs.20 lakhs.

#### *Centrally Sponsored Schemes*

277. *Soil conservation in River Valley Projects*—Government of India has approved two schemes of soil and water conservation in the river valley project area of U. P. viz., the Matatila and the Ram Ganga project areas. In order to reduce the inflow of silt from the catchment area into the reservoir, soil conservation measures like contour bunding, land levelling and grading, silt detention dams, gully plugging, check drains are being taken up in the priority watersheds. The above scheme is operated by the soil conservation wing of the Agriculture Department as well as the Forest Department. The Forest Department is confined to the areas falling within the limits of forests maintained by the Department while the Agriculture Department covers other areas.

278. During the year 1979-80 an area of 1,623 hectares was covered by soil conservation department by construction of 77 silt detention dams and 20 hectares by contour bunds.

279. It is proposed to cover 9,900 hectares under Matatila and 3,000 hectares in Ramganga Projects. The scheme will be financed on 50-50 basis by Central and State Governments. The outlay proposed for Matatila and Ramganga Projects

during the Sixth five-year Plan is Rs.65 lakhs and Rs.37 lakhs respectively under the State sector.

280. *Scheme of flood control in the Indogangetic plan*—The flood control measures in the State are limited to engineering measures in down stream area such as construction of embankments and raising of villages, etc. It is felt that unless the catchment is treated with different soil conservation measures, flood control measures initiated in the down stream reaches may not prove effective. Therefore, the programme of soil conservation, afforestation and watershed treatment has been proposed in the entire catchment of flood prone rivers.

281. It is proposed to cover about 82.5 thousand hectares of area under conservation during the Sixth Plan. To achieve the above targets it is proposed to establish 25 soil conservation units along with 5 divisional units.

282. The financing pattern will be 50 : 50 between the Government of India and the State Government. During the Sixth Plan, the State share would be Rs.387.01 lakhs.

283. *Uttar Pradesh Bhoomi Sudhar Nigam*—The Uttar Pradesh Bhoomi Sudhar Nigam was established in March 1978 with a share capital of Rs.100 lakhs. Subsequently Rs.15 lakhs were added to this during the following year. The work of Usar reclamation was actually started in 1979 after identifying a block of 200 hectares of area in Shivri village. The scheme envisages allotment of land to the landless farmers and undertakes reclamation work subsequently to enable the Nigam to avail the facility of subsidy on various component of the reclamation programme.

284. The Nigam proposes to reclaim an area of about 13.25 thousand hectares of Usar land during the Sixth Plan. Further State participation in the share capi-

tal to the tune of 100 lakhs during the Sixth Plan period is proposed.

285. The total financial outlay proposed for different soil conservation programme during the Sixth Five Year Plan is Rs.5,500 lakhs, out of which Rs.3965 lakhs are for plan and Rs.1,535 lakhs for the hills.

286. The additional employment, opportunities would be created to the tune of about 48 lakh mandays.

287. *Soil conservation schemes of the Forest Department*—Eight hill districts of Uttar Pradesh contain about 66 per cent forest area of the State. A large portion of the hill forest area is not under the control of the forest department. During the Fifth Plan 1974–78 many soil conservation schemes were started to arrest the soil erosion problem in critical spots. These schemes were river valley projects in the catchment of Alakananda, river valley project in the Kosi, soil conservation in Himalyan region, and soil conservation in Panar Ghati. All these schemes were merged under one scheme “soil conservation works in civil and soyam,” including development of Civil and Soyam Forests, from the year 1979-80. In addition to work on these lands, water conservation measures on private farming lands are also being carried out by the soil conservation wing of the Agriculture Department. There is also a proposal to integrate soil and water conservation activities of both the agriculture and the forest departments in the hills, and to ensure planning for this on catchments and sub catchments basis. It is proposed that soil conservation work in areas which contain more than 50 per cent agricultural land, will be done by the Agriculture department and in the remaining areas this work will be done by the Forest Department.

288. According to the working capacity norms, following work is proposed during Sixth Plan 1980–85 :

Item	Unit	Target for (80–85)
Afforestation and pasture Development .. .. .	.. Ha.	37.500
2. Planting of fruit trees .. .. .	.. Ha.	210
3. Terracing .. .. .	.. Ha.	50
4. Minor Engineering Works .. .. .	.. Rupees in Lakhs	138.50
5. Survey and Demarcation .. .. .	.. Ha.	50,000

289. In the plains of the State a scheme of ravine afforestation is also being implemented by the forest department where the total ravine area under the control of the forest department is 1.21 lakh hectares. With a view to check the formation of gullies and ravines and also to stabilize, conserve and enrich the soil, a beginning was made by the department to treat ravines under the plan scheme from the year 1964-65. Up to the end of the Fifth Plan 1974-78, 56,362 hectares of ravines have been afforestation under the plan schemes and during 1979-80, 2,400 hectares afforestation of ravines was also carried out by the department. The

scheme is to be continued during the Sixth Plan 1980-85 and a target of treating 15,900 hectares at an outlay of Rs.312.00 lakhs has been proposed.

290. *Integrated Soil Water Conservation in the Himalayan Region*—This is a centrally sponsored scheme begun in 1978-79 for soil conservation works in the hills of this State. It is proposed to carry out land use and land capability surveys of the Himalayan region of U. P. along with integrated soil, water conservation on micro-watershed basis.

291. The following table gives the achievements for 1978-79 and 1979-80 and target for Sixth Plan 1980-85 :

Serial no.	Item	Unit	Actuals 1978-79	Actuals 1979-80	Proposed 1980-85
1	2	3	4	5	6
<i>Physical :</i>					
1	Soil Conservation Survey .. ..	Sq. Km.	5,000	5,313	25,000
2	Terracing of				
	(a) Critically eroded land .. ..	Ha.	..	38	800
	(b) Branch terracing .. ..	Ha.	..	..	240
3	Afforestation .. ..	Ha.	123	4,284	8,35,000
4	Pasture Development .. ..	Ha.	34	3,079	28,500
5	Stabilization of land slips .. ..	Ha.	..	..	700
6	Minor Engineering Works Worth .. ..	Rupees in lakhs Nos.	..	..	2,400
			257	491	1,368
	Financial .. ..	Rupees in lakhs	25.26	107.40	2532.00

292. *Soil Conservation Works in the Catchment of Ramganga River Valley Project*—The scheme of soil conservation in river valley project in the catchment of the Ramganga river was started from 1970-71 as a centrally sponsored scheme. It is pro-

posed to continue this scheme during the Sixth Plan as well.

293. The achievements during 1978-79 and 1979-80 together with targets for the Sixth Plan under this scheme are given in the following table :—

Item	Unit	Actual Achievements Proposed Target			
		Up to 1978-79	During 1979-80	1980-81	1980-85
1	2	3	4	5	6
<i>PHYSICAL</i>					
1. Afforestation .. ..	Ha.	23,640	3,195	2,000	9,500
2. Pasture Development .. ..	Ha.				
3. Treatment of Agriculture Land .. ..	Ha.	1,418	127	300	1,500
4. Plantation of fruit trees .. ..	Ha.	801	166	50	250
5. Establishment Nos. of Silt Observation Laboratories .. ..		12	Maintenance.	Maintenance.	Maintenance.
6. Establishment of Sediment observations posts .. ..	Nos.	17	Do.	Do.	Do.
7. Minor Engineering works viz. Check Dams, Spurs, Slips etc. .. ..	Nos.	7,140	127	300	1,500
8. Survey of Catchment .. ..	Ha.	1,82,728	..	..	..
<i>FINANCIAL</i>					
(Rupees in lakhs) .. ..		383.22	44.99	50.00	384.00



294. *River valley project in the catchment of Matatila*—The scheme of soil conservation in the catchment of the Matatila Dam in Lalitpur, district was started from 1970-71 as a centrally sponsored scheme.

It is proposed to continue this scheme during the Sixth Plan.

295. The progress of work in previous years and proposals for the Sixth Plan are given in the following table :—

Item	Unit	Actual Achievements		Proposal	
		Up to 1978-79	1979-80	1980-81	1980-85
1	2	3	4	5	6
<i>PHYSICAL</i>					
1. Plantation .. ..	Ha.	760	300	200	1,000
2. Fencing and Development of Pastures ..	Ha.	870	200	200	1,000
3. Bunding .. ..	Ha.	855	..	100	500
4. Minor Engineering Works .. ..	Nos.	866	41	40	200
Financial .. ..	Rs. in lakh	59.75	5.99	11.00	47.00

### (5) AREA DEVELOPMENT AND INTEGRATED RURAL DEVELOPMENT

296. In recent years, a major policy reorientation has taken place in regard to the delivery of services and promotion of rural development. Area and beneficiary specificity is being increasingly emphasized in order to ensure that developmental impulses create identifiable impact in areas and on families which would otherwise have tended to be deprived from participating in the process of development. Concern with these aspects has led to a variety of programmes tailored to suit specific requirements.

297. The basic idea in any area planning activity is to ensure an optimum utilization of locally available resources in men and material on a spatial basis within a specific frame of objectives. The area specific approach seeks development of a particular area through the creation of necessary infra-structure. The beneficiary-specific approach, where an under-privilege group is deliberately selected for giving assistance, seeks to raise productivity of such groups and to pull them out of poverty.

298. Command Area Development, Drought Prone Areas Programme, as well as the programmes initiated by the Divisional Development Corporations have basically an area approach, although individual beneficiary programmes have also been included in these special area programmes. The Small Farmers Development and Integrated Rural Development programmes are basically beneficiary oriented programmes.

299. The I. R. D. programme was introduced with the intent that under its aegis, integrated planning and implementation of all programmes at the grass-roots level will be undertaken at the block level. The underlying assumption was that planning at the State level or even at lower levels, if hedged in with multifarious schematic patterns imposed from above, cannot be an effective solution to problems of unemployment, or poverty of specific families in various rural areas.

300. This part of the Chapter concerns :

- (i) local level planning ;
- (ii) antodaya ;
- (iii) command area development;
- (iv) integrated rural development ;
- (v) divisional development corporations ;
- (vi) drought-prone areas programme ;
- (vii) small farmers development agency ;
- (viii) training of rural youth for self-employment ;
- (ix) integrated area development corporations ;
- (x) intensive district planning and development projects.

301. *Local Level Planning*—Planning seeks to involve local entrepreneurial talents, expertise and resources for accelerated and diversified growth of the rural economy and enlargement of employment avenues on a decentralised basis. The programme broadly covers intensification, commercialisation and modernisation of conventional and basic rural occupations viz. agriculture, horticulture including vegetable production, animal husbandry, fisheries, poultry etc. and stimulating initiatives for development of processing, bye-product utilisation, packaging warehousing, transport, insurance and banking, merchandising, commerce, service industries and petty trade and vocations. It also aims at assisting capital investment and wealth creation and at remunerative investment of shy capital in the countryside for increasing production of goods and services and generation of employment opportunities. The problem of rural unemployment and under-employment and forced seasonal idleness could also be mitigated to a considerable extent through rural industrialization and commercialization. This would also help diversification, reduce pressures on land and ensure harmonious growth of agriculture and industry.

302. Zila Parishads have been given powers to examine feasibility, viability, utility and employment potentials etc. of the projects drawn up locally and to approve sound proposals up to the extent of Rs. 1 lakh and community projects costing up to Rs. 2.0 lakhs. The divisional administration has been vested with powers to clear proposals up to Rs. 5.0 lakhs. Schemes costing above Rs. 5.0 lakhs and up to Rs. 10.0 lakhs are processed and approved at the State Government level. The services of U. P. Development Systems Corporation and the State Planning Institute were made available to the district administration for project evaluation. Loans carry an interest of 10.5 per cent per annum, with a provision of 1 per cent rebate on timely debt servicing. Loans up to Rs. 10,000 are repayable in 8 years, and the rest in 11 years.

303. The funds are being used in areas or projects for which institutional finance is not readily available. Departmental programmes and infra-structural facilities are not being financed from this scheme. The object is to use the limited resources as seed capital in unbanked areas and for financing labour intensive projects involving low per unit investment.

304. Since the inception of the scheme, provision has been made for an outlay of Rs. 15.354 crores. Till the end of July, 1980, 10,031 projects have been sanctioned in rural areas, for which loans aggregating Rs. 616.26 lakhs were given by Zila Parishads and Rs. 21.48 lakhs by Commercial banks. Improvement in commercial bank funds' mobilisation is called for.

305. In the Sixth Plan, a provision of Rs. 15 crores is earmarked for local planning at the rate of Rs. 3.0 crores in each year of the plan.

306. Up to the end of 1979-80, a sum of Rs. 27.10 crores was disbursed by Zila Parishads and Rs. 7.24 crores by scheduled banks, as loan and subsidy to 1,43,398 families. If each family is earning a gross average revenue of Rs. 5 per day, the beneficiaries are roughly contributing Rs. 7.17 lakhs worth of goods and services per day

i.e. Rs. 27.17 crores per annum towards gross national product.

307. *Proposed level of achievement during the Sixth Plan*—In the Sixth Plan period, the remaining 3,83,385 families are to be provided gainful projects for self-employment. The whole State has now come under the coverage of Integrated Rural Development Programme with effect from October 2, 1980. The Antyodaya families comprise the bottom layer of rural society, hence it is to be expected that all the identified families would be of the category eligible for IDR assistance of 25 per cent or 33 per cent subsidy. The rest of the subsidy component to bring the total to 50 per cent in respect of the identified balance of families will be provided for Antyodaya provision with the Zila Parishads. The objective of covering all the balance of identified families assumes that special central assistance at the rate of Rs. 5.0 crores, as in the year 1980-81, is made available in each year of the Plan.

308. An outlay of Rs. 35 crores is proposed for local level planning during the Sixth Plan 1980-85.

309. *Antyodaya Scheme*—The objective of the scheme is to improve the life of the poorest of the poor residing in rural areas. Have nots belonging to this category, comprising landless labour, bonded labour, rural artisans, share-croppers, marginal and small farmers, etc. have not been adequately benefited from planned progress. Looking to the dimensions of the problem and the limited physical and financial resources of the Government, five poorest families were selected from each inhabited village in the State.

310. The effort is to provide economic assistance to each beneficiary to start an economic project of his choice. The Government extends loans up to Rs. 5,000 to each beneficiary through Zila Parishads or bank at a differential rate of interest. The Zila Parishad loans are repayable in eight years. As an incentive to the members of the lowest economic strata, 50 per cent of the loan is adjusted as subsidy. Stress is on quick-maturing and low technology projects which start supplementing

the beneficiaries income within the shortest duration. Mobilisation on institutional finance to cover the credit component is a condition of the scheme.

311. In the first phase 5,26,983 families were to be selected, against which 5,15,427 families were actually selected by the Gram Sabhas. Out of five lakh, fifteen thousand, four hundred and twenty-seven families identified, 2,26,644 belonged to scheduled castes and scheduled tribes. The special component for these groups in this scheme is around 50 per cent.

312. *Command Area Development Programme*—Irrigation projects constructed at very high costs, provide for water to be brought up to the outlet point only. However, there is need for another catalyst to ensure the speedy conveyance of this water to each and every field within the command area, to ensure that maximum water reaches the fields at the proper time, provide extension support to farmers, to make the best possible use of this water by introducing additional crops and better cropping patterns and to arrange for timely supply of other necessary inputs. Only through the working of such an agency the gains envisaged from such irrigation projects would materialise and the infrastructure created at high cost utilized specially.

313. The Sharda Sahayak, the Ramganga and the Gandak Command Area Development authorities (CADA) have been set up in U. P. to act as a catalyst in the command of these irrigation projects.

314. The C. A. D. authorities are undertaking on farm development work to ensure the maximum utilization of the irrigation potential created in the shortest possible time. By introducing 'Wara-bandi' they are endeavouring to introduce an effective water distribution system on every holding. Side by side, they are preparing and introducing scientific crop plants in each outlet command. In addition, they have also been made responsible for the overall, integrated and balanced development of the region by making arrangement for agricultural extension, supply of inputs, exploitation of ground water, marketing of produce and development of other attendant infra-structure for this purpose.

315. Under on-farm development, the C. A. D. authorities are undertaking construction of irrigation channels, field drained water control structures and *chak* roads. They are also lining a certain length of trunk channels in each outlet command. All this is preceded by soil survey and topographical survey, planning and designing.

316. The execution of O. F. D. Works leads to (i) greater utilization of irrigation potential by increasing the irrigation intensity per hectare and also area under irrigation, (ii) higher cropping intensity by introducing of double and triple cropping, (iii) higher yield per hectare, (iv) greater total agricultural output. An important indirect gain is also derived by creation of employment opportunities in the execution of O. F. D. works.

317. Some basic information is given in the table below :—

Sl. no.	Item	Ramganga	:Sarda Sahayak	Gandak	Total
1	2	3	4	5	6
1	Districts benefited	1. Aligarh 2. Mathura 3. Agra 4. Mainpuri 5. Etah 6. Farrukhabad 7. Etawah 8. Kanpur 9. Fatehpur 10. Allahabad	1. Lucknow 2. Raebareli 3. Sitapur 4. Kheri 5. Faizabad 6. Sultapur 7. Pratapgarh 8. Barabanki 9. Varanasi 10. Jaunpur	1. Deoria 2. Gorakhpur	26

Sl. no	Item	Ramganga	Sharda Sahayak	Gandak	Total
1	2	3	4	5	6
			11. Ghazipur		
			12. Ballia		
			13. Azamgarh		
			14. Allahabad		
2	C. C. A. (in lakhha)	8.21	20.00	4.43	32.64
3	Irrigation potential created up to end of 5th plan. (lakh hac.)	5.34	13.50	2.87	21.71
4	Irrigation potential to be created upto the end of Sixth Plan. (in lakh hac).	5.75	19.23	3.32	28.30
5	Number of blocks included in C. A. D. Project.	144	156	33	333

318. The Chief Executive in each CADA is an Administrator having wide administrative and financial powers. He is assisted at the headquarters by additional and joint heads of departments of co-operative, agriculture and animal husbandry. A superintending engineer of the irrigation department is attached with each authority. A senior accounts officer heads the finance and audit departments. In addition, there are several subject matter specialists for agriculture, minor irrigation, soil and water management, etc.

319. At the field level, OFD works are executed by soil conservation units headed by a Bhomi Sanrakshan Adhikari (BSA). Five or 6 such BSA units are supervised by divisional Deputy Directors. The soil survey work is done by a separate soil survey unit. There are at present 148 BSA units, 25 divisional units and 20 soil survey field units. 11 *Warabandi* units are also working with their authorities. Each authority is also equipped with a full-fledged soil survey laboratory, one correlation unit and a cartography unit.

320. The normal annual target for each BSA unit for purpose of topographical survey, planning and designing is 3,500 hectares and for execution of OFD works is

3,000 hectares. A part of the works amounting to 25 per cent of the entire target is executed in the first year, in the second year the unit covers 50 per cent of the target, and thereafter 100 per cent.

321. For strengthening the work of agricultural extension in the Command Areas, 5 additional VLWs, and one additional A. D. O. (Agriculture) has been provided in each block through the C. A. D. A. budget.

322. The objectives set forth during the Fifth Plan are proposed to be continued during the Sixth Plan, with emphasis on drainage, introduction of new cropping patterns, and setting up of growth centres, etc., which could not be given attention during the Fifth Plan. Thus apart from OFD the other programmes proposed to be undertaken during the Sixth Plan are '*Warabandi*', supply of inputs, strengthening of extension service, adoption of suitable cropping-pattern, conjunctive use of surface and ground water, provision of drainage, modernization of irrigation system, establishment of growth centres, and development of necessary infra-structure, etc.

323. Command Area Development concept being new, considerable time was

spent in clarifying the concept and establish suitable organization for the implementation of the programme. It took nearly two years to reach the take off stage and during the next 3 years of the Fifth Plan, up to the end of March, 1979, the area coverage under O.F.D. was only 3.47 lakh hectares. It was realized that at the rate of 1.16 lakh hectares per year, it would take nearly 25 years to cover the C.C.A. of 32.64 lakh hectares in the three Command areas. The work was, therefore stepped up from the year 1979-80 itself. Additional soil conservation units were provided and O.F.D. works were undertaken through the 'Food for work' scheme, with the result that during the single year 1979-80 an area of 3.19 lakh hectares was covered under O.F.D. which in itself is nearly equal to the total area of 3.47 lakh hectares covered during the Fifth Plan (1974-78).

324. During the Fifth Plan emphasis was on the execution of O. F. D. works; soil survey was done in 16.73 lakh hectares, topographical survey in 7 lakh hectares, and planning and designing in 6.36 lakh hectares. This was followed with the construction of 16.69 thousand kms. of irrigation channels out of which 1.93 thousand kms. were lined and made *pucca*. Over 32.25 thousand water control structures were also constructed. To save the land from water logging and to drain off excess water, 1.33 thousand kms of field

drains were constructed during the Plan period.

325. During 1979-80 soil survey was done in 5.70 lakh hectares, topographical survey in 3.00 lakh hectares, and planning and designing in 2.96 lakh hectares. This was followed by the construction of 16.34 thousand kms. of water conveyance channels, out of which over one thousand Kms. were lined. All these works resulted in the coverage of 3.19 lakh hectares under O.F.D.

326. During the Sixth Plan it is proposed to establish additional B.S.A. divisional soil conservation units.

327. For preparing scheduled *warabandi* arrangements 11 *warabandi units* in 3 C. A. D. are being established in 1980-81. During next four years of the Sixth Plan, additional 19 units are proposed to be established. Each such unit is normally expected to cover 8,000 hectares per year.

328. Realignment units, each headed by an assistant consolidation officer will have to be set up for carrying out the work of realignment of field boundaries. It is proposed to set up 40 such units during the Sixth Five Year Plan. Each unit will cover 2,000 hectares annually.

329. The table below gives the phasing of organisation development of C.A.D. Authorities in the Sixth Plan period.

*Phasing for development of the organisation for the C. A. D. Authorities*

Name of Project	No. of Soil conservation Units	No. of divisional units	No. of soil survey field Units	No. of Osraband Units	No. of realignment (A.C.O.) Units
1	2	3	4	5	6
(1980-81)					
1—Sharda Sahayak .. .. .	81	14	8	5	..
2—Ramganga .. .. .	44	8	8	4	..
3—Gandak .. .. .	23	3	4	2	..
Total .. .. .	148	25	20	11	..

## Phasing for developmmt of the organisation for the C. A. D. Authorities

Name of Project	No. of Soil conservation Units	No. of divisional units	No. of soil survey field Units	No. of Osraband Units	No. of realignment (A. C. O.) Units
1	2	3	4	5	6
(1981-82)					
1. Sharda Sahayak .. .. .	81	14	8	9	10
2. Ramganga .. .. .	44	8	8	7	6
3. Gandak .. .. .	23	3	4	4	4
Total .. .. .	148	25	20	20	20
(1982-83)					
1. Sharda Sahayak .. .. .	91	16	8	9	10
2. Ramganga .. .. .	54	10	8	7	6
3. Gandak .. .. .	23	3	4	4	4
Total .. .. .	168	29	20	20	20
(1983-84)					
1. Sharda Sahayak .. .. .	91	16	8	14	20
2. Ramganga .. .. .	54	10	8	10	12
3. Gandak .. .. .	23	3	4	6	8
Total .. .. .	168	29	20	30	40
(1984-85)					
1. Sharda Sabayak .. .. .	101	18	8	14	20
2. Ramganga .. .. .	54	10	8	10	12
3. Gandak .. .. .	23	3	4	6	8
Total .. .. .	178	31	20	30	40

330. Against the coverage of 6.66 lakh hectares during the 6 years 1974-80, O.F.D. works are proposed to be stepped up to 28.00 lakh hectares during the Sixth Plan. This would entail among other items, the construction of 140 thousand kms. of irrigation channels 29 thousand Kms. of *pucca* channels, and 29 thousand kms. of drainage channels, and over 2.85 lakh water control structures etc. during the Sixth Plan.

331. Maintenance of *kacha* and *pucca* O.F.D. works at State cost, '*osrabandi*' for

proper distribution of available water, crop planning and realignment of field boundaries in the command areas will be introduced during the Sixth Plan. Growth centres for the supply of necessary inputs, services and information will be set up at suitable points, and a programme for training of farmers is proposed to be introduced. Necessary physical and financial targets have been fixed within the limits of available resources in men, money and material.

332. An ambitious programme for the construction of *chak* roads and link roads

has been chalked out for which advance action for planning and designing has been initiated. The absence of intermediate drains was the main hurdle in the construction of field drainage channels. A sum of Rs.5 lakhs was released for the purpose during 1979-80 which was fully utilized.

*The proposed targets of physical programmes are given below :*

	(lakh hectares)
1. Soil survey .. ..	32.00
2. Topographical Survey ..	25.69
3. Planning and Designing ..	25.69
4. Chak roads .. ..	11090 kms <sup>2</sup>
5. O.F.D. maintenance ..	7.05
6. Orabandi .. ..	7.50
7. Crop Plan .. ..	3.47
8 Growth Centres (No.) ..	47
9. Training of farmers (No) ..	23750
10 Realignment of field boundaries	2.00

333. The total financial requirement for the Sixth Plan has been worked out as Rs.250 crores of which Rs.115 crores would be the Central share and Rs. 135 crores State share. In addition to the requirement shown in GN-5, the work of construction of field channels and O.F.D. will also be financed partly through the National Rural Employment Programme, and partly through institutional finance. It is estimated that food or equivalent resources worth Rs.7 crores (including handling charges) will be utilized and institutional finance to the tune of over Rs.30 crores will be mobilized by the C. A. D. Authorities during the Sixth Plan.

334. The pattern for Central Assistance which is at present 50 per cent for certain items and nil for certain others requires a second look. The centre may be persuaded to contribute 50 per cent for the entire programmes under the C. A. D. This will help in making adequate provisions for the items for which only token provision could be made in the annual

Plan 1980-81. Prior to 1979-80 the Central Government was contributing 100 per cent for certain items (O.F.D. loan and subsidy to small and marginal farmers) 50 per cent in certain others (establishment, equity capital etc.) and nil in other items like the strengthening of field agency, infra-structure, maintenance of O.F.D., realignment of field boundaries, etc. From the year 1979-80 while the centre has reduced its share to 50 per cent in these schemes where its contribution was 100 per cent, it did not share the expenditure borne 100 per cent by the State.

335. *Integrated Rural Development (IRD) Scheme*—Integrated Rural Development programme was introduced in this State in the year 1978-79. According to the Government of India guidelines, 331 blocks were initially selected from the areas covered under other area development schemes namely SFDA, DPAP or CAD. The intention was to intensify developmental activities by utilizing the infra-structural facilities created by the on-going programmes. Later in the same year 53 blocks were selected from the areas having no special schemes.

336. In the year 1979-80, 92 blocks were added, raising the total number of the IRD blocks to 476. Seventy-three more blocks were added in the year 1980-81 taking the IRD coverage to 549 blocks. The scheme has been extended to the remaining blocks from October 2, 1980 and now covers all the blocks of the State.

337. One hundred and sixty-five out of 331 blocks taken up in the first year were designated as Intensive Employment blocks and the remaining 166 blocks as Intensive Development blocks, with respective outlays of Rs.10 lakhs and Rs.5 lakhs per block per year. The remaining 53 blocks are covered under the Area Planning for Full Employment Scheme as part of the IRD. Each of these blocks is given Rs.2 lakhs in the first year, the amount is gradually stepped up to Rs.3 lakhs, Rs.4 lakhs and Rs.5 lakhs in the subsequent years. However, Intensive Employment blocks could not get Rs.10 lakhs per block per year as envisaged earlier. It has, therefore, been decided that I.E.P. and I.D.P. blocks



will treated at par during the Sixth plan, and each of the blocks under this category will receive Rs.5 lakhs per year during the Plan period. Blocks under the Area Planning for full employment will continue to receive outlays increasing annually from Rs.2 lakhs to Rs.3 lakhs, Rs.4 lakhs and Rs.5 lakhs, thereafter. For the remaining blocks the pattern of assistance is under the consideration of Government of India.

338. *Objective of the Scheme*—Initially Government of India had indicated that the IRD scheme should involve comprehensive block level planning as the medium for intensive efforts towards securing full employment through exploitation of local resources potential, both human and material. It was also intended that the main thrust of the programme should be on schemes which would yield quick result, involve small investment and create avenues for employment through production of goods so as to raise standards of living of the people subsisting below the poverty line. Preparation of such a block Plan implied that resources' development, employment planning, infrastructural development, and minimum level of social services should form integral part of a package relevant to each block.

339. It was, however, felt that this effort required a level of expertise which was not available in the districts or blocks. Necessary administrative and financial restructuring, involving disaggregation of sectoral outlays at the district and block level was also not feasible for the present. As a result the IRD scheme remains an individual beneficiary programme initiating programme for the target group with a view to generate extra employment. These programmes are based on agriculture, animal husbandry, minor irrigation and rural and cottage industry.

340. The State Government have examined the IRD and SFDA schemes and have decided that even though it may not be possible to evolve a broad-based block plan, at least all individual beneficiary programmes being run in the same area under different names, should be integrated and implemented as a single programme. Besides, the viability of the programme intended to be extended to

beneficiaries and income generation capability of each programme should be examined so that suitable packages of programmes can be worked out and advantages actually accruing can be evaluated.

341. Accordingly it has been decided to integrate IRD with SFDA and to some extent Antyodaya programmes in all the blocks under these schemes. Instructions have been issued to district level agencies to select beneficiaries for each of these programmes from the same economic range of families and prepare family-wise programmes. However, in view of the fact that funds for these schemes are earmarked from different sources, it would not be possible just at present, to give up the existing nomenclatures. As regards assessment of income creation potential of the programmes, a table of programmes showing investment requirements and actual income likely to be generated, is being prepared. This table would be made available to the district and block agencies for working out suitable packages of programme capable of giving out maximum income with minimum investment.

342. *Target group*—The scheme covers small and marginal farmers, landless labourers and village artisans. A subsidy of 25 per cent for small farmers and 33 1/3 per cent for others is admissible of the total cost of the programme, the remaining amount being arranged as loan from the Co-operative and the Commercial banks.

343. *Strategy*—It has been assessed that an investment of about Rs.5,000 per family is needed to arrange for suitable inputs capable of generating desired income. The subsidy content would be about Rs.2,000. On this basis it was decided to select 2400 families from the target group in the blocks covered under the Intensive Employment programme, 1200 families in the blocks under Intensive Development scheme, and 600 in blocks under area planning for Full Employment scheme and to work out packages based on traditional occupations of each family and their capacity to take up the programme, consumer potential and raw-material availability. Packages are to be given over a period of 4 years

so that the family is not burdened with heavy loan repayment liability at any time. Besides, 200 families, 100 families and 50 families, respectively in the above categories of blocks, have also been selected for rural industries and village artisans' programmes.

344. To ensure that the scheduled castes and scheduled tribes get maximum advantage of the scheme, at least 25 per cent of families have been taken from these groups and outlays have been earmarked for them to the same extent. It is now proposed to increase the percentage to 30, and the Plan for the subsequent years has been modified accordingly.

345. *Administrative Structure*—I. R. D. agencies under the District Magistrate have been set up in all districts, except where DPAP or SFDA agencies exist. The local heads of all development department are members of these agencies. For operational convenience, these agencies have been registered under Registration of Societies Act. A. D. M. (P)/Project Directors/District Development Officers/A. D. M. (D.) are the Secretaries of the agencies. Where necessary, additional staff has been provided at district and block levels to implement the programmes.

349. The work of the Corporation is the year 1978-79, an amount of Rs.10 crores was made available by Government of India as their 100 per cent contribution. Since the allocations were received late and it also took time to formulate the block plans only Rs.4.27 crores was utilized in that year, the number of families benefited being 76,800. In the year 1979-80 an outlay of Rs.28.23 crores was fixed for the IRD scheme but only Rs.22.30 crores was made available, out of which Rs.21.38 crores were utilized, and 4.94 lakh families benefited. Expenditure on the scheme is being shared equally by the Central and State Government from the year 1979-80. This pattern will be applicable to the outlays for subsequent years also. There is a provision for using 10 per cent of the outlay for infrastructural development which may be considered necessary for the programmes. Provision has been made for animal husbandry, horticulture and handloom departments, for setting up artificial insemination centres, fruit and vegetable

nurseries and sericulture development centres, respectively. These schemes would be linked with the programmes adopted by selected families.

347. *Sixth Plan projections*—Selections of families and programmes have been finalized for the entire Plan period. Individual family needs for various programmes, both in regard to subsidy and loan, have been aggregated at the district and State levels. The proposed outlay (State share) for the above programme during the Sixth Plan period is Rs.10,000 lakhs. The number of beneficiaries expected to be covered under this programme will be 622715 in 1980-81, and 8 lakhs and 10.60 lakhs respectively in 1981-82 and 1984-85.

348. *Divisional Development Corporations*—By 1976, nine Divisional Development Corporations were set up with an authorised capital of Rs.1300 lakhs to accelerate the pace of development in backwards and neglected areas in each division. It was intended that the corporation would mobilise finance by utilizing their share capital as margin money. They would set up agro and forest based industries and also take up marketing of agricultural inputs. The Corporations are also required to undertake such activities as may help in increasing agricultural production, such as the installation of community tubewells, agro service centres, Usar-reclamation, etc.

349. The work of the Corporation is looked after by a Board of Directors with the commissioner of the division as chairman, and deputy development commissioner as managing director, other posts of managers and branch managers are being filled.

350. In the beginning the corporations set up eight mini sugar mills but none of the mills could work satisfactorily and with a steep fall in sugar prices, the mills began to suffer heavy losses. The corporations have also set up 42 agro service centres and 4 irrigation projects known as community tubewells. They are also marketing agricultural inputs. The corporations have established 2 agro implement manufacturing units, 2 dal mills, 2 usar reclamation units, 2 atta chakkis, 2 saw mills. Besides, oil expellers, brick-kilns, stone crushers, mobile tractor repairing units have been established.

351. The following table gives Nigamwise details :

*Financial and physical position of divisional development corporation*

(Rupees in lakhs)

Name of Corporation	Date of Registration	Authorized Capital	Paid up Capital	Units Working	No.
1	2	3	4	5	6
1. U. P. Bundel-khand Vikas Nigam Jhansi.	March, 1971	200.00	85.60	1. Mini Sugar Mills 2. Subsidiary units a. Agro Imp. Manufacturing units. b. Agro Service Centre c. Oil Expeller 3. Brick Kiln 4. Stone crusher 5. Biri Manufacturing unit. 6. Blasting unit	2 2 1 1 1 1 1
2. U.P. Poorvanchal Vikas Nigam Faizabad.	March, 1971	200.00	95.60	1. Mini Sugar Mills 2. Engineering Workshop 3. Fertilize distribution units.	2 1 2
3. U. P. Paschmee Kshetra Vikas Nigam, Bareilly.	January, 1976	200.00	100.00	1. Agro Service Centres 2. Mobile Tractor repairing unit. 3. Agro Inputs supply units.	13 1 2
4. U. P. Madhya Kshetra Vikas Nigam, Lucknow.	January, 76	200.00	50.00	1. Agro Service Centres. 2. Custom Service Centre. 3. Irrigation Projects	3 1 2
5. Agra Mandal Vikas Nigam, Agra, March, 1976		100.00	100.00	1. Agro Service Centres.	8
6. Meerut Mandal Vikas Nigam, Meerut, March, 1976		100.00	100.00	1. Agro Service Centres	7
7. Gorakhpur Mandal Vikas Nigam, Gorakhpur.	March, 1976	100.00	45.00	1. Mini Sugar Mills 2. Subsidiary Units- a. Attachakki b. Saw Mills c. Dharam Kanta d. Dal Mill e. Usar Reclamation	4 2 2 1 1 1
8. Allahabad Mandal Vikas Nigam, Allahabad.	March, 1976	100.00	45.00	1. Agro Service Centre 2. Tractor Custom Service Centres 3. Agro Literature publication. 4. Community tubewells. 5. Usar Reclamation 6. Dal and Rice Mill.	4 4 1 2 1 1
9. Varanasi Mandal Vikas Nigam, Varanasi.	March, 1976	100.00	45.00	1. Agro Service Centres	6
Total	..	1300.00	666.20		

352. *Programmes for the Sixth Plan*—It is proposed that every Corporation will take up the integrated development of one Nyaya Panchayat in each of the districts under its jurisdiction. A few Corporations have got feasibility reports prepared for the development of the selected panchayat. The Corporations have been authorised to sanction projects costing up to Rs.10 lakhs each without reference to the Government. The proposed outlay during the Sixth Plan is Rs.750 lakhs of which Rs.100 lakhs has been proposed for 1981-82.

353. *Drought Prone Areas Programme (DPAP)*—Drought prone areas programme (DPAP) was introduced in 40 blocks of the six chronically drought affected districts of the State in the year 1974-75. The Districts covered are Allahabad, Varanasi, Mirzapur, Jalaun, Hamirpur and Banda.

354. The aim of the programme is to relieve the severity of the impact of drought and to restore ecological balance in drought affected areas through appropriate infrastructural development, and simultaneously to generate extra employment opportunities for weaker sections of population by subsidising individual beneficiary programmes. The main thrust of the schemes is on projects based on medium and minor irrigation, afforestation, pasture development and soil conservation. Individual beneficiary programmes relate to agriculture, animal husbandry and private minor irrigation. Supporting infrastructure namely dairy and chilling plant, veterinary hospitals/stockman centres, horticulture nurseries, seed godowns and marketing centres are also provided under the scheme.

355. Expenditure of the scheme is equally shared by the Central and State Government. Irrigation, afforestation, soil conservation and other infrastructural activities are 100 per cent financed from the allocations for the schemes, while individual beneficiary programmes are subsidized at 25 per cent of the cost for the small farmers and 33 1/3 per cent for the marginal farmers, agricultural labourers and other persons living below the poverty

line, the balance being arranged from the commercial and the co-operative banks.

356. The programme which was first introduced in Mirzapur in 1970-71 as a Rural Works programme with 100 per cent Central assistance was extended in 1971-72 to selected areas in Varanasi, Allahabad, Jalaun, Hamirpur and Banda. Though the programme was initiated in 1971-72 much headway under it could not be made during the Fourth Five-Year Plan due to lack of financial resources and administrative constraints. It was however felt that were employment oriented programme would not help the drought prone areas and as such a comprehensive Drought Prone Area Programme based on the needs of the area was introduced from 1974-75. The programme inter alia includes provision for irrigation through medium and minor State irrigation projects, private and community minor irrigation, agriculture, soil conservation and afforestation. To provide subsidiary employment to the weaker sections, animal husbandry, horticulture, co-operatives and fisheries development programmes were also introduced. The pattern of Central assistance was also revised from 100 per cent to 50 per cent. The remaining 50 per cent was provided by the State Government out of its own resources.

357. *Review of the Programme and targets for Sixth Plan*—The basic unit of development under DPAP is a watershed. Definite water-sheds have been identified in each region and a co-ordinated programme of water shed management has been drawn up for implementation. Efforts are made to contain all the programmes in a single water-shed. Under the dairy development programme milk sheds have been developed which may extend to more than one water-shed. Some observation on individual programmes are as noted below :

(a) *Medium and minor irrigation*—The irrigation potential created by State medium irrigation sources under the programme during 1979-80 was 13782 hectares. A target for creation of 100,000 hectares of additional irrigation potential has been proposed for the Sixth Plan. During 1979-80

irrigation potential of 1382 hectare was created through private and community minor irrigation works, for which target of 5000 hectares is proposed for the Sixth Plan.

(b) *Soil and water conservation*—the area covered under soil conservation programme during 1979-80 was 31,437 hectares. A target of 1,00,000 hectares has been proposed for the Sixth Plan, which will be carried out entirely on command or mini watershed basis. There will be integration of soil conservation measures with pasture and fodder development. Linkages between this programme and the adoption of improved agricultural practices and subsidiary occupation will also be established.

(c) *Afforestation and pasture development*—Excessive exploitation and deforestation is responsible for disturbances of ecological balances. To restore these balances, a special programme of afforestation and pasture development was taken up in D P areas. During 1979-80 afforestation was taken up in 3,920 hectares and pasture development in 750 hectares. A target of 30,000 hectares of afforestation and 10,000 hectares of pasture development is proposed for the Sixth Plan.

(d) *Animal husbandry*—To supplement the income of small marginal farmers and agricultural labourer through the provision of subsidiary occupations, animal husbandry and dairy development programmes were introduced in DPAP. Exotic bulls were distributed to improve local breeds. Frozen semen technology was introduced and A. I. Centres were established in selected areas. The programme was also extended to interior areas through mobile vans. Adequate animal health cover was also provided. Milch and other small animals, pigs and poultry birds were distributed at subsidized rates to small and marginal farmers and landless labourers. Milk production programme is being linked up with dairy development. A chilling plant has

been set up in each D. P. A. P. agency and milk collection centres and milk co-operatives are being developed. An ambitious programme of hinterland development in the periphery of dairies has also been prepared for implementation during the Sixth Plan.

358. Other programmes of agriculture, horticulture and fisheries development and the extension of co-operative activities were also taken up and are proposed to continue in the Sixth Plan. All these works will generate employment potential for 105000 man-years during the Sixth Plan, and 24840 man-years during 1980-81.

359. *Financial outlay*—Out of the total outlay of Rs.80 crores proposed for the Sixth Plan 1980-85. Rs.40 crores will be borne by Government of India and the E. E. C., and the balance of 50 per cent i.e., Rs.40 crores by the State Government. The State Government is pressing for the extension of the programmes to the other districts of the Jhansi Division also. It is hoped that these new areas will be included in the programme during the Sixth Plan.

360. *Small Farmers Development Programme*—The main object of S.F.D.A., is to carry benefits of agriculture development to economically weaker sections of the rural community through animal husbandary ; minor irrigation and other land-based and employment oriented programmes. It also aims at increasing the flow of institutional finance to small and marginal farmers, agricultural labourers and village artisans and trades so that they can under-take programmes for which they do not have resources of their own. Subsidies for small/marginal farmers, landless labourers and village artisans have also been provided, which act as an incentive both for the borrowers and the financial institutions.

361. The S. F. D. A. programme is being implemented in 191 blocks of 26 districts of the State. During the Fifth Plan, the programme was wholly financed by the Government of India and the State Government provided establishment expenditure only. The pattern of assistance has under gone a change since 1979-80 and Government of India now provides

only 50 per cent of the cost of programmes and the balance 50 per cent is borne by the State Government. In addition, the State Government is still wholly bearing the cost of establishment. For 1979-80 and 1980-81, the Government of India had indicated an outlay of Rs.477 lakhs per year at the rate of Rs.2.50 lakhs per block for 191 blocks. Including the establishment cost the State share was Rs.322.75 lakhs for the year 1979-80. It is proposed to increase the outlay to about Rs.3 lakhs per block from 1981-82 for 191 blocks.

362. The programme benefitted more than 11.50 lakh persons during the years 1974-79. During 1979-80, 65,500 persons were benefitted through different programmes. A target to benefit 69000 persons has been fixed 1981-82.

363. It is proposed to introduce H. Y. V. programme in 10 lakh hectares during the Sixth Plan (1980-85) and in 860 thousand hectares during 1981-82. For popularizing the high yielding variety programme 5000 demonstrations will be laid during 1980-85. A custom service will be provided for 1,00,000 hours. Necessary infrastructure for providing custom service is being created through divisional development corporations. Under the minor irrigation programme, apart from individual beneficiary programmes, which will be subsidized at prescribed rates, a programme for subsidizing community tubewells for the marginal farmers has also been taken up which will be owned and maintained by the divisional development corporations on the Panchayats.

364. To provide subsidiary employment to the target group, distribution of milch cattle and other small animals and birds at subsidized rates has also been taken up. During the year 1979-80, distribution of milch cattle was 2241, which is proposed to be substantially raised to 80,000 during the years 1980-85.

365. To relieve excess pressure on land and to help diversification of rural industries, a programme for training of rural artisans and help them in setting up small industrial units has also been included under the S. F. D. A. During 1979-80, 2,500 families were benefitted under the

programme. It is proposed to benefit 30,000 persons to set up their trade or industry during the Sixth Plan 1980-85.

366. Besides the above, targets for different items of development for 1980-85 are given below :

(1) Fruit cultivation (hectares)	..	15,000
(2) <i>Distribution of—</i>		
(a) Bullocks (No.)	..	50,000
(b) Agricultural implements	..	3,00,000
(c) Dunlop carts (,,)	..	22,000
(d) Store bins (,,)	..	80,000
(3) <i>Private M.I. Sources</i>		
(a) dugwells (,,)	..	10,000
(b) tubewells (,,)	..	30,000
(c) Pump Sets (,,)	..	30,000
(d) rahats (,,)	..	20,000
(4) Community tubewells (,,)	..	2000
(5) <i>Distribution of</i>		
(a) sheep/goat (,,)	..	75,000
(b) pigs (,,)	..	80,00
(c) poultry birds (,,)	..	60,000
(6) Rural artisans to be benefitted (,,)	..	20,000
(7) Training (,,)	..	30,000

367. The financial outlay for the proposed programmes during Sixth Plan (1980-85) as State share is Rs.24.00 lakhs against an over-all outlay of Rs.43.50 lakhs (including Central share).

#### TRYSEM

368. *Training of Rural Youth for Self-Employment*—The raining of rural youth for self-employment scheme is being implemented in all the 876 blocks of the State since 1978-79. The scheme aims at providing productive self employment opportunities to unemployed rural youth. According to Government of India guidelines, 40 persons belonging to small and marginal farmers landless labourer, village artisans and others living below the poverty line category are to be selected

in each block for training in suitable trades, and vocations relevant to rural areas. Subsidy at 33 per cent up to the maximum of Rs.3,000 is admissible for each beneficiary, the remaining cost of the programme being arranged through loans from banks, stipend up to Rs.100 per month is given to each trainee. Training Institutions are also given training assistance up to Rs.50 per trainee per month. In addition, training institutions can be allowed financial assistance to augment their training facilities.

369. Expenditure on training assistance to institutions and subsidy as in IRD blocks is to be met from the normal IRD outlay. For other blocks, expenditure is to be shared between the Government of India and the State Government on equal basis.

370. The selection of beneficiaries is made by the block staff with the assistance of officials of district industries centres, bank representatives and representatives of training institutions. Most of the training is arranged in Government training institutions, namely Industrial Training Institutes, Polytechnics, Extension Training Centres, while about 45 per cent of total training need is met from private institutions and skilled craft's men. Emphasis is on training in non-agricultural programmes e.g. carpentry, smithy, carpet weaving, tailoring etc.

371. In the year 1979-80, 17638 persons were admitted for training, of whom 6096 completed their training by March, 1980. Action is being taken to settle them through appropriate programmes. An outlay of Rs.24.00 lakhs i.e., 12.00 lakhs from Government of India and Rs.12.00 lakhs from State Government has been approved and was made available to the district IRD Agencies.

372. *Coverage and financial requirements during 1980-85*—Government of India have approved an outlay of Rs.193.00 lakhs for the scheme for the year 1980-81. The outlay (State share) for the above programme during the Sixth Plan is Rs.500 lakhs. It is anticipated that about 3500 trainees would be benefitted by this programme in each of the four years from 1981-82 onwards.

373. *Integrated Area Development Projects*—It has been increasingly recognised that sectoral planning at the State and National levels is inadequate as a means for optimal utilization of natural and manpower resources available locally and for ensuring the best returns from financial allocations for utilization in a particular area. The State Government has, therefore, taken up three pilot projects, one each in the western, central and eastern zones for integrated development of limited and specified areas wherein developmental methodologies, innovations in technologies and processes, and measures for ensuring more effective public participation could be evolved and pre-tested in actual field conditions before being recommended for adoption in the different zones of the State.

374. The initial work of planning and formulation of projects has been done by Planning Research and Action Division of the State Planning Institute. The actual execution of these projects is done by development agencies which are registered bodies of officials and non-officials. These agencies have been given wide ranging administrative and financial powers in order to ensure that they may, after due consideration, adopt suitable innovation in different fields of endeavour for getting the desired goals. The progress of various programmes and the processes of implementation and decision-making under the flexibilities granted to these agencies are reviewed periodically by a State level committee. This Committee provides funds for various programmes to the agencies from time to time on the basis of periodic and objective evaluation of the performance of on going field programmes.

375. A brief description of the work of these Agencies may be of interest in this regard.

376. *Integrated Area Development Agency, Ghazipur-Ballia*—The eastern districts of Ghazipur-Ballia are amongst the most backward in the State, with a high density of population, greatly dependent on agriculture. Absence of any worthwhile profitable cottage industries coupled with sizeable population of landless labourers and marginal farmers with un-economic holding have given rise to

condition of an object poverty in the area. These districts also suffer from frequent floods and droughts. The project was launched in December, 1976 to cover five development blocks of Ghazipur district and one from Ballia district.

377. The present programmes of the Agency cover the following four categories :

(a) *Programmes of direct economic benefits*—These programmes include rearing of milch, animals, sheep, goats and pigs, poultry-keeping and pisciculture, raising of short duration fruit trees, cultivation of vegetables and spices, installation of minor irrigation works and cottage/artisan industries.

(b) *Programmes of social consumption*—These programmes include drinking water facilities for the economically and socially backward people of the area.

(c) *Programmes of social service*—Setting up of female hospitals/dispensaries, training of "dais" and housing scheme for economically backward sections of the population.

(d) *Infrastructure*—This includes the construction of roads and drains.

378. An outlay of Rs.250 lakhs has been proposed for the Sixth Plan, 1980-85.

379. *Integrated Area Development Project, Ajitmal (Etawah)*—The project covers three blocks in district Etawah. The area is coterminus with that of the Pilot Development Project, Etawah under which pioneering work was done in the field of community development during the first Second Five-Year Plans. The present project lays particular stress on income generation activities and as such its programme includes fisheries, deepening of tanks and providing regulatory structures, goat and sheep rearing, cattle development, sericulture, paddy cultivation on usar lands, small co-operative tubewells, availability of improved agricultural implements etc. The local institutions have been actively involved in the development process of the area.

380. *Integrated Area Development Project, Meerut-Muzaffarnagar*—This is essentially in a developed region of the State,

but with its own quota of tensions. The project consists of three contiguous blocks of Muzaffarnagar and three contiguous blocks of Meerut district. The main thrust in the project is on establishing traditional, cottage, small and medium industries and filling in gaps in creation of infrastructure left in the sectoral Plans. The construction of approach roads has, therefore, been given priority. Agriculture in the area is unduly dependent on cultivation of sugar-cane and it is proposed to reduce this dependence by diversification to vegetables and spices. Crop intensity is proposed to be raised to 250 per cent.

381. In the field of animal husbandry, educated unemployed village youth are proposed to be drawn to start mini-dairies of their own and necessary facilities for training in veterinary and dairy science, financial accommodation for establishment of dairies and marketing of milk will be provided to them. It is further proposed to strengthen and start about 2000 traditional industries and about 70 small and medium industries for providing employment to about 11,000 persons.

382. The financial outlay proposed for Integrated Area Development Project, Ajitmal and Meerut, Muzaffarnagar and other area development projects, during the Sixth Plan is Rs.500 lakhs.

383. *Intensive district planning and development projects*—A major programme which is expected to be taken up with UNICEF assistance in a phased manner starting from 1981-82 is that of providing for basic needs on an integrated area basis. In a State like Uttar Pradesh, it is patently clear that the infrastructure of medical care, health, education, child nutrition, etc. is very weak and that there is a great need to work out viable strategies for identifying the weakest sections of the community and to provide them essential support in regard to a package of social inputs. This strategy has been endorsed by the Government of India also. Negotiations with UNICEF have proceeded in consultation with the Central Ministry of Social Welfare for taking up a set of 13 or 14 districts



where the existing efforts by the State Government from its own resources and through Centrally sponsored schemes available in the related sectors, will be supplemented through PNICFE assistance.

384. The programme will involve comprehensive district wide, beneficiaries oriental studies and surveys to assess the existing status of delivery of services, the existing status of rural households, identification of gaps, requirements of manpower as well as supplies and infrastructures, etc. After the projects have been drawn up, continuous support will have to be provided by the Planning Department to the implementing agencies for innovating in respect of organizations and delivery systems, so as to maximise impact. Monitoring and evolution arrangements will also have to be made. Training of staff in the relatively unexplored area of social inputs planning on an intensive area basis will also have to be arranged.

385. Since the total programme will involve a series of activities starting from disaggregation of existing and proposed outlays district by district for the selected areas, ensuring effective implementation, through to the stage of impact, considerable costs will have to be borne by the Planning Department itself. While it is too early stage to assess the forms in which the Planning Department would provide support to the project, it is already decided that the Department will be the focal point for all these activities. It is also clear that a certain supplementation of resources would be essential for ensuring that the objectives of the programme are realized. At this stage, therefore, a lump sum provision is proposed out of which expenditure on manpower, training, infra-structure, supplies etc. would be made. The amount proposed for inclusion in the Sixth Five-Year Plan is

Rs.8.50 crores and Rs.096 crore in the Annual Plan of 1981-82.

#### (6) ANIMAL HUSBANDRY

386. Uttar Pradesh has a large proportion of the country's animal population, 15.0 per cent of the cattle, 22 per cent of buffaloes and a sizeable proportion (9.0 per cent) of other species. On an average for a family of 5 persons, the availability of land is 1.47 hectares, of which 0.86 hectares (i.e. 58 per cent) is cultivated, and this has to sustain 2.6 heads of livestock also. Obviously, the pressure on land is considerable. Attempts for improvement of livestock need to be directed towards the improvement of productivity rather than increasing numbers.

387. As per the quick estimates worked out by Economics and Statistics department of the State, the contribution of the agriculture and animal husbandry sector (at constant prices of 1970-71) to the total State income of U. P. which was 58.4 per cent in 1970-71, dropped to 56.1 per cent in 1978-79. The share of animal husbandry in the agriculture and animal husbandry sector went up from 13.7 per cent in 1970-71 to 16.6 per cent in 1978-79. The gross value added of animal husbandry sector increased almost 30 times from Rs.26.34 crores in 1970-71, Rs.641.13 crores in 1978-79 (at constant prices of 1970-71). At current prices of 1978-79 the figure was Rs.1,430.10 crores.

388. Animal husbandry is the second most important occupation, next only to agriculture, and is perhaps a major means to fall back on for sustenance in the event of droughts and other natural calamities. The scale and scope of Governmental activities have historically remained mainly oriented to the provision of protective veterinary services, and have only gradually

been adopted to the positive promotional and developmental requirements. This process has only partially been achieved so far.

389. *Livestock population*—Livestock census is normally taken in the State at

quinquennial intervals and it covers economically important domestic species of livestock and birds. It was from 1961 that livestock in the whole of the State was enumerated. The details of livestock census, 1972 and 1978, are given below :

Species	Livestock Population((In lakhs)			
	Total		Breedable	
	1972	1978	1972	1978
1. Cattle	262.2(53)	257.7(49)	67.0(14)	65.7(13)
2. Buffaloes	125.9(26)	139.6(27)	65.4(13)	72.2(14)
3. Sheep	19.6(4)	20.6(4)	11.7(2)	12.1(2)
4. Goats	66.1(13)	84.6(15)	33.9(7)	42.2(8)
5. Pigs	13.0(3)	18.1(3)	4.4(1)	4.9(1)
6. Others	5.2(1)	4.8(1)	..	..
Total Livestock	492.0(100)	523.4(100)	182.4(100)	197.1(100)
Poultry	9.2(100)	55.0(100)	17.7(43)	25.1(46)

(Figures in brackets denote percentage to total livestock.)

390. The livestock population in 1972 was 492.0 lakhs which increased to 523.4 lakhs in 1978, indicating an increase of 6.4 per cent. The cattle population decreased by 1.7 per cent, while the number of buffaloes increased by about 10 per cent from 125.9 lakhs to 139.6 lakhs, reflecting a rising preference for more milk production. The percentage of breeding cows to total population was 46.4 per cent in 1978 as compared to 43.3 per cent in 1972. The buffalo population and particularly the breeding buffaloes have increased by 10.0 per cent and 10.4 per cent respectively, and percentage of she-buffaloes in milk have increased by 3 per cent over 1972.\*

391. The number of sheep and goat has increased from 19.6 lakhs and 66.1 lakhs respectively in 1972 to 20.6 lakhs and 84.6 lakhs in 1978. The sheep population which had registered a decrease of about 20 per cent in the period before the last census has now shown an upward trend of 5.3 per cent. Increased mutton pro-

duction is reflected in an 28 per cent increase in goat population, however there is a decrease of about 1.4 per cent in female goats, which warrants steps for discouragement of slaughter of she-goats.

392. The pig population has registered an increase of 23.4 per cent, adult males showing an increase of 25.8 per cent and adult females 10.8 per cent. To avoid indiscriminate breeding by indigenous males, a programme of replacement by improved stock is called for. Poultry has increased by 40.2 per cent.

393. The above trends of livestock population suggest the following issues for species development :

(a) Taking advantage of the increase in number of the breeding cows and buffaloes, it would require much larger number of good breed of males for breeding, and extension of breeding facilities by a greater magnitude, than at present.

(b) The increase in male goat, sheep and pigs, and proportionate smaller increase in respective female population, may lead to indiscriminate breeding. Therefore, simultaneous extension of breeding through improved breeds would be desirable to provide alternate breeding facilities along with castration of indigeneous males.

394. The "Framework" of Sixth Plan prepared by Planning Commission lays stress on mixed farming. Simultaneously, it has been suggested that development of sheep, goats, etc. be taken up on co-operative lines as far as possible.

395. It is proposed to adopt for the Sixth Plan period growth rates of 4.5 per cent in respect of milk, 4.9 per cent for eggs and 6.6 per cent wool, as against the respective growth rates of 5 per cent, 8 per cent and 4 per cent recommended by the Government of India.

396. The primary objective of various developmental schemes in this sector is to increase output of livestock products by through improvement of livestock breeds, intensive health cover, and feeds and fodder production. Besides, livestock breeding has now been recognised as an additional source of income particularly for the economically weaker and backward sectors of society. This sector has also gained considerable importance in the context of economic programmes for the weaker sections under various area programmes and the special component plan for scheduled castes and scheduled tribes.

397. The basic strategy for this sector would be as follows :

(i) To improve the presently available species of livestock by cross-breeding through highly productive exotic breeds of cattle. The cross-breeding would be done through artificial insemination by use of deep frozen semen.

(ii) In buffaloes, there will be upgrading of local stock with improved graded or pure murrhah breed. Attempts would be to extend this programme by use of deep frozen semen to the extent that buffalo semen can be successfully preserved and becomes

available. Since the results of this technology in buffaloes is in a trial phase, the programme would be supported, or would rather basically depend on the extension of insemination facilities through supply of liquid semen, for the time being.

(iii) In the case of sheep, the strategy would be to cross-breed sheep with highly productive exotic or cross-breeds to produce medium fine wool. In the plains upto the end of Fifth plan, upgrading of local sheep with well known Rajasthani breeds was the practice, but now a base farm at Varanasi to produce crossbred exotic rams has come up. Therefore cross breeding would be taken up intensively in the area of concentrations of sheep population, beginning with the eastern region and followed by Bundelkhand region. Efforts would be made to provide facilities of grading and marketing of wool on co-operative lines.

(iv) In pigs, cross breeding with exotic or cross bred stock would be done by extending breeding facilities.

(v) In goats, the strategy would be to conserve and develop the two well known breeds the State has, viz, Jamunapari and 'Barbari.'

(vi) For poultry development, highly productive birds from the State farms would be supplied. Increased capacity for hatching and rearing will also be supported through the expansion of rearing facilities and expansion of feed manufacturing units.

(vii) For fodder, production of improved varieties of fodder seed at State farms would be stressed, farmers would be encouraged to produce fodder and seed, by adopting fodder cultivation as a part of the normal cropping pattern.

(viii) For health cover, the recommendations of the National Commission on Agriculture have to be the guiding factor. The programme is to extend health care and disease control programme, to produce more vaccine and sera, and to extend the disease investigation services.

(ix) In regard to the implementation of animal husbandry programmes, the available facilities and funds under area development programmes and social welfare programmes would be utilised as an augmentation of available resources.

398. *Targets for the Sixth Plan 1980-85* :—The present level of production of various livestock products and the level of services and the targets for the Sixth plan period are as follows :

(i) *Level of anticipated production*

Products	Anticipated level of production		
	Base year 1979-80	1980-81	1984-85
1. Milk (000' tonnes).	5494	5721	6830
2. Egg (Million)	295	302	397
3. Wool (Lakh kg).	15.81	17.36	21.83
4. Meat (Lakh kg.)	886.34	910.15	1005.51

\*goats, sheep pigs and buffaloes only.

(ii) *Level of animal (husbandry) facilities*

Items	Base level 1979-80	1984-85
1. Livestock population covered per Veterinary hospital ((in thousand).	44800	42080
2. Livestock population covered per Stockmen entre(in thousand).	23200	21600
3. Breeding coverage facilities(in percentage to total population)		
(a) Cows .. ..	38.4	57.5
(b) Buffaloes .. ..	24.4	42.1
(c) Sheep .. ..	50.0	64.65
(d) Goats .. ..	15.50	40.41
(e) Pigs .. ..	11.30	23.18

399. *Cattle development*—During the Sixth plan, the main objective under cattle development would be to extend the cross-

breeding programmes in cattle, for which necessary infrastructural facilities would be provided. The livestock farms are the base for production of best quality germ-plasm. At present, there are 12 State livestock farms, and one additional farm is coming up in hills. Out of these, two farms are purely for exotic breeds. (including the new one). Of the remaining 11 farms, one farm at Babugarh (Ghaziabad) would be converted into a cross-bred cattle farm, so that cross-bred bulls of best pedigree are produced to bring about the requisite 62 per cent exotic inheritance level in cross-bred cattle. The present number of bulls to be produced from exotic farms would however, be limited. Therefore, to give a fillip to the programme and to produce larger number of such bulls the Indian breed cattle farms would be used to produce indigenous progeny and one crop of crossbreed progeny-alternatively, so that more cross bred bulls become available.

400. To disseminate the available germ-plasm, there are at present 32 semen collection centres, 743 artificial insemination centres and 1,936 sub-centres. Through this network more than 10 lakh cattle are being inseminated annually. This includes about 4 lakh inseminations with germ-plasm of exotic/cross-bred bulls. As a result of insemination programme in 1979-80, 0.85 lakh out of about 3.70 lakh calves born were cross-breds. With the policy of large scale cross-breeding and to further conserve and utilize available exotic germ-plasm over a larger population, deep frozen semen technology would be extended. For this purpose, a massive intensive cattle development programme would be started, by dovetailing resources available under integrated rural development programme with departmental resources. This would cover practically all breedable cattle population in one block of each district of the State every year in plains, with priority being given to areas near the existing dairy plants. To support this, two additional frozen semen centres with liquid nitrogen plants would be set up, and one of the three existing centres would be strengthened. Thus, the State would have within the Sixth Plan period 5 such centres and 3 additional liquid nitrogen plants (at places other than these

centres). These facilities would enable about 10.75 lakhs cattle to be cross-bred annually. By the end of 1985 about 31.60 lakhs of cattle and buffaloes would be inseminated. As an incentive to cross-breeding, the programme of rearing of cross-bred heifers would be continued and extended.

401. The eight intensive cattle development projects functioning in the State would be strengthened. Areas which have larger breedable population would be provided additional buffalo breeding facilities at existing insemination centres. The bull rearing farm established in the Fifth Plan would continue to provide supplies for timely replacements of bulls. The extensive use of buffalo semen would be extended. Deep frozen and progeny-testing of Sahiwal and Murrah stock would continue. Modernization of insemination centres in respect of the equipment and appliances would be done.

402. For cattle development programme, the proposed outlay in the Sixth Plan is Rs.1,386.04 lakhs.

403. *Fodder development*—Out of 243 lakh hectares gross cropped area of the State, in 1978-79 only about 7.60 lakh hectares (about 3.1 per cent) was under fodder. The percentage varies from 18 per cent in western region as a whole to about 3.0 per cent in the eastern region, and 0.2 per cent in Bundelkhand. The annual quantities required of green fodder in the State as per norms of I.C.A.R. is about 206.77 lakh metric tonnes while production is 70.0 lakh metric tonnes only, which is roughly 34.0 per cent. Though the programme is linked with assured irrigational resources, it is facing competition from the cereal crops. But, efforts to induce farmers to adopt its cultivation as a part of the regular cropping pattern have been made. As a result, the area under improved fodder has increased from about 14 thousand hectares at the beginning of the Fifth Plan to about 27 thousand hectares by the end of the Fifth Plan.

404. It is proposed to cover 1.45 lakh hectares of area under fodder, keeping in view 5.0 per cent growth rate over achievements of 1979-80. Livestock farms would be utilised for production of most of the

required fodder seed. Surplus fodder seed produced by the farmers themselves would be purchased through divisional development corporations and redistributed to the growers. In some of the forest areas in the hills in particular, and such areas in plains where land is available, the programme of farm forestry would be taken up which would include plantation of fodder trees and development of pasture grasses. This programme would be organised in co-ordination with the forest department. The departmental livestock farms and other institutions which have some land, would be growing about 37 lakh fodder trees. These farms would supply the planting material to the farmers. This programme has already been started in 1979-80 as a drought relief measure, and about 24 lakh sapplings have already been produced and are being distributed free to farmers. The proposed outlay for feed and fodder development is Rs.139.80 lakhs for the Sixth Plan.

405. *Sheep development*—The major emphasis in this programme would be on cross-breeding and to provide better breeding facilities. At the end of 1979-80, facilities to cover 50.0 per cent breedable sheep existed, which would increase to about 64 per cent by the end of the Sixth Plan. In hill areas, the present level of coverage is about 60 per cent. At the end of the Sixth Plan, it would increase to 83.0 per cent. The total wool production at the end of 1979-80 was 15.81 lakh kgs. which is estimated to increase to 21.83 lakh kgs. at the end of the Plan. The breeds of choice would be Russian Merinos and Rambollet (if they become available). The level of exotic inheritance which, at present ranges from 25 per cent to about 75 to 87 per cent varying from area to area, would be improved by introducing much better quality rams.

406. This programme requires a strong base of quality rams. For this, most of the 13 existing sheep-farms would be strengthened by addition of about 500 exotic and indigenous stock, and improving the present standard stock by more rigid culling and selection. An additional sheep farm being established, would start functioning shortly. About 160 hectares of additional area would be put under pastures on these farms.

407. The policy of upgrading of local stock with well known carpet wool breeds of sheep of Rajasthan would be slightly modified in the plains. With the establishment of a large sheep farm in Varanasi district in the Sixth Plan, the production of cross-bred rams has started. Such rams in the first phase, would be used for improvement of the local stock in intensive sheep development projects established in the Sixth Plan, covering districts with major concentrations of sheep population. Thereafter, selected pockets in central and Bundelkhand regions will be taken up. This is expected to add lustre to the carpet wool being produced, as per recommendations of the National Commission on Agriculture.

408. To facilitate availability of improved rams for breeding, 36 additional sheep and wool extension centres are proposed to be established. About 6,000 rams of improved breed would be purchased for distribution to sheep breeders. As a result of the additional inputs in the Sixth Plan, the present breeding coverage potential would increase from 50 per cent to about 64 per cent for the State.

409. The National Commission on Agriculture have recommended co-operative marketing facilities of wool. Already this programme has been taken up in the Fifth Plan and wool producers co-operatives have been established in intensive project areas and some other regions. Additional co-operative societies would be established, and a co-operative federation is proposed to be organised. A wool grading and marketing centre at Mirzapur has already been established with U.N.D.P. assistance in the Fifth Plan, which would be strengthened to handle more wool. One such centre would be started in hills as well where nothing has so far been done to organise wool marketing.

410. To reduce parasitic infestation, mass drenching programme would continue. It is estimated that about 21.525 lakh sheeps would be drenched against parasitic infestation at the end of the Sixth Plan.

411. *Goat development*—At the end of 1979-80, breeding coverage was 15.50 per

cent which would increase to 40.31 per cent at the end of the Plan. The potential of Jamunapari and Barbari breeds would be developed by establishing a farm for each of the breeds in their hometract. For Barbari breed, one farm has already been established during Fifth Plan ; for Jamunapari, it is proposed to establish one in the Sixth Plan. This programme is also an integral part of area development programme. As a result, the demand for improved breeding males and graded or pure breed goats is enormous. The production of males at goat farms and by the farmers who have established goat units, would help in extending breeding facilities ; for this a provision of purchase of 5,375 bucks is being made. It has also been proposed that 100 additional veterinary centres would have breeding bucks.

412. The proposed outlay for goat, sheep and wool development programme is Rs.481.68 lakhs in the Sixth plan.

413. *Pig development*—Since the pig production programme has been extensively taken up under special component plan the demand of improved breed stock of pigs has increased enormously. To keep up the pace of development, proper breeding facilities are a must. At the end of 1979-80, 11.34 per cent of breedable pigs were being provided coverage of breeding which will be increased to 23.18 per cent within the Sixth plan. The State has two pig breeding farms at Aligarh and Varanasi, though the latter is a small unit. One additional farm is proposed in the hills, and one in the plains. Besides this, strengthening of the existing farm at Aligarh would be taken up. The improved bred males would be made available by locating such males at 116 additional Veterinary Centres.

414. For pig development in the Sixth plan, the proposed outlay is Rs.33.16 lakhs.

*Poultry*—There is a large demand for improved bred poultry birds since this programme is also now an integrated part of the area development programme. The State had 58 small and large farms at the beginning of the Fifth plan and a hatching capacity for 8 to 10 lakh chicks annually. Twenty-eight such farms were demonstration units established in remote hill areas.

which were superfluous and were closed. Some of them would be used as rearing units. Of the remaining farms, 11 farms are comparatively of large size. During Sixth plan, it is proposed to—

(i) upgrade 2 of the zonal farms with about 5,000 layers each, which would have full facilities of development of improved breed birds, both layers and broilers. They would provide better strains to smaller farms,

(ii) upgrade 4 of the smaller district farms to about a level of 2,000,

(iii) one additional compounded feed unit would be established in hills,

(iv) four new intensive poultry development blocks would be set up, including one in hills,

(v) for welfare of tribals in hills, back yard poultry units would be established,

(vi) poultry farmers producers co-operative societies would be organised for better marketing,

(vii) the number of layers at State farms would be increased to 34,400 from the existing level of 24,000.

415. The Sixth plan outlay proposed for poultry development as Rs.222.41 lakhs.

416. *Disease control*—More than 90 lakh livestock are being treated annually at the veterinary centres and more than 200 lakh vaccinations are done. The State has a net work of 1,169 veterinary hospitals and 2,257 stockmen centres.

The major programmes for the Sixth plan are :

(a) Seventy-five additional veterinary hospitals including 25 for Hill region are proposed to be established in the Sixth plan. Besides this 175 veterinary stockman centres would be established additional medicines for veterinary institutions would be provided.

(b) Setting up of polyclinics is one of the recommendations of the National Commission on Agriculture

which would be implemented to a limited extent by upgrading two of the existing Veterinary Hospitals of importance.

(c) About 200 lakhs of vaccine doses are produced annually in the State at present. This provides protection to about 10–15 per cent of the livestock population. Production would be, further augmented.

(d) The rinderpest eradication programme would continue, as also the rinderpest surveillance programme.

(e) Disease diagnostic service would be strengthened by setting up one sheep disease investigation unit in the plains. The mass drenching programmes for sheep would be expanded. The foot and mouth disease control programme would be expended.

417. The outlay proposed for veterinary services and animal health during the Sixth plan is Rs.611.04 lakhs.

418. *Statistics and surveys*—The division-wise annual surveys of production of livestock products would continue and therefore the statistical cell would be re-organised. In hills, a separate statistical cell would be established and district-wise production estimates of livestock products would be taken up. During the Sixth plan, period the outlay proposed for the programme is Rs.63.27 lakhs.

*Other programmes*—Among others the following programmes are also included :

(i) The State has 3 carcass utilisation centres and about 18 flayers co-operative societies. The centres require modernization and improvement, and the societies are to be revitalized.

(ii) Equine breeding though becoming an outmoded programme in view of depletion of the equine population has its own importance in hilly area. Therefore, the existing equine breeding centre at Rishikesh would be strengthened and new stallion stands would be established.

419. For other programmes during Sixth plan the proposed outlay is Rs.235.90 lakhs.

420. *Veterinary education and training*—The programme of veterinary education and training includes training in sheep and goat husbandry, stipend to Pashudhan Vikas Sahayaks.

421. *Trysem*—Under the national scheme for training of rural youths for self-employment in poultry, carcass utilization and footwear and training in other programmes like artificial insemination, fodder development, deep frozen semen technology etc. an outlay of Rs.26.70 lakhs has been proposed for this programme.

422. *Centrally sponsored programmes*—Only three programmes viz. special livestock production programme foot and mouth disease and rinderpest control are under this group which would be continued.

#### (7) DAIRYING AND MILK SUPPLY

423. Dairying is an effective means of socio-economic uplift of the rural masses, particularly of the weaker sections of society. It opens up avenues of self-employment as a means of supplementation of incomes. It also contributes to availability of a vital article of consumption.

Dairy development programmes have been provided with a co-operative structure since the year 1938 in the State. The main activities of Dairy development sector are :—

(i) To encourage milk producers in rural areas, to form primary co-operative milk societies for marketing their produce under hygienic conditions.

(ii) To arrange transport of milk produced to the processing centres, for processing of milk and manufacturing of milk products for consumers in urban areas at reasonable prices.

(iii) To assist the primary producers with modern techniques of breeding, feeding and management of milch animals for higher rate of production.

424. The expenditure on dairying programmes from the First five year plan till 1979-80 was cumulatively a total of Rs.1851.00 lakhs.

425. The following table gives physical progress and achievements with the above investment, within the co-operative sector :

Sl. No.	Plan Period	No. of milk unions	No. of plants in operation	Installed capacity (lakh litres per day)	Milk handled (lakh litres per day)	Number of primary milk societies
1	2	3	4	5	6	7
1	1967-74	37	12	2.14	1.087	2,866
2	1974-78	28	22	2.96	0.95	4,807
3	1978-79	37	24	5.01	1.86	4,772
4	1979-80	37	24	5.01	2.135	3,171 (reorganised)
5	1980-81	37	26	5.24	2.30	3,171 (reorganised)

426. In addition to the government and co-operative dairies, there are four big private sector plants at Aligarh (Glaxo), Etah (Hindustan Lever), Muzaffarnagar (Indodan Milk Products) and Saharanpur (Foremost Dairies) with an aggregate

handling capacity of 4.00 lakhs litres of milk per day. This brings the total processing capacity in the State in all the sectors to the order of 9.24 lakh litres of milk per day.



427. Utilization of processing capacity available has been so poor that the units could not meet even the minimum overheads, leading to heavy losses. The more unfortunate fact is that none of the plants in the co-operative and government sector has been able to reach the break-even point to balance its economy.

The main reasons for the poor performance of the dairy sector have been as under :

(a) Weak co-operative structure at the village level due to which milk in adequate quantities could not be collected.

(b) The organisation of societies has been faulty, as it was not based on economic considerations.

(c) Bye-laws of milk societies were not producer oriented.

(d) Dairy schemes were not linked up with extension activities.

(e) Co-operative dairy sector had to face unhealthy competition from private milk traders.

(f) Scattered distribution of milch cattle did not allow of organised collection of milk.

(g) Constant time and cost overruns in setting up of new dairy plants resulted in serious erosion of the credibility of the programme in the eyes of the producers.

428. To overcome the above shortcomings following remedial measures have been taken :

(a) The bye-laws of the dairy co-operative have been made producers oriented to ensure participation of milk producers only as member of the society as well as its management.

(b) Directions under joint signatures of the director, animal husbandry and the milk commissioner have been issued to the field staff of the animal husbandry department, the dairy development department and those of the dairy units for co-ordinated efforts to identify milk belts in compact areas close to the central

dairy, to ensure maximum supply of milk with minimum expenditure, especially on transport.

(c) Targets have been fixed for re-organising the existing and organising primary co-operative milk societies at the village level to ensure a collection on an average 150 litres of milk per day per society in a compact area.

(d) Directions have been issued to the field staff to hold general meetings in the primaries for distribution of profits amongst the members as dividend on shares and as bonus on milk supplied by each member to motivate the members to supply more milk and other producers to become members of the society.

(e) Steps are being taken for reorganisation and strengthening of district level milk unions for maintenance of dairy plants for chilling, pasteurisation, standardisation, bottling and marketing of milk.

(f) Strengthening of the apex-co-operative body, viz., Pradeshik Co-operative Dairy Federation for co-ordinating and standardising the working of the district level milk unions.

(g) Provision of inputs viz., health cover facilities artificial insemination services, balanced cattle feed, and fodder seed, etc. is being ensured.

(h) Formation of milk grid for ensuring adequate supply of milk to balancing plants, so as to provide an assured market for those unions which lack local markets specially during flush season is being arranged.

(i) New methods and technologies for bringing about efficiency and economy in the working of dairy co-operatives and the plants are being introduced.

(j) Centralised cadre of key personnel is proposed to be introduced for ensuring better management of plants. This will make available the services of efficient and qualified technical persons for improving operational efficiency.

429. The strategy for the Sixth Plan aims at speedy implementation of the above remedial measures. Consequently, the major thrust during the Sixth Plan and its constituent Annual Plan necessarily has to be placed on :

(i) Strengthening the primary milk co-operative societies through integrated approach of development under "Aid to Dairy Co-operatives".

(ii) Strengthening the existing plants in Co-operative/State Sector to enable them to utilize higher percentage of installed capacity through increased production and procurement of milk. For this purposes, adequate funds shall have to be provided for revitalisation, consolidation and expansion wherever necessary of the existing plants.

(iii) Man-power development to enable the plants to improve their operational efficiency.

(iv) Sound pricing policy to encourage the producers engaged in milk production.

430. Keeping in view the above strategy and objectives, the following programmes have been included in the Sixth Plan.

431. *Directions and administration*—Since May, 1976, a separate Dairy Development Department is looking after the dairy development programme in the State. The department conducts surveys for assessing the potentiality of a particular area, organises and registers the co-operative societies, arranges effective supervision, concurrent audit, arbitration and inspection of the co-operatives, co-ordinates activities of the various development departments relating to dairy development and carries out the obligations under the U. P. Milk Act, 1976. As a result of expanding activities, there has been a constant need for increase in the administrative strength of this department. Up to the year 1979-80 headquarter, regional and district level staff for 37 districts in the State has been sanctioned with Milk Commissioner at the head. Some additional staff at various levels may be needed with the gradual expansion of activities. To meet the expenditure on the existing and proposed staff

an outlay of Rs.200.00 lakhs has been proposed for the total Plan period.

432. *Aid to Dairy Co-operatives*—Primary milk co-operative societies are already available as base for procurement of milk for the various plants. The main emphasis in the proposed Plan is to develop these very societies to enable each to procure at least 150 litres of milk per day on an average throughout the year and organise new ones only when necessary.

433. During the Sixth plan it is proposed to raise the present procurement of 2.14 lakh litres of milk per day to 3.00 litres of milk per day. To achieve this it is proposed to activate and revitalise 1530 existing societies and organise 150 new primary milk societies. It is expected that an average collection of at least, 100 litres of milk per day per society is likely to be achieved by the end of the plan. Under these schemes the following assistance shall be made available to the societies :—

(i) *Common Service*—In order to collect milk hygienically and on quality basis, society will be provided with necessary equipments and financial assistance for carrying out the quality test. During the plan period, 1680 societies are proposed to receive assistance at the rate of Rs.6,000 per society for equipments under common services and managerial subsidy at the rate of Rs.2,400 per annum for two years. It would be but proper to mention here that 783 societies have already been given the above assistance during the past three years (1977-80).

(ii) *Veterinary Inputs*—Better maintenance of the health of the milch animals and sound breeding are necessary for ensuring increased milk production. As such animal husbandry inputs in the form of health cover and artificial insemination services have their own importance under the dairy development programmes. It is estimated that about 7 paise per litre of milk shall be the expenditure, on these inputs.

To meet this expenditure, it is proposed to create a fund with the contributions from the State and the beneficiary institutions. Participation of the State in this fund shall be on a tapering basis, that is 5 paise per litre in the first year, 4 paise per litre in second year and 3.5 paise per litre in the third year and onwards. The balance amount of each year shall be the contribution of the beneficiary institutions. The fund thus created shall be operated and managed by the State Milk Board. It is estimated that State shall have to contribute about Rs.107.00 lakh during the total Plan period towards this fund.

(iii) *Share Participation*—In addition to the above, societies are proposed to be given funds by the Government as share participation in the ratio of 2 : 1 (Government ; Society), to enable the society to have base money for making timely payments and meeting short-term requirements for purchase of cattle feed etc. to be supplied against the milk price.

(iv) *Other Items*—Assistance at the rate of Rs.1,500 is also proposed for enabling societies to have dead stock like furniture and stationery etc. in the beginning. In order to educate the producers regarding modern techniques of cattle maintenance, disease control, etc., demonstrations and exhibitions are proposed to be organised in the rural areas. Each such demonstration is estimated to cost Rs.6000. During the Plan period 297 such demonstration are proposed to be held.

434. For all the activities mentioned above, an outlay of Rs.364.20 lakhs have been proposed for the total Plan period.

435. *Education and Training*—This Scheme includes :

(a) Training of Secretaries of the primary co-operative milk societies to enable them to maintain accounts, conduct quality testing of milk and milk products, and carrying out extension activities both relating to dairying and animal husbandry.

(b) Refresher courses and training on various disciplines to departmental officers as well as to the institutional officers.

(c) Training of farmers for educating them to adopt improved techniques for the up keep animals for increased milk production.

(d) Assistance to the Agricultural Institute, Allahabad, for arranging dairy courses.

(e) Stipend to candidates for Indian Dairy diploma and degree courses in dairy science.

(f) Holding of seminars at Tehsil level for educating the producers about the merits of co-operatives and other extension activities and also for having first hand knowledge of the local problems.

For this scheme an outlay of Rs.48.00 lakhs has been proposed.

436. *Revitalisation, consolidation and expansion of existing milk unions*.—The State already has 26 processing units under Government and co-operative sector having a total handling capacity of 5.24 lakh litres of milk per day. Many of these processing units are quite old and need funds for replacement of machinery and carrying out additional civil works. Funds are also to be provided for creating the net work for better distribution of milk which is rather inadequate so far. It is proposed to assist these dairies to set up small automatic filling units for the convenience and longer service to the consumers. This will resolve the problem of adulteration also.

437. Most of the plants are in arrears as far as payment of milk price to the producers is concerned. It is proposed to provide adequate funds as working capital to these dairies to tide over their financial incapability to make payment of milk price regularly.

438. To meet the above' an allocation of Rs.978.61 lakhs is proposed for the total Plan period.

439. *Other Schemes*—Besides the main programmes listed above, there are various other schemes taken up to supplement

the milk enhancement programmes or programmes leading to additional economic resources to the dairies. The main amongst them are : setting up of Miltone Plant at Kanpur which may supplement the economic resources to the dairy besides making available subsidised milk in the labour colonies of Kanpur.

440. The programme for development in tribal areas has also been included in the Sixth Five-Year Plan. The area around Dehra Dun is to be taken up to start with.

441. The total outlay of Rs. 390.00 lakhs is proposed for various schemes for the total plan period including Rs. 25.00 lakhs for tribal areas.

442. *Impact of the strategy*—The Plan has been worked out in such a manner that if the programmes and allocations proposed are approved, it is hoped that handling of 3.00 lakh litres of milk per day will be possible with 3,000 societies expected to be available by the end of the Plan period. This represents about 58 per cent of installed capacity available under the Co-operative and State Sectors. This will ensure satisfactory preference of the Plants which are at present in a very deplorable position. The activities will largely benefit the weaker sections of the rural areas as well as the consumers in the urban areas. This will specially contribute much towards reducing regional imbalance and opening large avenues for direct and indirect employment. Per capita income of the rural, population living below the poverty line is also likely to increase.

#### (8) FISHERIES

443. Fisheries is an important economic activity and there is tremendous potential available in the State which can be profitably utilised for production of fish. The present level of utilisation of available water resources is only a tiny fraction of the optimum. Fisheries development would tend to promote distributive economic justice since it would generate income for socially backward and economically weaker sections of the society. Fisheries being labour intensive, its development would create employment with relatively low investments. Besides, fish

production would also promote consumption of protein rich food in the rural areas where people are suffering from mal-nutrition. Further, fisheries development would also mean utilisation of fallow water bodies available in villages, and hence contribute towards improving standard of living specially of the weaker sections of the society, particularly in rural areas by reducing pollution utilisation of available resources, providing fish food and making available employment opportunities to the rural poor.

444. *Level of utilization of available water resources in the State*—It is estimated that about 7.2 lakh hectares of flowing water area (i.e. rivers and canals) is available within the State, which forms a large potential for capture fishery in the private sector. Flowing waters, being natural breeding grounds of Indian major carps, yield adult fish and fish seed on a regular to availability of confined waters are not available in the State, but it is estimated that 4.45 lakh hectares water area is available. Of this area, 1.42 lakh hectares area of reservoirs and medium waters has already been brought under direct control of the department. The remaining water area mainly comprise of natural lakes and village tanks. So far only 6,500 hectares small water area could be brought under fish culture and the remaining area is yet to be covered in an organised manner.

445. *Qualitative and quantitative analysis of infrastructure created in the State up to Fifth Plan*—Sixty-six irrigation reservoirs and 389 village tanks having an area of 1.42 lakh hectares are under direct control of the department. Through planned development, the level of fish production has increased from 3 kg./per hectare to 10 kg./per per hectare per year. The level of fish production can further be increased by adopting intensive pisciculture practices. For production of quality fish seed, 108 fish farms and 13 bundhies have been constructed in the State, from which about 1 crore fingerlings are produced every year. Since these fish farms and bundhies are exposed to the vagaries of nature hence they have become less productive. For increasing the production level these old fish farms and bundhies need repairs and modernisation. The

availability of fish seed (fry) is declining day by day from rivers. As such efforts are being made to supplement it by induced breeding technique. The present level of fry production from induced breeding technique has reached a level of 4 crores which can be further increased by construction of large fish farms.

446. *Approach to Fisheries development during Sixth Plan*—Fisheries sector mainly serves to the fishermen community who are poor, besides provides valuable fish crop for the State. Keeping these two factors in view the approach to the Sixth Plan would be in the following manner :

(i) *Assessment of the natural resources*—Since authentic data about water resources is not available hence it is proposed to prepare a resource inventory during Sixth Plan period. This will cover information regarding all types of waters, fishermen population and fish marketing practices etc.

(ii) *Fish seed production*—It is estimated that the State would require 13 crores fingerlings at the end of Sixth Plan period, against which the present actual availability is only 4.7 crores. Hence efforts will be made to increase the availability of seed through induced breeding in the departmental fish farms. Private pisciculturists will also be encouraged to take up fish seed production work.

(iii) *Intensification of fisheries development work in the departmental waters*—Fishing and marketing of fish produce from departmental waters is becoming a real problem because of predominance of middle men in the fisheries sector. Similarly, poaching is another problem which creates hindrance in regulatory fishing of the large reservoirs. Stocking of reservoirs with different varieties of fingerlings in a balanced manner is another problem because of the shortage of seed in the State. Hence to overcome all these problems, it is proposed to create a separate commercial wing in the department, so that better management techniques could be adopted.

(iv) *Fish culture in rural areas*—The resource of village tanks and ponds are largely neglected and majority of them has silted up. Consequently, most such tanks are seasonal in nature and are unsuitable for intensive fish culture. During Sixth plan period efforts will be made to encourage fish culturists for adopting intensive fish culture methods so that more and more water area could be utilised for production of fish.

(v) *Cold water fisheries*—Aquaculture technology of the Plan is not possible in hill areas of the State because of the ecological conditions prevailing therein. Most of the hill streams are left with very little population of cold water fish viz., Trout, Mahaseer, and Mirror Carp. Therefore, a massive programme for rehabilitation of these fish will be taken up in order to enrich the natural fish fauna.

(vi) *Marketing of fish*—Fish is a perishable commodity and requires quick, efficient handling and transport facilities, so that produce reaches consumers in good condition but due to scattered and diffused nature of the inland fisheries, marketing is a real problem. Hence it is proposed to allow the fish trade to remain in the hands of fish merchants till the creation of a network of storage, transportation and marketing infrastructure.

447. *Programmes included in the Sixth Plan*—According to the nature of the schemes different proposals have been grouped in two categories (i) continuing schemes, and (ii) new schemes. Brief resume of various schemes is given below.

448. *Continuing Schemes*—In all there are eleven schemes in this category, of which following six schemes which are continuing since Fifth Plan period will be discontinued on the Plan side from 1981-82 :

(a) Applied nutrition programme in collaboration with UNICEF.

(b) Intensive fish culture in small waters and establishment of extension units.

(c) Improvement of old fish farms.

(d) Setting up of units for analysing soil and water of private waters.

(e) Development of reservoir fisheries.

(f) Improvement of departmental small waters.

449. The remaining five schemes are proposed to be continued during the entire Sixth Plan period. Schemewise details are given below.

450. *ICAR Research Schemes*—These are :

(a) *Co-ordinated research project at Rihand reservoir, Mirzapur*—This programme will remain functional during the Sixth Plan period. Under this programme ecology of fresh water fishery of the reservoirs is being studied. An outlay of Rs.1.05 lakh is ear-marked for the Plan period.

(b) *Co-ordinated research project at Gujartal (Jaunpur)*—Under this research scheme studies on the composite culture of Indian and exotic species is in progress. Encouraging results have been obtained, as such this scheme will remain functional during Sixth Plan period. An outlay of Rs.3.21 lakh is ear-marked.

451. *Fisheries education and training*—Officials of the department are sent to all India Institutes for training in latest techniques every year. During training period trainees are paid stipend at the prescribed rates. A provision of Rs.1.45 lakh has been made for this purpose.

452. *Strengthening of Fisheries Directorate*—An outlay of Rs.0.99 lakh has been proposed during the Sixth Plan.

453. *Establishment of planning and statistical cell*—For proper follow-up of Plan work a planning and statistical cell was established during 1978-79. The staff sanctioned for this cell will continue during the Sixth Plan period. An outlay of Rs.9.00 lakhs has been ear-marked during the Plan period.

454. *New Schemes*—These are described in the following paragraphs.

455. *Operation . aquaculture*—The future strategy with respect to fish farming in small confined waters would be to launch a major programme of aquaculture in rural areas during the Sixth Plan period. Out of 56 districts in the State eight hill districts are not suitable for extensive aquaculture work. In the remaining 48 districts operation aquaculture programme is proposed to be launched through various agencies 17 districts are proposed to be covered under Inland Fisheries. Project with World Bank assistance. Two districts viz. Meerut and Badaun shall be covered under the Centrally sponsored scheme and the remaining 29 districts are proposed to be covered under State run schemes. Under this programme following works are proposed to be undertaken :

(i) Arrangement of long-term lease of village tanks.

(ii) Providing credit support to fish farmers for improvement of tanks and first year inputs.

(iii) Provision of financial support i.e. 25 per cent subsidy on bank loans obtained for improvement of tank and fishery inputs.

(iv) Arrangement of training facilities to the fish farmers.

(v) Supply of fingerlings to the fish farmers.

456. Schemewise details of operation aquaculture are given below :

(i) *Inland Fisheries Project with World Bank assistance*—Under this programme it is proposed to establish Fish-farmers development agencies all the 17 project districts (1) Barabanki, (2) Sultanpur, (3) Pratnagarh, (4) Azamgarh, (5) Deoria, (6) Gonda, (7) Gorakhpur, (8) Basti, (9) Varanasi, (10) Jaunpur, (11) Ghazipur, (12) Ballia, (13) Allahabad, (14) Lucknow, (15) Unnao, (16) Rae Bareilly and (17) Faizabad. As a result of implementa-

tion of the scheme 16000 hectares of water area will be brought under fish culture and 16000 persons are proposed to be trained. Bank loans for the improvement of tanks and for the initial inputs will be provided. Twenty-five per cent subsidy on bank loans will be given to the fish farmers. In the project area about 32000 tonnes of fish is expected to be produced per year from private sectors. An outlay of Rs.370.13 lakhs is proposed for this scheme, against which World Bank/central share is Rs.2.00 crores. In addition to the above about Rs.6.00 crores will be required as institutional finance from commercial banks.

(ii) *Centrally sponsored fish farmers development agencies*—This scheme is proposed to be continued as central sector scheme on 50 : 50 bases in Meerut and Badaun districts. Under this scheme all the benefits of above mentioned scheme will be made available to the fish farmers, 400 persons would derive benefit and about 200 hectare water area will be covered. An outlay of Rs.21.05 lakh is proposed for this scheme.

(iii) *State Fish farmers development agencies*—This scheme is proposed to be implemented in the remaining 29 districts of the State, Muzaffarnagar, Saharanpur, Ghaziabad, Bulandshahr, Bijnor, Shahjahanpur, Pilibhit, Moradabad, Rampur, Bareilly, Mathura, Etah, Mainpuri, Aligarh, Agra, Kanpur, Fatehpur, Etawah, Farrukhabad, Hardoi, Sitapur, Kheri, Bahraich, Mirzapur, Jalaun, Hamirpur, Banda, Lalitpur and Jhansi. The fish farmers will be extended all the facilities of operation aquaculture scheme so that beneficiaries are in a position to take up fish culture work. Staff will be posted at division/district level/and block levels, for close supervision of the work. As a result of implementation of the scheme 9500 hectares of water area will be brought under fish culture, 10,000 fish farmers are proposed to be trained. An outlay of Rs.200.15 lakh is ear-marked for this

scheme during Sixth Plan period. This will be entirely in the State sector. In addition to the above outlay Rs.3.5 crores would be required as institutional finance from the commercial banks.

(iv) *Establishment of training, extension and research wing in Pantnagar University*—It is proposed to establish a wing in the Pantnagar University with the World Bank financial assistance, for extending training facilities to the extension officers of the Department. This wing will form a nucleus for the future Training Institute. An outlay of Rs.60.70 lakhs is ear-marked for Sixth Plan period, against which an assistance of Rs.33.80 lakhs will be available from World Bank.

457. *Reservoir management agency*—It is proposed to establish an autonomous body within overall ambit of the department for development and exploitation of departmental waters on commercial lines. The agency shall be provided grant-in-aid from the State budget as and when required. A token provision of Rs.10.00 lakhs is ear-marked for this purpose. The financial resources of this agency will be supplemented by way of obtaining institutional finances as per requirement.

458. *Organization of Fisheries department*—With a view to have close supervision, and monitoring of the extended activities of the fisheries sector, few posts were sanctioned in the year 1978-79. The same will continue during the Sixth Plan period also. For strengthening the above activities Rs.3.68 lakhs will be required during the Sixth Plan period.

459. *Establishment of Fisheries development corporation*—A fisheries development corporation has already been established with a view to construct four hatcheries, under World Bank project. As per agreed terms, the Corporation will have to be provided State equity share. As such an outlay of Rs.55.00 lakhs has been ear-marked for this scheme. In addition to above the Corporation will procure institu-

tional finance to the tune of about Rs.2 crores in a phased manner.

460. *Development of cold water fisheries*—During the Sixth Plan period it is proposed to create additional infrastructure for production of Trout, Mahaseer and Mirror Carp fingerlings so that denuded hill streams could be rehabilitated with the natural fauna. For proper supervision of work it is also proposed to strengthen the staffing pattern in the Hill area. An overall outlay of Rs.30.00 lakhs has been ear-marked for this purpose.

461. *Financial requirements during Sixth Plan period*—During the Sixth Plan the total financial requirement is Rs.780.00 lakhs. against which Rs.200.00 lakhs is expected as Central/World Bank assistance. In addition to State Plan allocation an amount of Rs.12.50 crores would be required in the shape of loans from the institutional agencies.

462. *Physical targets*—The level of physical achievements at the end of Sixth Plan period (i.e. 1984-85) will be as per details given below :

- (i) Fingerling production (in crores) 13.00
- (ii) Fish production (1000 tonnes) 50.00

463. *Employment generation*—To carry out the above programmes the department would require 878 persons during Sixth Plan period.

It is expected that about 26.000 persons will get self-employment opportunity by way of taking up fish culture activity.

464. *Component plan for scheduled castes and scheduled tribes*—Fisheries department mainly caters to the needs of backward sections of the society. But during the Sixth Plan period it is proposed to extend special facilities to the scheduled castes also. Against Rs.780.00 lakhs proposed over-all outlays Rs.179.00 lakhs is divisible outlay. From divisible amount it is proposed to earmark Rs.10.07 lakhs for the benefit of scheduled castes. As a result of implementation of the component plan 1,500 scheduled caste families will be benefitted through pisciculture in 750 hectare water area.

## (9) FORESTS

465. Forest constitute an most important natural resources, which is naturally renewable. Forests impart to our environment an ecological balance a moderation of climatic fluctuation and conservation of both soil and water resources. They also provide a wide range of products used directly and indirectly in a variety of uses. The challenge for any forest policy is to transform management of forest ecosystems for growth and development in a manner which least disturbs the ecological balance; in areas where such balance have been disturbed on account of past practices to speedily restore it. This basic objective highlights the constraints and assumption of the State Forest Policy. Unless forests yield returns broadly comparable to the opportunity cost of land covered by these lands in other uses, their survival even on the present scale would be in constant jeopardy. Furthermore, policies regarding forests must be formulated and implemented in the context of an overall and integrated plan for land use. It is also important to realise that if forest policy must take into account the legitimate needs and aspirations of the people living in and around forests. Fortunately modern research and technology, coupled with suitable managerial skills and the increasing concern for maintaining ecological balance has made it possible for man to be able to co-exist and even benefit for a progressive increase in the area under forests.

466. The total forest cover in U. P. is estimated to be 51,130 sq. kms. which is 17.4 per cent of total geographical area of the State, as against the norms of 33.33 per cent area of the State, as against the norms of 33.33 per cent recommended in the National Forest Policy. The forests of U. P. are mostly confined to the hills, the Tarai belt and the vindhyan ranges. The other parts of the State are virtually devoid of any forest cover. The area under forests in different States and its proportion to the total geographical area is shown below :



Name of the State	Year	Geographi- cal area (Sq. Km.)	Total Forest area (Sq. Km.)	Percentage of Forest Area with respect to geographi- cal area
1	2	3	4	5
1. Andhra Pradesh	1978-79	2,76,814	64,154	23.18
2. Assam	1978-79	78,523	30,708	32.11
3. Bihar	1973-74	1,78,880	29,320	16.68
4. Gujarat	1978-79	1,95,984	19,712	10.06
5. Haryana	1978-79	44,222	1,631	3.69
6. Himachal Pradesh	1978-79	55,658	21,847	39.25
7. Jammu & Kashmir	1978-79	2,22,236	21,887	9.80
8. Karnataka	1977-78	1,91,773	36,225	18.89
9. Kerala	1978-79	88,864	11,320	29.13
10. Madhya Pradesh	1977-78	4,42,840	1,68,350	38.01
11. Maharashtra	1978-79	3,07,762	63,922	20.77
12. Manipur	1978-79	22,366	15,154	67.75
13. Meghalaya	1973-74	22,490	6,990	31.00
14. Nagaland	1978-79	16,527	2,861	17.31
15. Orissa	1978-79	1,55,845	67,675	43.42
16. Punjab	1978-79	50,376	2,225	4.42
17. Rajasthan	1977-78	3,42,214	34,484	10.08
18. Sikkim	1973-74	7,300	2,650	36.30
19. Tamil Nadu	1978-79	1,30,069	21,737	16.71
20. Tripura	1978-79	10,477	5,998	57.26
21. Uttar Pradesh	1978-79	2,94,413	51,136	17.37
22. West Bengal	1973-74	87,850	11,830	13.47

1	2	3	4	5
<i>Union Territories</i>				
1. Andaman and Nicobar Islands .. ..	1978-79	8,294	7,464	0.90
2. Arunachal Pradesh .. ..	1978-79	83,578	51,540	61.67
3. Dadar and Nagar Haveli .. ..	1978-79	490	203	41.43
4. Delhi .. ..		1,475	N. A.	..
5. Goa-Daman-Diu .. ..	1978-79	3,813	1,308	34.39
6. Mizoram .. ..	1978-79	21,090	7,127	33.79
7. Others .. ..		567		
All India .. ..		32,87,790	7,59,458	23.10

467. The forest area in 12 States, including U. P. and one Union territory is much less than All India average of 23.10 per cent. This calls for the preservation and extension of forests in the State. Since on account of various demands on land new areas available for forests would of necessity be limited of the thrust has to on reforestation of denuded forest areas; conversion of low value forests into

high value ones and on improvement of management techniques. In this regard intensification of work on schemes of Social forestry assume significance.

468. Out of the total forest area of 51.13 lakh hectares, 40.85 lakh hectares is under the direct control of the Forest Department. The break-up of the forest area is as follows :

(Area in sq. km.)

Item	8 Hill districts	Plains	Total
1	2	3	4
1. Under the control of Forest Department			
(a) Reserved .. ..	23,731	10,517	34,248
(b) Protected .. ..	9	198	207
(c) Unclassed .. ..	26	6,368	6,394
2. Civil and Soyam Forests .. ..	7,600	..	7,600
3. Panchayat Forests .. ..	2,448	..	2,448
4. Cantonment and Private Forests .. ..	233	..	233
Total	34,047	17,083	51,130

469. *Main trends of development from 1960 onwards*—1,62,304 hectares of plantations of fast growing species have been raised from which after 8 years about 4 lakh M. Tonnes of pulpwood will be available annually for 24 years for the paper and pulp industry. 1,76,156 hectares of plantations of other species have been raised which on maturity (about 50 to 60 years), will annually yield about 15 lakh cubic metres of timber for 20 years. 11,603

hectares of plantations of fuelwood species have been raised which, on maturity, will yield about 30 thousand metric tonnes of fuelwood per year for 10 years. Construction of 4,864 kms. of roads, other infrastructural development and improvements in management practices has resulted in increasing in the production of timber from 0.18 cubic metre/hectare in 1960 to 0.37 cubic metre/hectare in 1980. 1,40,400 hectare of land (including ravines)

was under Soil Conservation programme. Additional, under the Extensive Tree Plantation programme which was started in 1976-77, about 12 crore plants of various quick growing and economically valuable species have been distributed by the Forest Department through the block

development organisation to various agencies and private individuals for Plantation on their private land.

470. The qualitative and quantitative review of development over various Plan periods is given on the table below :

Item	Plan Unit period	Third Plan period	Three Annual plan period	Fourth Plan period	Fifth Plan period
		1969—74		1974—79	
1	2	3	4	5	6
Average Annual Revenue (at 1960-61 prices) ..	lakh Rs.	836.92	893.32	1056.00	1200.00
Average Annual Expenditure (at 1960-61 prices) ..	Do.	372.37	342.14	397.56	492.00
Average Annual Net savings (at 1980-81 prices) ..	Do.	465.55	556.18	658.44	708.00
Average Annual Net Saving (at 1980-81 prices) ..	Lakh Rs.	2042.00	2225.00	2688.00	28.66
Average Annual production of saw timber ..	Lakh Cu	6.22	9.00	9.50	9.00*
Average Annual production of fuel ..	Do.	20.10	21.52	23.50	22.00*
Average Annual production of Resin ..	Lakh Qtls	1.74	2.50	2.87	2.50*
Average Annual production of Tendu Patta ..	Do.	0.85	0.86	1.24	1.62

\*The decrease is due to restriction of working in hill forests.

471. *Strategy and objectives during the Sixth Five Year Plan 1980-85*—During previous plans while same attention was given to social forestry; emphasis was laid mainly on the plantation of species of economic importance and other fast growing species to meet the increasing demand of raw material for wood based industries. In the Sixth Five Year Plan for 1980-85 the main thrust will be on social forestry together with restoration of Himalayan eco-system without neglecting the productive protective and aesthetic aspects of forestry. In more specific terms, during the current Plan the Forestry Plan would attempt to :—

(a) Maintain the ecological balance particularly in the Himalayas and thereby contribute to environmental stability.

(b) Protect land and soil against injury by physical and biological forces, erosion and denudation, illicit felling and theft.

(c) Preserve the natural heritage of fauna and flora, the repository of a

wide range and variability in the gene-pool.

472. The economic benefits could flow only after the above three objectives are met with. The priority emphasis is listed below :

(a) Fulfilling the social aspects by meeting the daily needs of the community dependent on the forest ecosystem, particularly tribals and other people settled in the vicinity of forests.

(b) By meeting the needs of forest products for defence, communication, domestic consumption and industrial purposes.

(c) To provide recreational amenities associated with forests in urban, semi-urban and remote areas.

473. The main thrust of the forest plan, has therefore, to be directed towards the following objectives :—

(i) Increasing the area under forests and trees accelerating the pace of reforestation and afforestation and checking the rapid pace of deforestation and denudation.

(ii) Regulating exploitation and optimising and diversifying the yield of forest produce, both wood and non-wood products on a sustained basis.

(iii) Eliminating deleterious factors, such as encroachments, grazing and fire, on forests and treelands.

(iv) Intensification of forest management to increase the current productive capacity and tree cover so as to realise, as nearly as possible, the potential productivity of the site.

(v) Providing technical and extension training to personnel executing normal and social forestry programmes and instilling conservation consciousness in people in general and the rural population in particular.

(vi) Strengthening the research base for optimising direct and indirect benefits from multiple use of forestry practices.

(vii) Allocating sufficient financial resources for implementing the directives of the National Forest Policy.

(viii) The implementation of the concept of multiple functions and multi-dimensional use of forests and treelands.

(ix) To build up trained manpower resources adequately and sufficiently.

474. Expenditure on forestry sector during the Fifth Five Year Plan (1974-79) was of the order of Rs.23.93 crores. The proposed Plan expenditure seeks to initiate series of measures which will increase the area under various kinds of forest plantations from 6.34,000 hectares as on 1979-80 to 8.75,000 hectares, resulting ultimately in additional availability of valuable forest produce from areas under the control of Forest Department. The projected additional availability is shown as below :—

Sl. no.	Produce	Unit	Present level (1980)	Future level projections	
				1985	2000 A. D.
1	2	3	4	5	6
1	Industrial Wood	Lakh cu.m (round)	(1) 11.00 (1)	(2) 16.00 (2)	(3) 16.50 (3)
2	Fuel Wood	Lakh cum.	22.00	23.00	26.00
3	Fooder (Green & dry both)	Lakh Metric Tonnes	(4) 480.00	(6) 680.00	(5) 840.00

NOTE—1

- (1) Reproduced from All India figures for 1970 of NCA (1976) on the basis of population and further reducing it by 0.85 since 70 percent population of U. P. is below poverty line against 60 percent for total country.
- (2) and (3) Reproduced from All-India figures of NCA (1976) for 1985 and 2000 A.D. respectively on the basis of human population.
- (4) This is only for commercial fuel wood. Actual demand of total fuel wood will be still greater.
- (5) (6) and (7) Reproduced from All-India figures for 1980, 1985 and 2000 A. D. respectively (NCA 1976) on the basis of live stock population.
- (9) and (11), Figures as for 1973 and 2000 A.D. from NCA (1976) after reducing on the basis of the live stock population for U. P.
- (10) Simple average of 1973 and 2000 A. D. figures.

NOTE 2—The demand projections of the National Commission of Agriculture 1976 takes into account all the latest changes in the technology of processing and harvesting wood in India.

475. The anticipated gap between demand and supply of industrial wood which is at present 11 lakh M<sup>3</sup> will rise to 30 lakh M<sup>3</sup> by 1985 and 62.5 lakhs M<sup>3</sup> by 2000 A.D. Except eucalyptus plantations for pulpwood which are felled at 8 years rota-

tion, the plantations of industrial woods have a rotation of 40-45 years in the plains and 70-80 years in the hills. Since the plantations have been raised on a substantial scale only from the Third Five Year Plan, it will not be possible to meet the

increased demand of industrial wood from these plantations till the year 2000 A. D. Even in the later years, it will be possible only to meet a small part of the rising demand for industrial woods of the forest department, since the area suitable for conversion to plantation is limited and there is no scope of increasing the area under the forests. Besides, there are limitations in increasing area under plantations and change in the pattern of species in the reserve forests. To preserve the ecological and environmental balance, Uttar Pradesh is now faced with a critical situation unless radical solutions based on some revolutionary technological and management concepts can be found. In the meanwhile, the course of action with the maximum pay-off is increasing production by better management practices in the reserved forest areas and by planting intensively in areas outside the control of Forest Department under the social forestry programme and other schemes designed for restoration of the Himalayan eco-system.

476. *Main programmes and Activities—Production Forestry*—Under production forestry, two schemes viz. (a) Raising of Plantations of economic and Industrial importance to meet the increasing demand of raw material for wood based industries like matchwood, plywood, fibre board, packing cases katha etc., and (b) plantation of fast growing species for meeting the demand of raw material for pulp and paper industries from pulpable species like eucalyptus, paper mulberry and bamboo are being implemented. Up to 1979-80, 1,76,156 hectares have been planted under the forest scheme and another 1,62,304 hectares covered under the second scheme. During the 1980–85 Plan, these schemes would be continued and plantations raised over additional areas of 51,200 hectares and 18,000 hectares respectively poplar plantations are also being raised under the second scheme, the timber of which will be used mainly for match industry though some quantities would also be available for paper and pulp industry. regeneration of old eucalyptus plantations by coppicing, started during Fifth Five Year Plan will be speeded up during the Sixth Five Year Plan.

477. The outlay proposed for raising plantations of species of economic and industrial importance is Rs.1038.00 lakhs, and for plantation and coppicing of fast growing species an outlay of rupees 902 lakhs is proposed in the Sixth Plan period.

478. *Social Forestry*—In order to meet the basic requirements in plain areas of fuel, fodder and small timber for rural population specially where there are no forests, this scheme is being implemented, with World Bank aid by the forest department. The scheme was first started in 1976-77. Up to 1979-80 plantations of mixed species over 13,556 hectares, and 19,739 row km. shelterbelt plantations have been raised by the department. It is proposed to raise 60,600 hectares of plantations at an outlay of Rs.4875.00 lakhs during 1980–85.

479. *Management of Roadside Avenues*—Forest department has been carrying out the activity of raising plantations along P. W. D. and other roads for the purpose of providing shade to pedestrians and also adding aesthetic looks to roads. Up to 1979-80 some 20,995 row km. of roadside plantations have been raised. It is proposed to continue this scheme during Sixth Five Year Plan and to further raise 5,700 row km. of roadside plantations at an outlay of Rs.369.00 lakhs, in areas now associated by social forestry.

480. *Forest protection*—As stated earlier biotic agencies are causing considerable damage to forest wealth. Antisocial elements are inflicting injuries on forests as well as on those who are responsible for protection of forests. Accordingly creation of armed forest guard squads, a mobile P. A. C. company and construction of check post on Indo-Nepal and U. P.-M. P. borders are proposed during Sixth Plan at an outlay of Rs. 136.00 lakhs.

481. *Fire Protection*—Fire is the greatest single source of damage to our forests and the loss due to forest fires is to the extent of Rs.3.00 crores annually apart from substantial intangible and indirect losses. Accordingly a scheme of fire fighting with modern equipment was implemented during the earlier plans. It is proposed to continue it during Sixth Plan with an outlay of Rs. 140.00 lakhs.

482. *Forest Research*—The aim of forest research scheme is to perfect techniques of various forestry practices, both in hills as well as in plains, to enable the department to meet the industrial, social, cultural and environmental obligation from forests and to identify and solve the problems arising out of various forestry practices, Rs.99.00 lakhs have been proposed for Sixth Plan on this scheme.

483. *Survey of Forest Resources*—In order to meet the increasing demand of raw materials from forests for wood based industries, it is essential to have correct figures of various raw material from forests. Accordingly this scheme was started from Third Five Year Plan and it is proposed to continue this scheme during the Sixth Plan with an outlay of Rs.57.00 lakhs.

484. *Revision and Preparation of Working Plan*—For systematic and scientific management of forests, the department prepares a working Plan for each forest division tenable for a period of 10 years. This scheme started in the earlier Plans is proposed to be continued during the Sixth Plan with an outlay of Rs.60.00 lakhs.

485. *Communication*—The scheme envisages development of communication facilities in forest by renovation (including metalling) of existing roads, bridges and culverts; construction of new roads and telephone lines to improve the infrastructure. The scheme is proposed to be continued during the Sixth Plan with an outlay of Rs.395.00 lakhs.

486. *Buildings*—Due to onset of Plan activities and intensive management of forests there has been a considerable increase of staff of all ranks who has to live and work in remote areas. There is acute shortage of buildings for office accommodation and residences for staff. Hence this scheme which was started during Second Plan is proposed to be continued during Sixth Plan at an outlay of Rs.330.00 lakhs.

487. *Forest Statistics, Data Processing and Monitoring*—A cell for the collection, processing and dissemination of forest statistics was started during Fourth Five Year Plan with a skeleton staff at the head-

quarters. This scheme could not make much headway during Fifth Plan for want of adequate funds. It is keenly felt that the present staff in this cell cannot meet the requirements of collection of accurate statistics and monitoring of various stages of planning and management of forests. It is, therefore, proposed to strengthen the staff at grass root level as well as headquarters at an outlay of Rs.65.00 lakhs during Sixth Plan.

488. *Training of Staff*—The training of staff of all ranks in this country as well as abroad started from the Second Five Year Plan. The work of forestry always require trained man power. As the scheme is essential it is proposed to be continued during Sixth Five Year Plan at an outlay of Rs.200.00 lakhs.

489. *Establishment of Project Formulation and Physical Evaluation Cell*—A scheme for setting up a cell for project formulation and physical evaluation of forestry works was taken up for implementation during Fifth Five Year Plan, but the same could be started only in 1977-78 and that too with a skeleton staff of one forest economist and two field investigators. This staff needs to be increased. Accordingly an outlay of Rs.35.00 lakhs during the Sixth Plan.

490. *Development of Deer Park at Mangalore*—On Delhi-Dehra Dun highway few miles away from Roorkee, Manglore is being developed as a halting spot for tourists from Delhi as well as from Dehra Dun. This scheme started from 1979-80 is proposed to be continued in Sixth Plan at an outlay of Rs.5.00 lakhs.

491. *Amenities to Forest Labourers and Taungya Cultivators*—In various forestry works like silvicultural operations, plantation, construction and repair of roads, bridges and buildings and felling and conversion of timber about 6 lakh labour force works in forests throughout the year. The labour force includes Taungya cultivators who do all plantation work free of cost in lieu of the facilities of cultivating inter-spaces between plantation lines for their own use. In order to ameliorate the living conditions of labour force this scheme was started in 1979-80

by providing them facilities of hutments, dispensaries and schools for their children. It is proposed to provide an outlay of Rs.79.00 lakhs during Sixth Plan on this item.

492. *Provision of Facilities of Drinking Water and Electricity in quarters of Subordinate Staff*—This welfare scheme was started in 1979-80. There are over 7,500 subordinate executive staff in the forest department. The residential quarters for staff are situated in very remote areas without the facility of drinking water and electricity. It is proposed to continue this scheme in Sixth Plan so as to provide them these essential facilities at an outlay of Rs.80.00 lakhs.

493. *Establishment of High Altitude Zoo*—In U.P. there are only two Zoological Parks one at Lucknow and other at Kanpur. In these parks only such animals that can tolerate heat are kept. There is no park for high altitude fauna which cannot tolerate heat of the plains. In view of this during Sixth Plan it is proposed to establish a high altitude Zoo at Naini Tal at an outlay of Rs.62.00 lakhs. In addition to the above schemes the following new schemes are also proposed from 1981-82 for remaining four years of the Sixth Plan.

494. *Intensification of Forest Management*—At present the jurisdiction of the administrative units right from forest guard beat to forest circle is very large and has to be reduced to facilitate intensive management, inspection and supervision of forest. In addition to this it is also proposed to provide jeeps to S. D. O.s/A. C. F.s so as to improve their efficiency and mobility in intensive inspection of various forestry works. It is proposed to provide an outlay of Rs.270.00 lakhs for this work. Inadequacy of extension work, particularly in hill areas and for wild life has been acutely felt. Accordingly the scheme for expansion of extension work in hill areas is proposed with an outlay of Rs.62.00 lakhs during Sixth Five Year Plan period.

495. *Social Forestry in Urban Areas*—The forest department is often requested by local bodies and municipalities in various cities and towns to undertake the work of planting of trees along roadside

and on vacant lands. Accordingly this scheme is being proposed at an outlay of Rs.43.02 lakhs during Sixth Five Year Plan.

496. *Forest Recreation*—In welfare State, it is one of the duties of Government to provide cheap recreation facilities. It is proposed to develop four picnic spots during Sixth Plan at an outlay of Rs.32.00 lakhs.

497. *Development of Minor Forest Produce*—Revenue from minor forest produce in the forest department is roughly one-fourth of its total revenue and there is sufficient scope to further increase revenue from untapped minor forest produce such as medicinal herbs. Accordingly this scheme at an outlay of Rs.37.03 lakhs is being proposed for the survey and development of medicinal herbs during Sixth Plan.

498. *Creation of Vigilance Cell*—In past few years there has been considerable increase in the number of complaints regarding illicit fellings, poaching, encroachments, etc. and also involvement of our own staff in such activities. It is becoming increasing difficult to attend to all such complaints expeditiously due to heavy pressure of work on the normal administrative staff. In line with policy of the Government, many departments have already started their own vigilance cells. Accordingly it is proposed to create vigilance cell under the forest department at an outlay of Rs.33.00 lakhs during Sixth Plan.

499. *Forest Corporation*—The corporation was established in November, 1974, with Rs.15.00 lakhs as Government loans and Rs.25.00 lakhs cash credit from State Bank of India. The main aim of the corporation is to abolish contractor system in felling and transportation of timber and to minimise its wastage by using modern equipment for logging. All this requires large initial investment. Due to cash credit squeeze from Reserve Bank of India, the corporation is facing severe financial difficulties particularly when the activities of the forest corporation are being expanded from year to year. Hence, Rs.200.00 lakhs will be given to Forest Corporation

in the form of subvention or loan by the Government. Accordingly, Rs. 200.00 lakhs have been proposed on this item during Sixth Plan.

500. *Intensive Management of Sanctuaries*—Wild life sanctuaries representing forest eco-systems and areas rich in flora and fauna in different geographical region of the States have been created in the past few years. Unfortunately, the objectives with which these sanctuaries were created could not be fulfilled due to needs of protection and management. Accordingly, this scheme at an outlay of Rs. 401.00 lakhs have been proposed for the development of existing sanctuaries during Sixth Plan.

501. *Wild Life Conservation in U. P. (in areas outside parks and sanctuaries)*—The expanding population of the State demand on land for agriculture and development projects, construction of net work of roads and advent of power weapons and organised poaching have contributed to the annihilation of Wild Life. As a result of this quite a few species are at the verge of extinction. The number of muskdeer, four-horned deer, black-buck, chinkara, Ghariyal, etc. have declined considerably. It is essential to make wild life organisation an effective instrument to conserve wild life and to enforce the provisions of Wild Life (Protection) Act, in the State. Accordingly, this scheme at an outlay of Rs. 113.00 lakhs have been proposed during Sixth Five Year Plan. Some Centrally sponsored schemes on wild life which are continuing from previous Plans are given below :

502. *Project Tiger*—There is great concern among conservationist to protect tiger. There are very few pockets in the State where tigers are found. It is the obligation of the forest department that tigers are not only protected but their number should also increase so that this magnificent species does not disappear from the State. Accordingly this scheme has been proposed at an outlay of Rs. 176.00 lakhs during Sixth Five Year Plan. This includes central share @ 50 per cent also.

503. *Development of Dudwa National Park*—The Tarai forests of Kheri district are known throughout the country for the variety and abundance of wild life. Con-

sidering the floral, faunal, ecological, geomorphological and recreational importance of the region an area of 490 sq. kms. have been carved out and declared as Dudwa National Park in February, 1977. It is proposed to continue the development work in the Dudwa National Park at an outlay of Rs. 86.00 lakhs. This includes Central share @ 50 per cent also.

504. *Rehabilitation/Regeneration of Magar/Ghariyal*—In U. P. Ghariyal are found in all the major rivers and Māgars are commonly found in some village ponds. Since the last war human interference in their habitat and indiscriminate hunting for their valuable skins have reduced their numbers to the point of extinction. In order to rehabilitate the dwindling population of Magar and Ghariyal this scheme which is continuing from previous Plan is proposed to be continued during Sixth Five Year Plan at an outlay of Rs. 26.00 lakhs. This includes Central share @ 50 per cent also.

505. *National Chambal Sanctuaries*—Out of the three species of Crocodiles found in India, two species namely Ghariyal and Magar are found in this State. Only a few wild habitats of Ghariyal are still viable in this State and Chambal river is one of the best we have in the country. Therefore, about 150 kilometres portion of the river flowing through U. P. is being preserved for this purpose.

506. The Government of India has declared the entire length of 533 kilometres of this river as a national sanctuary for protection and multiplication of Ghariyal. Accordingly, this scheme at an outlay of Rs. 40.00 lakhs is proposed to be continued during Sixth Plan. This includes Central share @ 50 per cent also. In addition to above Centrally sponsored wild life schemes, the Government of India has already proposed to undertake an scheme of fuelwood plantation in the rural areas on priority basis. Accordingly, a scheme on Rural Fuelwood Plantation is being proposed from 1981-82, during the remaining years of the Sixth Five Year Plan.

#### (10) INVESTMENT IN AGRICULTURAL FINANCIAL INSTITUTIONS

507. The U. P. State Co-operative Land Development Bank Ltd. has been providing



long-term agricultural credit in rural sector. The purposes of loan, hitherto, have been confined to minor irrigation and farm mechanisation, but these have recently been diversified and the long-term loans for other purposes like dairy development, soil conservation, horticulture, on farm development, etc. are also being provided to the agriculturists of the State.

508. The bank has at present 247 branches spread all over the State, through which by the end of financial year 1979-80, the bank has advanced a sum of Rs. 405 crores benefitting nearly 10,15,000 members. During the financial year 1979-80, it advanced by Rs. 57 crores of which Rs. 54 crores have been advanced for minor irrigation alone.

509. Minor irrigation department has a programme of development of 13,65,800

minor irrigation projects during the Sixth Plan as per details given below :

Masonry well	..	35,000
Boring alone	..	6,28,000
Persian wheel	..	17,500
Pumping Set	..	4,64,300
Tube well	..	2,21,000
		<u>13,65,800</u>

510. Out of the total 13,65,800 proposed projects 9,65,000 projects will be financed by providing institutional credit to the cultivators in the State. The experience in the field reveals that nearly 50 per cent of the long term credit is provided by the Land Development Bank in the State and the rest by commercial banks and other agencies. Thus 4,78,030 projects will be financed by L.D.B. The details are given hereunder :—

Item of Development	Number	Unit cost	Total Amount (Rs. in lakhs)
1	2	3	4
(a) Masonry well	12,250	5,000	6,12.50
(b) Boring	2,19,800	3,000	6,594.00
(c) Persian Wheel	6,125	1,500	91.87
(d) Pumpset	1,62,505	8,000	13,000.40
(e) Tubewell	77,350	15,000	11,602.50
(f) Nali, Bandhi Blast well etc.	..	..	3,098.72
Total	4,78,030	..	35,000.00

511. Taking into consideration 8 per cent yearly normal growth in the investment of long term agricultural credit, it is envisaged that nearly Rs. 350 crores would be needed for the purpose of development of additional irrigation potential through minor irrigation projects. The year-wise targets are given hereunder :—

Year	(Rupees in crores)
1980-81	60.00
1981-82	65.00
1982-83	70.00
1983-84	75.00
1984-85	80.00

512. After completion of the Sixth Plan it is expected that an additional irri-

gation potential of 13,25,487 hectares will be created as noted below :—

Item	No.	Irrigation potential per unit (Hect.)	Total Irrigation potential created (Hect.)
1	2	3	4
Masonry well .. .. .	12,250	1	12,250
Boring .. .. .	2,19,800	$\frac{1}{2}$	1,09,900
Persian Wheel .. .. .	6,125	$\frac{1}{2}$	3,062
Pumping set .. .. .	1,62,505	5	8,12,525
Tube-well .. .. .	77,350	5	3,86,750
Total .. .. .	4,78,030	..	13,25,487

513. *Energisation of Tube-wells*—The Land Development Bank has also been providing financial assistance to the U.P.S.E.B. About Rs.19 crores have been advanced during the last 4 years for energisation of the private tube-wells. This has resulted in energisation of 34,800 tube-wells in the State. It has further been envisaged that 80,000 tube-wells on average of 16,000 tube-wells per year will be energised in the Sixth Plan with the financial assistance of Rs.45 crores for which the refinance would be obtained from the ARDC and the State Government and the Government of India.

514. The year-wise break-up of this programme is as under :—

Year	No.	Amount ((Rupees in crores)
1980-81 ..	14,000	8.00
1981-82 ..	15,000	8.50
1982-83 ..	16,000	9.00
1983-84 ..	17,000	9.50
1984-85 ..	18,000	10.00
Total ..	80,000	45.00

515. *Farm Mechanisation*—The additional potential created by minor irrigation and on farm development works are helpful in generating additional income to the cultivator when it is followed by intensive cultivation for which farm mechanisa-

tion is essential. As such loans for purchase of tractors and power tillers are being provided to the cultivators who have the repaying capacity. The small and marginal farmers are likely to get the farm mechanization facilities by custom service, run by the entrepreneurs.

516. During the last 5 years, the Land Development Bank has provided loans for purchase of 1,000 tractors per year. On an average the loan at the rate of Rs.3 crores per year for farm mechanisation through Land Development Bank would be required by the cultivators of the State and thus Rs.15 crores, would be needed for the Sixth Plan.

517. *Miscellaneous*—Land Development Bank has started financing schemes of horticulture, dairy development, construction of rural godowns, sugar godowns, cold storages, fisheries and gohar gas plants etc. The financial assistance of Rs.10 crores would be required during the Sixth Plan period as details given below :

5 Year	(Rupees in crores)
1980-81 .. .. .	1.00
1981-82 .. .. .	1.50
1982-83 .. .. .	2.00
1983-84 .. .. .	2.50
1984-85 .. .. .	3.00
Total .. .. .	10.00

518. *Growth of branches*—The Land Development Bank has been distributing long term credit to the agriculturist through its branches. By the end of 1979-80 it has 247 branches. For speedy disposal and easy operation, the branches which have more business are bifurcated and new branches are opened in the same area. Twenty-five new branches are expected to be opened during the period at the rate of 5 per year. A managerial subsidy at the rate of Rs.18,000 per branch would be required to be provided on tapering basis as details below :—

Year	Number of Branches	(Rs. in lakhs)
1980-81	5	0.45
1981-82	5	0.75
1982-83	5	0.90
1983-84	5	0.90
1984-85	5	0.90
Total	25	3.97

519. *Total Plan*—The Land Development Bank has a total programme of advancing Rs.420 crores during the Plan period as under :—

(Rupees in Crores)

Year	Minor Irrigation	Energisation of Pvt. T. W.	Farm Mechanisation.	Diviersification	Total
1	2	3	4	5	6
1980-81	60.00	8.0	3.0	1.0	72.0
1981-82	65.00	8.5	3.00	1.5	78.0
1982-83	70.00	9.0	3.0	2.0	84.0
1983-84	75.00	9.5	3.0	2.5	90.0
1984-85	80.00	10.0	3.0	3.0	96.0
Total	350.00	45.0	15.0	10.0	420.0

520. *Financial assistance from Government*—To achieve the above programme, similar amount of refinance facilities will be availed from Reserve Bank of India, ARDC by floatation of debentures. The State Government has to participate as per amount fixed by Reserve Bank of India in the ordinary programme which comes to nearly 5 per cent of the total amount and 5 per cent from Government of India on matching basis. Rest of the amount i.e. 90 percent comes from the market as per allocation of the RBI. The special debentures are contributed by ARDC, State Government and Government of India 90 per cent amount is contributed by A.R.D.C. five per cent by State Govt. and 5 per cent by the Government of India, Apart from this, the Government has to participate in the share capital of Land Development Bank to reduce the overdues of the weak branches nationally at the rate Rs.2 crores per year so that their loaning eligibility may increase and programme may not suffer.

521. The Government has also to provide managerial subsidy for opening new branches. Thus the total requirements of funds from the State Government would be of the order of Rs.3,000 lakhs only during the Sixth Plan.

#### (11) COMMUNITY DEVELOPMENT AND PANCHAYAT

522. *Rural Development*—The Community Development programme was launched on October 2, 1952, for the development of the rural areas through an integrated approach to solve the rural problems which were inter-related and could not be tackled in isolation. The know-how, credit and supplies of inputs for production had to be synchronised to produce fruitful results. This organisation aimed at conveying the message from the research stations and laboratories to the cultivators' farms. It also aimed at arousing community consciousness among the rural masses so that their energies

could be channelled for common good in an integrated manner. It was soon realized that without an active involvement of the people and initiative from them, the rural development programme could not make any real impact. On the basis of Balwant Rai Mehta Committee report, the three tier Panchayat Raj institutions at the district, block and village levels were created to enable the people's representatives to participate in the formulation and execution of development programmes of the rural area.

523. The Community Development organisation in the State is responsible for planning and implementation of the various functional programmes of rural development at the village, block, district and divisional level in an integrated manner. There are 885 blocks in the State at present out of which 86 blocks are in the hill districts. The main activities of the development blocks are agriculture, extension, minor irrigation, co-operation, animal husbandry family welfare and other programmes.

524. A Plan outlay of Rs. 1,703.00 lakhs is proposed for the Sixth Five Year Plan, 1980-85. Subheadwise details are given below :

Rural Development	(Rupees in lakhs)	
	Plan outlay	
	Total	Hill
1	2	3
1. Agriculture Extension ..	38.78	5.02
2. Social Education ..	19.20	2.22
3. Health and Sanitation ..	27.55	2.73
4. Construction of block building and electrification.	1390.47	190.20
5. Purchase and replacement of jeeps for blocks.	166.00	5.13
6. Staff for Deputy Development Commissioner's Office.	20.00	3.70
7. Creation of 9 blocks in hill districts.	41.00	41.00
Total ..	1703.00	250.00

525. Rural Development Department budget does not reflect the function of the organisation in the sense that for normal programmes pertaining to agriculture, panchayats, co-operative, animal husbandry, minor irrigation, etc., provision is made in the concerned departmental budgets. The staff is borne on non-Plan side and provision in the Plan is made only for such of the programme for which there is no provision in the concerned departmental budget. These are briefly indicated below :

- (1) Agriculture Extension Programme.
- (2) Social Education.
- (3) Health and Sanitation.
- (4) Construction of block buildings and electrification, etc.
- (5) Purchase/replacement of jeeps for blocks.

526. *Agriculture Extension*—Under this scheme improved practices such as use of better quality seeds and chemical fertilizers are popularised among cultivators through the extension staff of the development blocks. For this work publicity, demonstration, sight seeing and purchase of demonstration material and implements become necessary for this programme. An outlay of Rs.38.78 lakhs is proposed for this activity for the Sixth Five Year Plan period 1980-85.

527. *Social Education*—Library and information centres have an important role to play in the development blocks. New techniques and methods are radiated from these centres. Information centres at the blocks headquarter would be provided with radio/television, wherever possible and would be fully equipped and activated in the Sixth Plan period. - The total expenditure during the Sixth Plan would be Rs.19.20 lakhs.

528. *Health and Sanitation*—The cataract an eye disease, is prevalent in the rural areas. Eye welfare camps to facilitate cataract operations have been organised in the Blocks even earlier. It is proposed to sanction Rs.750 per block for organising an eye relief camp per year. Thus an outlay of Rs.27.55 lakhs is proposed for the Sixth Five Year Plan.

529. Proposals about construction and electrification of block buildings are described below :

(a) *Block buildings*—Development block is the nucleus of the community development organisation. There are 51 blocks (40 in the plain and 11 in hills) where office buildings have not been constructed and there are 369 blocks (350 in plains and 19 in hills) where residential buildings have not so far been provided. Construction of block buildings is very essential for the safety of the Government property and employees of the blocks as well as for successful implementation of the various programmes in the blocks. To provide required buildings in these blocks a sum of Rs. 898.00 lakhs is required.

(b) *Boundary wall*—At present almost all the block buildings (836) are without boundary walls. Boundary wall is essential for safety of Government property and employees of the blocks. At the rate of Rs.40,000 for plains and Rs.56,000 for hill area per block an outlay of Rs. 346.72 lakhs would be required.

(c) *Water supply*—The headquarters of almost all the development blocks are situated in rural areas where the facility of pure drinking water is generally not available. An amount of Rs. 36.35 lakhs is proposed in the Sixth Plan period for the activity.

(d) *Electrification*—In 547 blocks (500 blocks in plains and 57 block in hill areas) no arrangement have been made for electrification which cause inconvenience to the public and to the block staff, so the electrification of block building is very essential. Therefore, it is proposed to incur an expenditure of Rs.109.40 lakhs for electrification of block buildings during the Sixth Plan period.

530. An outlay of Rs. 1,390.47 lakhs has been proposed for this purpose.

531. *Purchase/replacement of jeeps for blocks*—For brisk mobility, effective monitoring surprise checks emergency assistance, intensive touring and efficient execution

of time bound programmes there is a proposal to replace 276 worn out jeeps of 276 old blocks and to provide jeeps to 9 newly opened blocks in hill areas at a total estimated cost of Rs.166.00 lakhs during the Plan period 1980—85.

532. *Staff for Regional Deputy Development Commissioner's Office*—During the Sixth Five Year Plan great attention is being paid to the development of rural areas. The Deputy Development Commissioner is the regional authority who provide guidance and incentives to the block, besides ensuring monitoring of essential items. To achieve the objectives of the Plan, strengthening of Deputy Development Commissioner's office staff is essential. So the following staff is proposed to be provided to each regional Deputy Development Commissioner on Plan budget :

Name of Post	Scale	No. of Post
1. Administrative Officer.	Rs.550—1200	1
2. Statistician	Rs.350—700	1

533. For the creation of these posts estimated total expenditure in the Sixth Five Year Plan will be Rs.20.00 lakhs.

534. *Creation of 9 new blocks in hill areas*—Nine new blocks have been created this year (1980-81) in hill districts, and posts have been sanctioned on plan budget. So, far the payment of the salaries and to meet contingent expenditure and P. O. L. and repair charges etc. Rs.41.00 lakhs is being provided for these blocks during the Sixth Plan period.

535. *Grant to Blocks for Development Work*—In rural areas easy means of communication and facility of pure drinking water is generally not available. The situation all the more becomes acute during the dry and the rainy season. The provision of safe water supply and proper disposal of the wastes constitute the principal environmental control measures against the transmission of most of the water borne disease in rural areas. Roads are also an essential infra-structure for the socio-economic development of the rural masses. So it is very necessary that Kshetra Samities should take up these works through gaon

sabhas in rural areas by giving 100 per cent assistance to them. For these works an outlay of Rs.552.00 lakhs is proposed for the Sixth Plan period. The items of expenditure will be as under :—

(1) Assistance to gaon sabhas for drinking water facilities (construction of wells and installation of hand pumps in plains and diggies in hill areas).

(2) Assistance to goan sabhas for construction of drains, kharanja, internal roads, culverts and P.R.A.I. type latrines including their shed.

#### PANCHAYATI RAJ

536. Gaon Sabhas from the base of the three-tier system of Panchayati Raj system. These units at the grass roots level have remained non-viable. The only agency in the rural areas which can mobilise community work in the Gaon Panchayat which has to be properly developed as a local body and suitably strengthened. In the Sixth Five Year Plan for the Panchayat Raj Sector, an effort has, therefore, been made to strengthen these basic local bodies to enable them to provide essential infrastructure of civil amenities and thereby better living conditions which is of pivotal importance for all future development and rural industrialization.

537. Out of the total plan outlay of Rs.700 lakhs for 1980—85 provision has been made for all of the following 12 continuing schemes :—

(1) Technical and managerial assistance to Panchayat Udyogs.

(2) Incentive to Gaon Sabhas for raising their own resources.

(3) Rural environmental sanitation construction of village pavements and drains through peoples participation.

(4) Construction of Panchayat Bhawans Community Centres at vari-out levels.

(5) Street lighting in village abadis.

(6) Improvement of hats, bazars, and melas.

(7) Improvement of rural sanitation—Installation of PRAI type latrines.

(8) Share contribution for Panchayati Raj Vitta Nigam.

(9) Training of Panchayat Raj office bearers.

(10) Training of Panchayat Sewaks.

(11) Training of Kshettra Samitis and Zila Parishad office bearers.

(12) Training of Panchayat Udyog Managers.

538. Apart from the continuing schemes, the following three new schemes are proposed to provide drinking water facilities, employment generation for the rural youth, and chlorination of existing drinking water wells :

(1) Employment generation through practical training to Village Youths in Panchayat Udyogs.

(2) Grant-in-aid to Gaon Sabhas for developing Drinking Water facilities.

(3) Chlorination of available drinking water.

539. In addition to the provision for subsidy for Panchayat Bhawans in Gaon Sabhas extra provision has been made for similar Panchayat Bhawans at District Headquarters and State Headquarters. An additional sum of Rs.50.00 lakhs has been set apart for the purpose during the year 1981-82 and 1982-83. This amount will be utilized as subsidy for the purpose. The major share of funds required for this purpose will however, be met by Panchayati Raj institutions themselves.

540. Under the Food for Work programme nearly 28,000 kilometers of link roads were constructed up to the end of the year 1979-80. To convert this vast network of *kachcha* roads into permanent asset, brick pavements and culverts are necessary. The estimated cost of these

works is about Rs.15,500 lakhs which is beyond the scope of this departments total plan outlay. As such a sum of Rs.320 lakhs only has been set apart for this purpose to be utilized during the entire plan period.

#### RURAL ENGINEERING SERVICE

541. Rural Engineering Service has played an unique role by constructing various works in remote rural areas since its creation in 1972. It has also provided technical guidance to block level agencies engaged in development work. Thus, it is filling a very important need by providing a technical nucleus for development of villages in extensive rural areas of this State.

542. Some of the important works which are being executed by the Rural Engineering Service are mentioned below :—

- (i) Block Office buildings/veterinary hospitals and stockman training centres ;
- (ii) Development of houses—sites for landless labourers and Harijans ;
- (iii) Link roads of Mandi Parishad ;
- (iv) Roads under Command Areas (Ram Ganga and Gandak) ;
- (v) Execution of Flood protection works, viz. strengthening of old Zamindari bandhs, and raising of village *abadi* sites ;
- (vi) residential and non-residential buildings of Revenue, Horticulture, Animal Husbandry, Fisheries and Industries departments.

The provision for the above mentioned works are made in the budget of the respective departments. As a matter of fact, the Rural Engineering Service is only an executing agency and its work load depends on the works allotted to it by various departments. It has presently a capacity to execute works amounting to about Rs.8 crores per year.

543. This Service has completed works worth about Rs.36.29 crores during the

years 1972-73 to 1979-80. Year-wise performance has been as follows :—

Year	Amount provided in the budget	Actual Expenditure	Cost of works constructed
1	2	3	4
1972-73	29.00	28.744	307.410
1973-74	60.00	59.55	552.127
1974-75	86.76	86.76	334.341
1975-76	88.26	88.953	267.588
1976-77	113.91	113.824	370.721
1977-78	155.30	157.15	462.865
1978-79	163.00	145.10	557.649
1979-80	181.71	184.58	776.350
Total	887.94	864.661	3629.051

544. An outlay of Rs.1400.00 lakhs has been proposed for this service in the Sixth Plan (1980—85) including Rs.225.00 lakhs for hills. This outlay is meant for establishment only and is justified on the basis of expected workload.

#### PRADESHIK VIKAS DAL

545. Pradeshik Vikas Dal has been working as the spearhead for (1) man power mobilization for construction of roads, *bandhis*, tanks and irrigation channels and (2) nucleus of rural youth programmes which comprises of (a) organisation of youth sports and *vyayamshalas* and (b) economic activities and gainful employment of rural youth on the basis of learning while working and earning while learning".

546. *Work and Training Camps*—It is proposed to organise 350 work training camps during the plan period in which 18,250 youth will participate and 4375 km. roads and 4375 km. of guls etc. will be constructed or repaired.

547. A brief discussion of various programmes/schemes as have been included in the Plan is presented below :—

- (a) *Strengthening of Voluntary Service Organisation—Provision of uniforms to volunteers*—To create discipline and to inculcate spirit of fellowship among the members, 17,400 selected volunteers will be provided with uniforms to serve as an incentive for these volunteers to join various development activities.

(b) *Social Service Work*—An additional employment of 60,000 (mandays) will be mobilized for the volunteers for social service work on the occasion of Melas, pilgrimage, exhibition etc.

(c) *Promotion of voluntary organisation (Strengthening of Yuvak Mangal Dals)*—In accordance with Government of India's scheme, transferred to the State Governments, 4,079 selected Yuvak Mangal Dals will be given grant-in-aid to serve as an incentive for the organisation of Yuvak Mangal Dals during the plan period @Rs.500 per Yuvak Mangal Dal. This grant enables the Dals to establish itself and is released only to these dals who are registered.

(d) *Job oriented training of rural youths*—4,300 rural youth will be trained in different jobs, i.e. making of fibre-glass goods, attachy-case, tube-well boring, tin smith, air-bag and umbrella making, photography, Armature binding and bee-keeping etc. for the gainful employment of the unemployed youth.

Three hundred selected youth will also be given grant-in-aid on selective basis to start their own work as margin money to enable them self-employed youth seek institutional finance.

(e) *Construction of buildings*—Store rooms and tin sheds will be constructed according to local needs for Vyayamshalas at both the district and the block headquarters.

(f) *Seminars and work-shop*—Seminars and work-shops of rural youth will be organised every year at the divisional level.

(g) *Training of youth in swimming*—Five training centres are imparting training to youth in swimming. The number will be increased to ten in the year 1982-83 and onwards. An amount of Rs.1,000/- per training Centre each year has been earmarked for this purpose. In this manner 500 youths will be trained every year.

(h) *Organisation of games and sports*—Games and sports are organised at block, district and State levels in which 90,000 youth participate every year.

Six hundred Vyayamshalas of 'B' Category will be established at the block level during the plan period.

(i) *Generation of Additional Employment*—4900 youths will be provided part-time jobs and additional employment of 78,250 mandays will be generated during the plan period.

548. An outlay of Rs.150.00 lakhs has been proposed for the Sixth Plan.

#### NATIONAL RURAL EMPLOYMENT PROGRAMME

549. The crash scheme for Rural employment was launched in Uttar Pradesh during 1971-74 at the behest of the Central Government. During the drought year 1979-80, extensive works were taken up in rural areas to provide gainful employment and to mitigate human suffering in areas affected by monsoon failure.

550. Various projects of community benefit were started in different parts of the State in 1979-80 and 4.64 lakh tonnes of foodgrains were utilised amongst the rural poor through the Food for Work projects. During the peak months of drought the average per day working force exceed 6.39 lakhs. Work was started on 31,609 projects out of which 16,000 were completed. During the period 24,466 km. of rural link roads, 4,270 km. of irrigation channels were constructed and 1,339 tanks were deepened.

551. In the year 1980-81 the scheme is proposed to be implemented in areas where intensity of rural unemployment is more due to loss of crops caused by floods, drought, etc. The Central Government have been requested to assist the State with four lakh tonnes of foodgrains to continue the scheme.

552. In a large and populous State like Uttar Pradesh with extreme dependence on agriculture, often frequented by floods and failure of monsoon, unemployment and under-employment are a common feature. As such means of subsistence have



have to be provided to those who are faced with lack of job opportunity. The food for work schemes gained tremendous popularity in the rural areas because it could successfully circumvent problems caused by successive monsoon and crop failures. It is therefore, necessary to run the scheme at a low key during normal years and intensify it whenever a region is acutely affected by natural calamities.

553. Studies indicate that by 1980 the rural unemployment and under employment would be in close proximity of 17 lakh man years. It is further apprehended that the working rural force would increase by about 40 lakhs during the Sixth plan period. It is a well accepted fact that alongwith rapid growth in agriculture, industry and tertiary sectors there will be scope for the N.R.E.P. to provide gainful employment to the swelling labour force.

554. Like other agrarian economies, rural unemployment is more or less seasonal. During the sowing and harvesting periods there is a precipitate fall in the number of jobseekers but during the lean months, lack of productive opportunities breed human misery and social tension. The weakest segment of the rural society comprising the landless labour, artisans, share-croppers, marginal and small

farmers, members of scheduled castes and scheduled tribes suffer most.

555. Though details of the National rural Employment Scheme are yet awaited, the national rural employment scheme is proposed to be executed with a provision of Rs.50 crores, per annum.

556. The rich experience gained during the last two years would be utilised to identify area and programmes of maximum community benefit. In the initial phases, stress will be laid on digging and disilting of tanks, construction of drains and irrigation channels land reclamation and soil conservation, construction of bundhies and bunds, afforestation and soil conservation in hilly areas, fishery development etc. and besides construction and consolidation of rural link roads etc. as well. Realising the magnitude of the drainage problem the State Government has decided to establish a rural drainage department for construction of primary and secondary drains.

557. Under the Rural Employment Programme members of Scheduled Castes and Scheduled Tribes constitute bulk of the labour force. As such the Special Component for scheduled castes and tribes in the Scheme is estimated at 50 per cent. It will be ensured that the programme is equally effective in the Hill area. Projects of community benefit shall be taken up to create assets of durable nature.

ANNEXURE—I  
Production and productivity

Year	Production—Lakh tonnes							
	Productivity—qtls./ha.							
	Kharif Food- grains	Rabi Food- grains	Total Food- grains	Total Pulses				
1	2	3	4	5				
<b>1970-71</b>								
Total Production	..	..	..	..	73.36	121.31	194.67	30.69
Productivity	..	..	..	..	8.45	11.25	10.00	8.24
<b>1971-72</b>								
Total Production	..	..	..	..	58.78	117.95	176.73	29.20
Productivity	..	..	..	..	6.82	11.01	9.14	8.28
<b>1972-73</b>								
Total Production	..	..	..	..	64.59	116.74	181.33	29.23
Productivity	..	..	..	..	7.54	10.85	9.38	8.33
<b>1973-74</b>								
Total Production	..	..	..	..	67.36	88.27	155.64	18.50
Productivity	..	..	..	..	7.84	8.35	8.12	5.32
<b>1974-75</b>								
Total Production	..	..	..	..	56.67	106.61	163.28	21.85
Productivity	..	..	..	..	6.83	10.29	8.75	6.94
<b>1975-76</b>								
Total Production	..	..	..	..	69.23	125.33	194.56	26.57
Productivity	..	..	..	..	8.17	11.95	10.26	8.42
<b>1976-77</b>								
Total Production	..	..	..	..	71.95	126.91	199.09	26.28
Productivity	..	..	..	..	8.46	11.98	10.41	8.62
<b>1977-78</b>								
Total Production	..	..	..	..	79.22	133.13	212.35	24.21
Productivity	..	..	..	..	9.22	12.63	11.14	8.10
<b>1978-79</b>								
Total Production	..	..	..	..	83.62	147.48	231.10	23.36
Productivity	..	..	..	..	9.58	13.31	11.61	7.62
<b>1979-80</b>								
Total Production	..	..	..	..	42.24	119.08	161.32	15.21
Productivity	..	..	..	..	4.83	10.92	8.19	5.27

ANNEXURE—II  
Compound Growth Rate  
(1950-51 to 1978-79)

Crops				Compound Growth Rate		
				Area	Production	Productivity
1				2	3	4
Total Foodgrains .. .. .				0.43	2.18	1.73
Total Kharif Food grains .. .. .				0.44	1.95	1.51
Total Rabi Foodgrains .. .. .				0.42	2.30	1.87
Total Cereals .. .. .				0.94	2.89	1.94
Total Kharif Cereals .. .. .				1.48	3.65	2.13
Total Rabi Cereals .. .. .				1.48	3.65	2.13
Total Pulses .. .. .				-1.46	-0.93	0.55
Total Kharif Pulses .. .. .				-1.67	-1.99	-0.33
Total Rabi Pulses .. .. .				-1.47	-0.91	0.57
Rice .. .. .				1.02	3.13	2.09
Jowar .. .. .				-1.40	-1.22	0.19
Bajra .. .. .				-0.43	0.49	0.72
Maize .. .. .				1.79	1.77	-0.02
Wheat .. .. .				2.77	5.16	2.33
Barley .. .. .				-2.52	-1.37	1.18
Gram .. .. .				-1.67	-0.93	0.75
Peas .. .. .				-2.34	-2.64	-0.30
Arhar .. .. .				-0.92	-0.55	0.37
Masur .. .. .				2.26	3.79	1.66
Oilseeds (Pure) .. .. .				2.12	2.80	0.53

## ANNEXURE—III

*The Production of Cereals and Pulses from 1976-77 to 1979-80*

('000 tonnes)

Serial no.	Item	Actuals			1979-80	
		1976-77	1977-78	1978-79	Target	Estima- ted achie- vement
1	2	3	4	5	6	7
Foodgrains Production—						
(1)	Rice .. .. .	4291	5200	5961	5500	2465
(2)	Jowar .. .. .	484	551	481	460	155
(3)	Bajra .. .. .	790	658	581	750	358
(4)	Maize .. .. .	1097	952	807	1050	940
(5)	Kharif pulses .. .. .	46	62	47	140	36
(6)	Other cereals .. .. .	510	499	485	300	270
	Total, Kharif .. .. .	7218	7922	8362	8200	4224
(7)	Wheat .. .. .	8940	9884	11450	10150	9669
(8)	Barley .. .. .	1168	1070	1001	1150	754
(9)	Gram .. .. .	1362	1207	1220	1400	682
(10)	Peas .. .. .	360	287	270	450	167
(11)	Arhar .. .. .	752	750	646	810	553
(12)	Masur .. .. .	109	115	145	140	83
	Total, Rabi .. .. .	12691	13313	14748	14100	11908
	Total, Foodgrains .. .. .	19909	21235	23110	22300	16152

ANNEXURE-IV  
Average yield of main crops in qtls. per hectare

Serial no.	Crops	1965-66	1968-69	1973-74	1978-79	1979-80
1	2	3	4	5	6	7
1	Rice .. .. .	5.57	6.44	8.63	11.59	4.99
2	Jowar .. .. .	5.25	5.50	6.70	7.31	2.24
3	Bajra .. .. .	5.94	5.42	7.43	6.25	3.33
4	Maize .. .. .	9.58	8.95	7.34	6.85	2.59
5	Wheat .. .. .	9.12	12.01	9.78	15.50	13.00
6	Barley .. .. .	9.06	7.71	9.20	11.52	9.19
7	Gram .. .. .	6.06	7.06	5.34	7.48	4.36
8	Peas .. .. .	7.99	10.24	5.50	7.13	5.49
9	Arhar .. .. .	12.84	11.11	5.68	12.90	10.19
10	Masur .. .. .	5.05	6.21	4.68	4.82	3.47

## ANNEXURE—V

*Trend of area and production of oil seeds during Fifth Plan period*

Crops				1974-75	1975-76	1976-77	1977-78	1978-79
1				2	3	4	5	6
1.	Groundnut—							
	(a)	Area (pure)	.. ..	4.15	4.25	3.89	3.29	3.18
	(b)	Production	.. ..	3.51	3.13	2.33	2.44	1.79
	(c)	Productivity	.. ..	8.47	7.37	5.99	7.48	5.65
2.	Sesamum—							
	(a)	Area (pure)	.. ..	0.63	0.61	0.54	0.54	0.48
	(b)	Area (mixed)	.. ..	6.15	6.14	7.37	7.12	6.87
	(c)	Production	.. ..	0.88	0.86	0.71	1.05	0.87
	(d)	Productivity	.. ..	1.38	1.31	0.95	1.40	1.25
3.	Castor—							
	(a)	Area	.. ..	0.008	0.008	0.007	0.006	0.001
	(b)	Production	.. ..	0.003	0.002	0.003	0.002	0.002
	(c)	Productivity	.. ..	3.68	2.90	3.61	3.49	3.50
4.	Rapeseed Mustard—							
	(a)	Area (pure)	.. ..	3.41	2.93	2.79	3.53	3.23
	(b)	Area (mixed)	.. ..	16.95	17.15	17.36	16.54	17.30
	(c)	Production	.. ..	18.43	18.34	18.67	18.42	20.53
	(d)	Productivity	.. ..	6.44	5.36	4.19	4.68	5.28
5.	Linseed—							
	(a)	Area (pure)	.. ..	0.95	1.04	0.86	1.02	0.95
	(b)	Area (mixed)	.. ..	5.27	5.40	5.44	5.05	5.99
	(c)	Production	.. ..	0.22	6.44	5.80	6.08	6.94
	(d)	Productivity	.. ..	2.33	2.88	2.44	2.60	2.61
6.	Sunflower—							
	(a)	Area	.. ..	0.185	0.223	0.224	0.235	0.081
	(b)	Production	.. ..	0.093	0.12	0.14	0.12	0.035
	(c)	Productivity	.. ..	5.04	5.16	5.56	5.10	4.25
7.	Safflower—							
	(a)	Area	.. ..	0.02	0.02	0.11	0.16	0.29
	(b)	Production	.. ..	0.03	0.04	0.05	0.07	0.15
	(c)	Productivity	.. ..	0.67	0.50	2.22	2.30	2.00
8.	Soyabean—							
	(a)	Area	.. ..	0.25	0.36	0.44	0.54	0.69
	(b)	Production	.. ..	0.16	0.28	0.34	0.42	0.60
	(c)	Productivity	.. ..	6.2	7.8	7.8	7.7	8.8

## ANNEXURE-VI

*Trends of area, production and productivity of Cotton*

Year					Area (Lakh Hect.) hect.)	Production (Lakh Tonnes)	Average yield Qtls./ Hect.	
1					2	3	4	
1976-77	..	..	..	..	..	0.23	0.02	1.01
1977-78	..	..	..	..	..	0.27	0.02	0.88
1978-79	..	..	..	..	..	0.31	0.03	0.85
1979-80	..	..	..	..	..	0.41	0.07	1.59

## Annexure-VII

*Trends of area, production and productivity of Jute*

Year					Area (Lakh hectare)	Production (Lakh tonnes)	Average yield Qtls./ hect.	
1					2	3	4	
1976-77	..	..	..	..	..	0.07	0.12	16.95
1977-78	..	..	..	..	..	0.11	0.18	15.78
1978-79	..	..	..	..	..	0.11	0.16	15.07
1979-80	..	..	..	..	..	0.10	0.16	15.66

## ANNEXURE—VIII

## Outlays and Selected Targets Agriculture

(a) Outlays				(Rupees in lakhs)			
Sl. no.	Group			1979-80 Actual Expenditure	Proposed Outlay for Sixth Plan	Outlay for 1980-81	Proposed Outlay for 1981-82
1	2			3	4	5	6
1	Land Reforms and Consolidation of Holdings			847.80	6054.89	900.00	1100.00
2	Multiplication and distributions of seeds			17.48	353.81	16.90	34.48
3	Agriculture Farms	..	..	136.32	1014.57	157.45	179.20
4	Manures and Fertilizer						
	(a)	Agriculture Deptt.	..	82.84	1425.10	103.89	113.87
	(b)	L. S. G. Deptt.	..	22.04	200.00	12.00	15.00
	Total (4)			104.88	1625.10	115.89	128.87
5	H. Y. V. P.			54.55	1001.24	22.64	25.69
6	Plant Protection			36.36	469.64	49.81	51.03
7	Commercial crops						
	(a)	Agriculture Deptt.	..	21.50	285.82	42.47	54.92
	(b)	Cane Dev. Deptt.	..	121.42	2098.00	144.00	175.00
	(c)	Horticulture	..	74.47	1650.00	87.25	100.00
	(d)	Fruit utilisation	..	132.74	2052.00	160.75	200.00
	Total (7)			350.13	6085.82	434.47	529.92
8	Extension and Farmer's Training						
	(a)	Agriculture Deptt.	..	1.63	229.13	3.91	7.59
	(b)	Rural Development	..	54.06	325.00	56.00	65.00
	Total (8)			55.69	554.13	59.91	72.59
9	Agriculture Engineering			5.96	339.53	6.29	13.03
10	Agriculture Education			3.63	40.00	4.15	5.00
11	Agriculture Research			446.38	2810.00	320.85	495.00
12	Agriculture Economics and Statistics						
	(a)	Agriculture Deptt.	..	14.51	117.40	18.67	19.79
	(b)	Assistance to I. C. A. R.	..	0.78	0.58	0.58	..
	Total (4)			15.29	117.98	19.25	19.79
13	Storage and warehousing			..	300.00	33.00	35.00
14	Agriculture Marketing and quality Control			144.00	1366.00	135.00	200.00
15	Others			26.51	263.08	17.39	15.40
	Total, Agriculture Department			398.84	5500.00	440.00	515.00
	GRAND TOTAL			2245.38	22395.89	2293.00	2905.00



## ANNEXURE—VIII—(Contd.)

## (b) Targets of important programmes

Serial no.	Programme	Unit	Actuals			Proposed target		
			1977-78	1978-79	1979-80	1980-81	1981-82	1984-85
1	2	3	4	5	6	7	8	9
1	Gross cropped Area	'000 h a.	23,349	24,300	24,500*	24,800	25,000	27,500
2	Gross Irrigated Area	Do.	10,009	10,571	12,928*	13,859	15,111	17,768
3	Percentage over Cropped Area.	%	42.9	43.5	52.8*	55.9	60.4	64.6
4	Net Area sown ..	'000 ha.	17,421	17,481	17,550*	17,570	17,660	17,800
5	Net Irrigated Area	Do.	8,493	8,892	9,000*	8,800	9,300	9,800
6	Percentage over Area sown.	%	48.7	50.9	51.3*	50.1	52.7	55.0
7	Cropping Intensity ..	Do.	134.02	139.01	139.6*	141.1	141.6	155.0
8	<i>Food Production—</i>							
	(a) Rice ..	'000 tonnes	5,200	5,961	2,465	6,000	6,200	7,700
	(b) Jowar ..	Do.	551	481	155	500	500	550
	(c) Bajra ..	Do.	658	581	358	800	800	850
	(d) Maize ..	Do.	952	807	940	850	900	1,100
	(e) Kharif pulses ..	Do.	62	47	36	150	200	350
	(f) Other cereals ..	Do.	499	485	270	300	200	240
	Total Kharif ..	Do.	7,922	8,362	4,224	8,600	8,800	10,790
	(g) Wheat ..	Do.	9,884	11,458	9,669	10,600	11,400	13,000
	(h) Barley ..	Do.	1,070	1,001	754	1,100	900	800
	(i) Gram ..	Do.	1,207	1,228	682	1,400	1,500	1,600
	(j) Peas ..	Do.	287	270	167	450	500	600
	(k) Arhar ..	Do.	750	646	553	900	940	1,000
	(l) Masur ..	Do.	115	145	83	150	160	200
	Total Rabi ..	Do.	13,313	14,748	11,908	14,600	15,400	17,200
	Total Foodgrains	Do.	21,235	23,110	16,132*	23,200	24,200	27,990
9	Oilseeds Production (Pure and mixed)	Do.	1,600	1,580	995	2,300	2,390	3,000
10	Cotton ..	'000 bales	13	16	35	20	40	50
11	Jute ..	Do.	103	96	89	110	120	150

\*Subject to revision.

## ANNEXURE—VIII—(Concl.)

Serial no.	Programme	Unit	Actuals			Proposed target		
			1977-78	1978-79	1979-80	1980-81	1981-82	1984-85
1	2	3	4	5	6	7	8	9
12 <i>High yielding Varieties—</i>								
	(a) Paddy	.. '000ha.	1,800	2,364	2,186	2,500	2,700	3,750
	(b) Wheat	.. Do.	5,300	5,800	5,192	5,800	6,000	6,800
	(c) Maize	.. Do.	32	43	32	45	50	125
	(d) Jowar	.. Do.	3	2	1	10	40	100
	(e) Bajra	.. Do.	30	3	6	10	10	25
	Total	.. Do.	7,165	8,212	7,417	8,365	8,800	10,800
13 <i>Fertilizer Consumption—</i>								
	(a) Nitrogenous (N)	'000 tonnes	648	772	756	1000	1100	1400
	(b) Phosphatic (P <sub>2</sub> O <sub>5</sub> )	Do.	139	207	182	250	266	350
	(c) Potassic (K <sub>2</sub> O)	Do.	73	79	72	110	104	150
	Total	Do.	860	1,058	1,010	1,360	1,470	1,900
14	Soil samples analysed	Lakh No.	7.90	7.92	10.84	11.00	11.00	11.00
15	Plant Protection (Area Covered).	Lakh ha.	134.56	156.78	163.91	178.00	200.00	250.00
16	Green Gas Plants Installed.	No.	5,000	2,860	4,345	10,000	10,000	10,000
17	Green manuring	Lakh tonnes.	10.21	9.26	3.00	13.00	16.00	25.00

ANNEXURE IX  
State Tube-wells

Year	No. of tubewells running on the first day of the defect fasal in Kharif/Rabi.	Rated capacity (Ha) area irrigated, average per tube well	Area irrigated (Ha) Total average per Tube-well	Rated capacity hours run average hours average	Hours/ run total average per tube-well	Hours lost due to Rost ing and other hydel defec. total/ average per tube well.	Hours lost due to mach-anical defects Total average per tube-well.	Hours un-util ed due to no de-mand Total average per tube-well.
1	2	3	4	5	6	7	8	9
1970-71	9596	1161960	876792	29049000	22357279	9591085	1585055	51717003
	9770	120	90	3000	2305	983	162	5310
1971-72	10041	1218240	769302	30453000	16113017	9830655	1430515	61833858
	10262	110	75	3000	1580	951	128	6101
1972-73	10832	13172140	835697	32931000	22137555	23998340	2704802	47856860
	11123	120	76	3000	2014	2141	246	4359
1973-74	11645	1411800	638632	3529500	15155157	39960845	2619674	N. A.
	11885	120	54	200	1284	2328	220	N. A.
1974-75	12447	1513680	752559	37842000	17239765	56800784	3316000	32968892
	12782	120	59	3000	1321	4383	263	2793
1975-76	13297	1602360	1001841	40059000	24245678	35165879	8483000	57225570
	13409	120	75	3000	1811	2609	186	4154
1976-77	13692	1652120	1066577	41328000	31735975	18769785	6656000	55123326
	13861	120	77	3000	2297	1354	478	4309
1977-78	14079	1689480	427874	42237000	22202128	43990630	6378517	52004886
	14179	120	66	3000	1569	3180	449	3655
1978-79	14560	1761120	960511	44028000	22174384	388335265	7182000	61169780
	14772	120	68.2	3000	1508	2613	497	4142
1979-80	15283	1874400	898475	46850000	22960035	70231034	6514000	38536155
	15957	120	57.1	3000	1466	4460	419	2415

## ANNEXURE—X

Census Year	Total breeding cows and buffaloes (in milk dry and not calved) (lakhs)		Breeding cows/buffaloes in milk at the time of census (lakhs)		Percentage of cows & buffaloes in milk to total breeding cows buffaloes.		
	1	2	3	4	5	6	7
		Cows	Buffaloes	Cows	Buffaloes	Cows	Buffaloes
1961	.. ..	66.70 (100.00)	57.2 (100.00)	27.29 (100.00)	31.2 (100.00)	40.9	54.6
1966	.. ..	67.10 (100.00)	59.5 (104.2)	26.68 (97.8)	30.3 (97.0)	39.8	50.1
1972	.. ..	66.96 (100.4)	65.4 (114.3)	29.00 (106.3)	34.3 (109.8)	43.3	52.5
1978	.. ..	65.75 (98.6)	72.2 (126.2)	30.48 (111.7)	39.7 (127.02)	46.4	55.0

(Figures in parentheses are indicated with 1961 as base)

## CHAPTER 8 CO-OPERATION

Co-operative banking institutions are providing support to agricultural production programmes by providing institutional credit as short, medium and long term loans. Co-operatives have also assumed the responsibility for processing and marketing of agricultural produce. Co-operatives also serve as an effective base for building a strong public distribution system. Consumer goods are being distributed through co-operative agencies in rural and urban areas. Efforts are being made to provide adequate storage facilities in the rural areas for storing agricultural produce. In order to provide better return to the farmer, schemes for setting up cold storages have also been taken up in the co-operative sector.

2. The primary agricultural credit societies have been re-organised and efforts have been made to strengthen their professional and financial base. Farmer Service Societies (F.S.S.) have been setup to take up various activities to help the agriculture sector. Managerial cadres have been formed at various levels to ensure smooth functioning of the co-operative agencies. There exist a number of apex organisations for guiding and co-ordinating the functions of grass root level societies in order to ensure socio-economic development.

3. *Objective and strategy*—Following are the main objectives of the Sixth Plan in the co-operative sector :—

(i) Strengthening of primary societies and diversification of their activities.

(ii) To build up a strong and effective marketing structure by utilizing primary co-operative societies.

(iii) To augment the existing storage and warehousing capacity in the co-operative sector.

(iv) To set up agro-based processing units.

(v) To strengthen the Apex Co-operative Institutions by providing financial and managerial inputs.

(vi) To strengthen the consumer co-operatives in urban and rural areas.

(vii) To design specific schemes for benefitting the weaker sections of the society such as labour and artisans.

(viii) To have an effective monitoring system.

(ix) To strengthen the existing infra-structure in order to provide a strong base for the co-operative movement in the State.

4. The activities of co-operative sector for the purpose of assessing and framing its progress have been divided into the following areas :—

(i) Co-operative Credit and Banking.

(ii) Marketing, Storage and Processing.

(iii) Consumer Co-operatives.

(iv) Co-operative Training and Education.

(v) Specific schemes for weaker sections.

5. *Outlay*—The proposed outlay works out to Rs.7800.00 lakhs which will be in the shape of seed money and is likely to generate further investment.

6. *Co-operative Credit and Banking*—Short and medium term loans are being provided by a 3-tier co-operative structure with U. P. Co-operative Bank at the Apex level, District/Central Co-operative Banks at the district level and primary societies at the Nyaya Panchayat level. The progress of co-operative bank branches over the years is shown in the following table :—

	1960-61	1973-74	1977-78	1978-79	1979-80 Tentative <sup>1</sup>
	2	3	4	5	6
District Coop. Bank Branches (Excluding Hqrs.)	41	577	812	880	890
No. of District Co-operative Banks (Headquarters)	54	56	55	55	55
Total	95	633	867	935	945

Besides, there is a separate agency, the U. P. State Co-operative Land Development Bank, with its 250 branches which functions as a unitary banking structure providing long term investment finance

to farmers.

7. The performance of co-operatives in respect of loaning, recovery and deposits is shown in the following table :

(Rupees in crores)

	1960-61	1973-74	1977-78	1978-79	1979-80 Tentative
	2	3	4	5	6
1. Loaning					
(a) Short term	30.98	68.79	142.72	157.39	6.24
(b) Medium term	Nil	3.30	15.25	22.35	19.91
(c) Long term	2.72	25.51	51.11	43.76	6.86
2. Deposits	1.21	5.81	10.98	14.26	18.69
3. Recovery	27.09	64.10	127.87	150.92	158.68

8. *Sixth plan 1980-85 programme*—Co-operative banking structure will at the end of the plan cover 60 per cent of rural families including 90 per cent small and marginal farmers agricultural labourers, scheduled castes and scheduled tribes. Loans under the Differential Rate of Interest schemes will be available at 4 per cent to small and marginal farmers etc. Co-operative lending will be diversified to provide capital and working capital loans to one lakh artisans and self-employed persons in rural areas. Co-operatives will also advance loans for dairying and similar activities. Crop Insurance will be introduced on a pilot basis in selected area. Besides, the co-operatives will continue to disburse consumption loan, special schemes for promotion of thrift will be introduced in primary socie-

ties. Long term lending will be diversified, so as to provide loans for fisheries, horticulture, reclamation of land and for various other purposes.

9. *Membership and Primary Societies*—There are 8,201 primary societies with a membership of 87 lakhs as against 209 lakh families. It is proposed to raise the membership to 144 lakhs so that 60 per cent families are covered.

10. *Deposits*—Deposits of primary societies stood at Rs.18.69 crores at the end of 1979-80. A target of Rs.26 crores is proposed for the entire plan period for this programme. The level of share capital and deposits and the year-wise projections for the Sixth plan are given in the following table :

(Rupees in crores)

	1973-74	1977-78	1978-79	1979-80
	2	3	4	5
(1) Share capital	32.33	48.50	53.84	58.96
Out of which Govt.	2.79	5.42	.09	8.24
(2) Deposits	5.81	10.98	14.26	18.69

	1980-81	1981-82	1982-83	1983-84	1984-85
(1) Share capital	4.80	4.80	4.80	4.80	4.80
(2) Deposits	0.5	0.5	0.5	0.5	0.6

11. *Disbursement of loans*—Disbursement of short and medium term loans from primary societies amounted to Rs.166.24

crores and Rs.19.91 crores respectively in 1979-80. It is proposed to have the following targets for disbursement of loans :

(Rs. in crores)

Year	Short term	Medium Term
1	2	3
1980-81 .. .. .	230	25
1981-82 .. .. .	250	30
1982-83 .. .. .	314	35
1983-84 .. .. .	345	40
1984-85 .. .. .	385	45

12. *Farmer's Service Societies (F.S.S.)*—There are at present 1,075 Farmer's Service Societies in the State, which have been organised to cater to the needs of farmers for production, storage, marketing as well as

consumption on an integrated basis. It is proposed to organise 1,500 new farmer service societies during the plan period. The yearly break-up is as follows :

Year	No. of F. S. S.
1	2
1980-81 .. .. .	500
1981-82 .. .. .	250
1982-83 .. .. .	250
1983-84 .. .. .	250
1984-85 .. .. .	250

Every F. S. S. will have a managing director and 2 technical officers. It is proposed to bring the managing directors in the Cadre scheme. F. S. S. will contribute 1.5 per cent of their total borrowings into the Cadre fund for meeting the cost of salary of managing directors. The deficit will be met by the State and Central Government on 50 : 50 basis. The cost of salary of 2 technical officers will be borne by the State Government. The total amount required for the above scheme, by way of subsidy, will be Rs.233.12 lakhs.

13. For effective functioning, offices of primary agricultural societies need to be properly furnished. Accordingly it is proposed to provide subsidy to 4,000 societies in the plan period at the rate Rs.5,000 per society for which provision of Rs.200 lakhs is indicated under the scheme to be shared equally on a 50 : 50 basis by the State and the Central Government.

14. A sum of Rs.16 crores is proposed to be disbursed as consumption loan dur-

ing the plan period for which a sum of Rs.160 lakhs will have to be provided as Risk Fund for this purpose to be shared equally on a 50 : 50 basis by the State and Central Government.

15. An *ad-hoc* provision of Rs.265 lakhs for primary societies and District Co-operative Banks has been proposed towards a risk fund for the Plan period. A sum of Rs.264.14 lakhs has been proposed towards State share participation in Co-operative Credit Institutions.

16. With the increase in lending by the Co-operative institutions, overdues have shown a tendency to increase. This needs to be checked. Therefore, separate supervisory and administrative machinery will have to be strengthened for effective implementation of the credit recovery programme for which a sum of Rs.822 lakhs is proposed for the plan period 1980-85.

17. As at present, the Apex bank is providing conversion facilities to district co-operative banks, primary societies and

the farmer members at the time of natural calamities when the loss of crop is 50 per cent or more. An adhoc provision of Rs.500 lakhs has been made for the entire plan period in the State sector. Besides this, an ad hoc provision of Rs.800 lakhs has also been made under the Centrally Sponsored Scheme which is outside the plan ceiling.

18. A new scheme to cover the loss of crops due to drought, floods and other natural calamities has been envisaged. Under the scheme, cultivators who has not been provided conversion facilities, will be paid 50 per cent of the value of crop lost. In the event of deficit in the Crop Insurance Fund to meet the insurance claim, the amount will be provided by the Apex bank on a 50 : 50 basis to be recouped from the State Government by way

of special grants.

19. Out of 125 new bank branches to be opened, 100 branches will be opened in the plain areas and 25 branches in the Hill. A subsidy at the rate of Rs.8000 for each branch in the plain areas and Rs.10,000 per branch in the Hill areas is proposed to be provided for a period of 3 to 5 years respectively and as such a total amount of Rs.41.20 lakhs will be provided during the plan period including provision for spill-over expenditure. A sum of Rs.25 lakhs by way of interest free loan for plain areas and Rs.5 lakhs by way of subsidy for Hill areas is being provided for renovation of 500 rural branches.

20. The following table shows the existing position as well as the projections for the Sixth plan in respect of the co-operative banks :—

(Rupees in crores)

	1977-78	1978-79	1979-80
(1) Share capital .. .. .	35.63	37.83	41.35
Out of which Government share .. .. .	8.76	8.83	11.26
(2) Deposits .. .. .	142.01	158.57	183.87

(Rupees in crores)

<i>Year-wise projection for the Sixth Plan</i>				1980-81	1981-82	1982-83	1983-84	1984-85
(1) Share capital .. .. .	..	..	..	4.40	4.40	4.40	4.40	4.40
Government share .. .. .	..	..	..	1.40	1.40	1.40	1.40	1.40
(2) Deposits .. .. .	..	..	..	25.00	25.00	25.00	25.00	25.00

21 : Similarly the position with regard to U. P. Co-operative Bank is shown in the following table

	1977-78	1978-79	1979-80
(1) Share capital .. .. .	8.70	9.59	10.74
Government share .. .. .	2.02	2.02	2.02
(2) Deposits .. .. .	118.73	130.02	153.93

*Year-wise projection for the Sixth Plan*

	1980-81	1981-82	1982-83	1983-84	1984-85
(1) Share capital .. .. .	3.00	3.00	3.00	3.00	3.00
(2) Deposits .. .. .	24.00	24.00	24.00	24.00	24.00



22. *Co-operative Marketing and Storage*—Co-operative marketing societies have been organized with a view to provide storage and marketing facilities to agriculturists and to save them from the clutches of middlemen. For this purpose a programme of covering all important

Mandis of U. P. with co-operative marketing societies and organizing farmers' service societies to collect the produce, has been formulated. Performance of marketing societies can be gauged from the following table :

	1961-62	1973-74	1977-78	1978-79	1979-80
(1) No. of Marketing Societies. . . . .	170	212	230	235	242
(2) Amount of business handled (Rs. in lakhs) . .	743.29	1,149.68	5,541.68	5,757.00	4,645.00 (Anticipated)

It is expected that with the increase in agricultural production and general spread of price support scheme to commodities other than paddy and wheat, the co-operative handling at Mandis would increase considerably by the end of Sixth plan.

23. Handling of food grains in Mandis, outside the price support scheme which was worth Rs.16.10 crores is expected to increase to Rs.40 crores by the end of Sixth Plan. Including wheat and other agricultural produce purchased for procurement or under any other price support scheme, the handling of agricultural produce by marketing societies is expected to increase to Rs.200.00 crores in the terminal year of the Sixth plan. About 4,000 PACs would work as collecting centres of agricultural produce, feeding marketing societies organised at the Mandi level. For strengthening this programme, a sum of Rs.4,000 would be required as margin money in the form of share capital assistance from the State Government for each society. Total allocation of funds for the Sixth Five Year Plan would be Rs.120 lakhs out of which Rs.4 lakhs would be allocated to Hills.

24. In order to increase the business of marketing societies, a provision for Rs.25 lakhs as margin money for the 250 marketing societies has been made in the Sixth Five Year Plan.

25. A provision of price fluctuation fund has also been made to cover the risk in outright purchases and Government would provide assistance to extent of 2 per cent on the outright purchases made. For this purpose an allocation of Rs.40.40 lakhs has been proposed in the Sixth Plan.

out of which Rs. 2.40 lakhs would be allocated to Hills.

26. To strengthen the weak societies, a provision of Rs.50,000 as additional share capital and Rs.10,000 as managerial subsidy has been proposed per society. Total requirement for this purpose would be Rs.27.50 lakhs as share capital and Rs.13.00 lakhs as managerial subsidy for the Sixth plan period.

27. To promote minor irrigation equipment business with the marketing societies, a provision of Rs.25 lakhs is being proposed as margin money.

28. *Fertilizer Marketing*—It is proposed that the work relating to fertilizer distribution be decentralised to the district level by the end of Sixth plan. The P. C. F. will work as the commission agent and co-ordinator and would provide liaison between the State Government, the supplier and the district co-operative development federation at the district level. A provision of margin money of Rs.15 lakhs per D. C. D. F. has therefore been made for the 50 D. C. D. Fs. during the Sixth plan, and a sum of Rs.750 lakhs has been provided for the purpose.

29. *Godown construction*—In order to provide adequate storage facilities, it is proposed to construct 1,331 godowns in plains and 351 in hills during the Sixth plan for which an outlay of Rs.339.26 lakhs has been proposed.

30. A provision of 20 per cent share capital by the State Government has been made for the construction of P. C. F. godowns of 35,000 M. T. capacity and a sum of Rs.26.25 lakhs has been allocated for it.

31. It is necessary that every marketing society should have a godown. As such 65 godowns with a capacity of 250 M.T. are to be constructed during the Sixth Plan, for which a provision of Rs.26 lakhs has been made. Another Rs.20 lakhs have been provided for the construction of residence for the Secretary of the society in the marketing societies. Rs.170.32 lakhs has been proposed for construction of such residences in PACS and godowns sanctioned under the N. C. D. C. scheme. A provision for share capital amounting to Rs.43.49 lakhs has been made for construction of 302 godowns during the plan. Besides a provision for Rs.80 lakhs is being made for the common cadre fund for the Sachiv of the godowns ; apart from a provision of Rs.6.20 lakhs for additional staff in this scheme for supervision and a provision of Rs.6.49 lakhs for the monitoring cell at the Headquarters. To strengthen the P. C. F., a provision of Rs.175 lakhs by way of State participation in their share capital is also proposed.

32. *Co-operative fruit marketing*—The co-operatives have not as yet played an effective role in the marketing of hill produce which is because of lack of infrastructure, working capital, marketing outlets and high cost of transportation. Therefore a co-operative fruit marketing federation has been formed in Kumaon hills and similarly yet another federation is proposed for the Garhwal division which will involve financial assistance of Rs.1 lakh by way of share capital, 2 lakhs as loan for raising the working capital and Rs.1.50 lakhs as managerial subsidy.

33. It is envisaged that marketing of 10,000 M. T. of Hill produce be undertaken in the Hill districts for which a transport subsidy of Rs.50 lakhs is proposed for the Sixth Plan 1980—85, at the rate Rs.100 per M. T. It is note-worthy that such subsidy is permitted on transport of fertilizers in the Hill areas at present. Similar marketing subsidy is also given in other Hill States.

34. *Marketing and development of herbs*—Four herb development and collection Federations are operating in *Chamoli, Uttar Kashi, Pithoragarh and Almora*. These federations need share capital from

the Government @ Rs.0.50 lakh each, with managerial subsidy, transport subsidy and godown rent subsidy @ Rs.0.05 lakh per year for three years. In addition expenditure on 24 demonstration units @ Rs.1,000 per demonstration unit each year will be required.

35. The work of herb collection is very important and it is being suggested that selected service co-operatives, numbering 20 in each district, will pilot the collection of herbs in their areas for a subsidy of Rs.3,000/- each society for three years. Besides a transport subsidy of Rs.2,000/- per society is also proposed. A target of Rs.12 lakhs has been made in the Sixth Plan 1980—85 for the marketing of hill produce. A plan allocation of Rs.14 lakhs is envisaged from the State Government @ 35 per cent of the cost of Rs.40 lakhs for processing and marketing of these herbs by installing suitable machinery at the Co-operative Drug Factory, Ranikhet.

36. For effective supervision and monitoring on these four federations and their affiliated societies qualified staff would be needed for this purpose and an expenditure of Rs.14.10 lakhs is proposed during the Sixth Plan period.

37. *Co-operative processing*—In order to provide better competitive price to cultivators of their produce, a programme for installing processing units in the co-operative sector has been undertaken. In the Sixth Plan it is proposed to strengthen the existing units and to establish new units, which are mainly paddy, *dal* and sugarcane processing units, groundnut decorticating processing units, oil seed processing units and agro service centres. A brief account of a few of them is given below :

(i) *Modern rice mills*—During the Sixth Plan, it is proposed to install five modern rice mills with a capacity of 2 M. T. each per hour with a project cost of Rs.13.00 lakhs each. Out of the total project cost 65 per cent will be met by way of loan from N.C.D.C., 26 per cent by way of State share capital from the Government and 9 per cent from concerned institutions from its members. Provision of Rs.15.71 lakhs by way of State share has been proposed.

(ii) *Dal mills*—It is proposed to set up 5 *dal* mills of one tonne capacity, one each every year. The project cost for installing one *dal* mill will be Rs.6.40 lakhs and State share will be Rs.7.66 lakhs against a total project cost of Rs.32.00 lakhs with the same financial pattern as mentioned above.

(iii) *Agro-service centres*—During the Sixth Plan, it is proposed to establish 13 agro-service centres with a project cost of Rs.2.80 lakhs each, out of which 80 per cent of the cost is to be borne by N.C.D.C., by way of loan and 20 per cent in the ratio of 1:1 from State Government and the institution concerned. The Plan outlay proposed is Rs.3.64 lakhs by way of State share.

(iv) *Strengthening of old processing units*—In addition to the above new projects, 24 old units are proposed to be revitalized during the Sixth Plan for which a share capital of Rs.50,000 for each unit has been proposed. Besides a loan of Rs.1.00 lakh for each paddy units and Rs.0.75 lakh for each of the *dal* units, subsidy for three years on a tapering basis has also been proposed for the units.

(v) *Soyabean processing unit*—In order to provide better price for soyabean growers, a soyabean processing plant with an annual capacity of handling 30,00 M.T. soyabean entailing an estimated expenditure of Rs.650 lakhs will be set up. Out of the cost 60 per cent by way of loan from N.C.D.C., 35 per cent by way of State participation (of which 20 per cent will be given by N.C.D.C. to State Government) and 5 per cent by way of members' contribution will be available for meeting the expenditure on the project.

(vi) *Expansion of the VINCO project*—An oil complex installed by P.C.F. namely VINCO at Bitroi in district Budaun, proposes to make a viable project by installation of a Soyabean Processing Plant, a Rice Bran processing unit and a Decortiating Plant with a project cost of

Rs.59.96 lakhs in the second year of the Plan. Financial assistance for the project will comprise of 65 per cent loan from N.C.D.C. and remaining 35 per cent would be shared by the State and the P. C. F. An outlay of Rs.19.07 lakhs in the year 1980-81 has been proposed for this complex as the State share.

(vii) *Co-operative Textile Mills, Bulandshahr*—The U. P. Textile Corporation has assessed the economic condition of the co-operative textile mills at Bulandshahr and recommended immediate financial assistance of Rs.239.06 lakhs for the revitalisation of the mill. A State loan of Rs.62.00 lakhs was sanctioned in 1979-80 and an outlay of Rs.48.00 lakhs for the year 1980-81 and Rs.30.75 lakhs in 1982-83 have been proposed for this unit.

(viii) *Fertilizer Factory at Hazaria (Gujarat)*—On the recommendations of the Government of India, the State would participate in shares of the Krishak Bhartiya Co-operative Ltd. As such a sum of Rs.200 lakhs has been proposed in the outlay.

(ix) *Common cadre*—A managerial subsidy scheme for a common cadre of processing managers on tapering basis, i.e. 80 per cent, 60 per cent, 40 per cent and 20 per cent in the first, second, third and fourth year respectively has been proposed with an outlay of Rs.2.98 lakhs.

(x) *Headquarter staff*—For effective guidance, supervision, control and monitoring of the processing units, an outlay of Rs.3.90 lakhs has been proposed.

(xi) *Cold storages*—To assist the Potato growers, a project for the construction of 75 Cold storages have been sanctioned, out of which 44 are functioning and construction work in 31 others is under way.

(xii) During the Sixth Plan, 55 new Cold Storages are proposed to be installed in different Plan years, i.e. 10 each in 1980-81 and 1981-82, 12 each in 1982-83 and 1983-84 and 11 in 1984-85 at a cost of Rs.44.60 lakhs

per cold storage. The financial assistance has to come from N. C. D. C. the State Government and the societies, the ratio of which is 60 : 27 : 13. Thus, the total Plan outlay will come to Rs. 24.55 crores, out of which the State Government has to bear Rs. 6.31 crores by way of share capital participation.

(xiii) To increase the storage capacity of the existing cold storages, to a total of 4,000 M.T. each, it is proposed that in the 30 existing cold storages, an additional capacity of 2,000 M.T. be added at a cost of Rs. 23.00 lakhs per unit. Thus, the total cost of 30 cold storages would come to Rs. 690 lakhs out of which State share participation @ 20 per cent would be Rs. 90.47 lakhs which is being proposed in the Plan.

(xiv) *Rehabilitation of cold storages*—To strengthen the finance of 10 cold storages, it is proposed to provide a sum of Rs. 2.5 lakhs as State share capital to each unit during the Plan period. The total outlay for 10 weak cold storages would be Rs. 25 lakhs by way of share capital.

(xv) *Ice plants*—During the Sixth Plan period it has been proposed to set up 13 Ice plants at the existing cold storages at a cost of Rs. 2.50 lakhs per unit. The total cost will come to Rs. 32.50 lakhs, out of which State share would be Rs. 5.87 lakhs.

(xvi) In order to strengthen the finances of the apex federation of the processing units, it has been proposed to invest Rs. 22 lakhs by way of share capital from the State Government during the Sixth Plan at the rate of Rs. 2 lakhs in 1980-81 and Rs. 5 lakhs in each subsequent year. It is proposed to meet the expenditure on staff at 100 per cent basis for five years which comes to Rs. 19.01 lakhs. Besides a loan for Rs. 1.04 lakhs for furniture, etc. has also been proposed.

(xvii) *Generating sets*—Experience has shown that erratic and inadequate supply of power, has adversely effected the performance of cold storages.

Thus, 75 cold storages sanctioned earlier, and 55 cold storages to be constructed during the Sixth Plan are to be equipped with a Generating Set of 175 KW costing Rs. 4.50 lakhs each. The total cost of the 76 Generating Set would come to Rs. 342.00 lakhs 50 per cent of this amount i.e. Rs. 171.00 lakhs are likely to be borne by the State Government by way of subsidy.

(xviii) *Common cadre for cold storages*—A common cadre of cold storage personnel is proposed, under the administrative control of the Uttar Pradesh Processing and Cold Storages Federation. A pool fund is proposed with the aid of contributions by the societies and the State Government. The contribution of State Government in the fund would be 80 per cent of total expenditure in first year, 60 per cent in second year, 40 per cent in third year, 20 per cent in the fourth year. As such an outlay of Rs. 25.62 lakhs has been proposed.

38. *Co-operative Education Training and Extension Scheme*—An outlay of Rs. 312.80 lakhs is being proposed for Co-operative Education, Training and Extension Scheme in the Sixth Plan. A few of the schemes are :

(i) Grant of Rs. 97.52 lakhs to U. P. Co-operative Union (P.C.U.) for expenditure on staff of 12 co-operative training centres (existing and proposed).

(ii) Grant of Rs. 55.00 lakhs to P.C.U. for purchase of land/construction of building for Co-operative Training Centres.

(iii) Provision of Rs. 5.00 lakhs for Departmental training staff for the first year of the Sixth Plan.

(iv) Grant of Rs. 10.00 lakhs for purchase of land in respect of new building for the Co-operative Training Colleges of NCUI at Lucknow and at Rajpur (Dehra Dun).

(v) Provision of Rs. 7.55 lakhs for the staff in the education section at the headquarters of the R. C. S.

(vi) Provision of Rs. 2.50 lakhs for the expansion of the U. P. Co-operative Library of R. C. S. Office.

(vii) A sum of Rs. 30.55 lakhs as grant to P. C. U. for stipend and T. A. to the trainees.

(viii) Provision of Rs. 2.40 lakhs as grant to P. C. U. for furniture, fixture and equipment for new Training Centres.

(ix) Provision in the shape of grant of Rs. 75.84 lakhs to P. C. U. for peripatetic unit under the Member Education Programme.

(x) Grant of Rs. 11.00 lakhs to the P. C. U. for Co-operative Publicity and Propaganda programmes in the rural area.

(xi) Grant to P. C. U. of Rs. 9.00 lakhs for organising camps.

(xii) Provision in the shape of grant amounting to Rs. 5.00 lakhs to P. C. U. for equipment for the peripatetic units under the member-education programme.

(xiv) A sum of Rs. 1.44 lakhs as grant to P. C. U. for rent of Training Centres.

39. *Consumer's Co-operative*—To strengthen the consumer co-operative structure ; to expand the consumer activity and to establish consumer industry ; to act as an effective instrument of consumers' protection are the objectives of this programme.

40. During the Sixth Plan, the total turn-over of consumer's goods is expected to increase from Rs. 75 crores in 1979-80 to Rs. 250 crores in 1984-85. Measures proposed to achieve the above gigantic target are outlined below :

(i) *Rehabilitation of Weak Central Consumer Stores*—Financial assistance is being proposed to the 17 Weak Central Stores during the Sixth Plan. The total outlay needed for the rehabilitation has been assessed at Rs. 85 lakhs (Rs. 75 lakhs for plains and Rs. 10 lakhs for hills), to be shared by Government of India and the State on 75 per cent and 25 per cent basis.

The share of the State Government would be Rs. 21.25 lakhs (Rs. 18.75 for plains and Rs. 2.5 lakhs for hills).

(ii) *Strengthening of share capital base of U. P. C. C. Federation*—The U. P. Co-operative Consumer's Federation arranges supplies of wide range of consumer goods from manufacturers to the ultimate consumers through central consumer stores, lead societies and societies engaged in retailing. It would require additional working capital of Rs. 3 crores.

(iii) *Setting up of consumer industries*—In order to minimise the dependence on private manufacturers, it is proposed to set up small scale industrial units, such as printing press, exercise books making plant, etc. 7 units in the plain and 2 in the hill areas are proposed. The total outlay for this would be Rs. 42.75 lakhs (Rs. 33.25 lakhs for plains and Rs. 9.50 lakhs for hills) to be shared by Government of India, the State and the concerning co-operative institution in the ratio of 80 : 15 : 5. The share of the State Government would amount to Rs. 6.75 lakhs (Rs. 5.25 lakhs for plains and Rs. 1.5 lakhs for hills).

(iv) Besides a provision of Rs. 2.75 lakhs has been proposed for setting up of one spices grinding unit, the share of N. C. D. C. the State and the concerning institution in the ratio of 65 : 26 : 9, the State Government share would be Rs. 0.78 lakhs.

(v) *Margin money for whole sale consumer stores*—To meet the working capital requirement, the central consumer's stores will have to arrange 20 per cent margin money to avail loan facility from the bank. A provision of Rs. 20 lakhs has, therefore, been proposed for 10 stores in the plain and Rs. 8 lakhs for the hills.

(vi) *Regional godowns for U.P.C.C. Federation*—It is proposed to construct four office-cum-godowns in the plain and one in the hill area. A provision of Rs. 25 lakhs (Rs. 20 lakhs for plain and Rs. 5 lakhs for hills) has been proposed in the Plan.

(vii) *Buffer godowns for consumers stores*—Twenty-five buffer godowns (21 in plain and 4 in hill) are proposed to be constructed. A provision of Rs.50 lakhs (Rs.42 lakhs for plain and Rs.8 lakhs for hills) to be shared by N.C.D.C. and the State Government on 60:40 basis, has been provided, in which the State share has been calculated at Rs.20 lakhs (Rs.16.80 lakhs for plains and Rs.3.20 lakhs for hills).

(viii) *Consumers' Protection*—An outlay of Rs.6 lakhs (Rs.5 lakhs for Plain and one lakh for hills) have been provided to set up a food testing laboratory to ensure the testing of consumer goods.

(ix) *Price Fluctuation Fund*—Because of large price fluctuation in consumer goods, it is extremely necessary to create a price fluctuation fund. The consumer stores shall contribute 10 per cent of their yearly profit, while the State Government shall contribute 2 per cent of the value of the goods purchased during the year. An outlay of Rs.55 lakhs (Rs.48.50 lakhs for plains and Rs.6.50 lakhs for hills) has been proposed during the Plan period.

(x) *Transport subsidy in Hill areas*—Transportation cost is disproportionately high in the hills. Like fertilizers, the expenditure on transport of consumer commodities exceeding Rs.10 per ton is proposed to be subsidised. For this purpose a provision of Rs.15.25 lakhs have been proposed in the outlay.

(xi) *Strengthening of the promotional and consultancy Cell of U. P. C. C. Federation*—It is proposed to expand the Cell during the Plan period, for which a provision of Rs.15 lakhs (on 100 per cent subsidy basis) has been made in the outlay.

(xii) *Assistance to common cadre of Chief Executives of consumer stores*—A centralised cadre of chief executives of central consumer stores has been created and the consumer's federation has been made its cadre-authority. Since most of the stores are financially weak, it is proposed to

provide 100 per cent managerial subsidy to weak consumer co-operative stores and 75 per cent subsidy to others to meet the cost of the Secretaries. Rs.30 lakhs for plain and Rs.5 lakhs for hills has been provided in the outlay for this purpose.

(xiii) *Additional Staff for Women Consumers' Scheme*—To ensure better and effective supervision over 150 Women Consumer Co-operatives, it is proposed to have an Assistant Registrar to monitor this scheme at the Headquarters. A provision of Rs.0.71 lakhs has been made in the Plan.

41. *Central Sector Schemes*—Having regard to the importance of the programme of consumers' Co-operatives, a provision of Rs.130.05 lakhs has been made in the Plan under the Centrally Sponsored Schemes. The details of different programmes proposed are as noted below :

(i) *Janta Shops*—Two hundred and fifty Janta shops in Plains and 20 in hills are proposed to be opened. A total outlay at the rate Rs.14,000 per shop in the Plan period amounting to Rs.37.80 lakhs (Rs.35 lakhs for plains and Rs.2.80 lakhs in Hills) has been made.

(ii) *New Branches*—One hundred and thirty-five branches (125 in plain and 10 in hills) of the central consumer's stores will be opened in the urban areas. The Government of India, on 100 per cent aid pattern, will provide Rs.33.75 lakhs (Rs.31.25 lakhs in plains and Rs.2.5 lakhs for hills).

(iii) *Large Sized Retail Outlets*—Twelve large sized retail outlets (10 in plain and 2 in hills) are to be opened, in Hill areas not served by Mini/Departmental stores, with a total outlay of Rs.6.00 lakhs (Rs.5 lakhs for plain and Rs. one lakh for hills) on the basis of Rs.0.50 lakhs per outlet.

(iv) *Mini Stores*—Twenty-five Mini Departmental stores are to be opened by the wholesale stores during the Plan. A provision of Rs.52.5 lakhs on the basis of Rs.2.10 lakhs for each store has been made under the scheme.

42. *Special schemes for the weaker sections—Co-operative Farming*—It is proposed to revitalize weak and defunct societies, form model societies and to liquidate dormant and unserviceable societies which cannot be revitalized. An outlay of Rs.62.11 lakhs has been proposed for the Sixth Plan.

43. *Labour and rickshaw puller's co-operatives*—At present 422 Labour societies and 150 Rickshaw Pullers' societies are functioning in the State. These were organised with a view to providing employment to weaker sections and tackle the problem of rural employment. During the Sixth Plan it is proposed to organise new societies and revitalize the old ones by providing them assistance by way of share participation and managerial subsidy. The construction societies should be given managerial subsidy at the rate Rs.5,000 each for a term of three years and Rickshaw Pullers' societies at the rate of Rs.5.00 per society for five years and a subsidy at the rate Rs.10,000 per year per society is proposed for purchase of tool and implements which cannot be arranged by individual workers. For the labour societies a total outlay of Rs.42.11 lakh is proposed, and the total outlay for the Rickshaw pullers societies is Rs.19 lakhs.

44. *Tribal Development Scheme*—Special schemes have been formulated on the recommendation of Bawa Committee to cater to the needs of tribal people. An outlay of Rs.54.00 lakhs has been proposed for the Sixth Plan for Hill area.

45. *Provision for Sahkarita Colony*—Due to ever increasing rents, the employees of the Department working at the

headquarter find it extremely difficult to find suitable residential accommodation which adversely affects their efficiency. As an employee welfare measure, an outlay of Rs.305.00 lakhs has been proposed in the Plan for constructing a colony for the co-operative workers.

46. *Co-operative Audit Organisation*—An efficient and effective system for the audit of co-operative institutions is a *sine-qua-non* for the success of the co-operative movement. If the organisational set up for audit is loose, inadequate or ineffective, the Co-operatives will not be able to inspire confidence amongst their members and there will remain a likelihood of irregularities and misuse of funds and authority. There has been a tremendous growth in the Co-operative movement, both in terms of the nature of their work and volume of business and the number of irregularities have been on the rise. A fairly large number of cases of misappropriations and irregularities have been detected in years. In the year 1978-79 alone relating to such irregularities involved an aggregate amount of Rs.1075.68 lakhs. The need for enforcing a better financial discipline in co-operatives is, therefore, self-evident and the State Audit Organisation is, therefore, duly strengthened.

47. During the Sixth plan 1980-85, the volume of business in various co-operative societies will increase manifold, new institutions will be organised and new branches of many of the existing institutions will be opened. Following new societies are proposed to be organised and branches of existing institution are to be opened during the Sixth plan period in the State :—

	Plains	Hills	Total
1. District Co-operative Bank (New) .. .. .	2	..	2
2. Branches of DCB, UPCB and LDB .. .. .	344	25	369
3. Regional Rural Bank of UPCB, .. .. .	5	..	5
4. Primary bank .. .. .	100	..	100
5. Farming Societies .. .. .	50	..	50
6. Marketing and Processing units .. .. .	103	4	107
7. Consumer units and branches .. .. .	417	74	451
8. Labour and Rickshaw Societies .. .. .	20	..	20
9. Milk plants and Societies .. .. .	258	..	258
10. Textile and non-textile societies .. .. .	3,400	100	3,500
11. Spinning mills .. .. .	2	..	2
Total .. .. .	4,701	163	4,864

48. Two spinning mills viz. Maghar and Najibabad appearing at Serial 11 in above table on page 327 have already come into existence but no arrangements for their audit has been made. Therefore, arrangements for their audit in the Plan have been envisaged.

49. Keeping the proposed expansion in view, as well as the desirability of performance of following functions, audit organisation should be suitably strengthened :

(1) Annual audit of all the Co-operative societies.

(2) Introduction of an effective concurrent audit of big and important institutions in which the nature and volume of day to day transactions, calls for timely effective check on possible loopholes or leakage of income to obviate huge losses if not detected in time.

(3) Effective supervision of audit of big and important institutions by superior officers.

(4) Documentation and monitoring cell at the headquarters.

(5) Scrutiny of the cost aspects in case of various co-operative processing

units or other factories in the co-operative sector in order to assist auditors in apprising the cost structure.

(6) To ensure effective followup action on special reports through which cases of embezzlements, defaultations and frauds are reported to officers of concerned departments.

50. With a view to achieve the above objectives, all the societies as on June 30, 1979 were evaluated on the basis of latest norms prescribed by the department, in order to determine the total number of man days required for the audit of existing societies. Societies to be organised and branches of existing societies to be opened during the Sixth plan period have also been evaluated on the same basis. The estimated average business of these institutions was also kept in mind while making the calculations.

51. According to the norms the staff requirement of the department is 719 Auditors and 263 Senior Auditors entailing a cost of Rs.161.72 lakhs. However keeping in view the ceiling of Rs.1.5 crores for the department, creation of only the following posts is being proposed during the Sixth plan period :

					(Rs. in lakhs)
Serial no.	Particulars of posts		No. of posts	Expenditure up to 1985	Total Expenditure up to 1985
1	2		3	4	5
1	<b>Ground Level Staff in Plain</b>				
	(i)	Senior Auditor .. .. .	180	1.90	
	(ii)	Auditor .. .. .	186	19.46	39.36
2	<b>Officers and Supervisor posts</b>				
	(i)	Joint Chief Audit Officer (cost) .. .. .	1	0.78	
	(ii)	Dy. Chief Audit Officer .. .. .	1	0.55	
	(iii)	Audit Officer .. .. .	3	1.09	2.42
3	<b>Clerical Staff</b>				
	(i)	Head Clerk .. .. .	1	0.39	
	(ii)	Noter and Drafter .. .. .	3	0.62	
	(iii)	Stenographer .. .. .	2	0.38	
	(iv)	Typists .. .. .	16	1.92	
	(v)	Class-iv .. .. .	2	0.21	3.52
4	Office Equipment and Contengencies .. .. .				0.67
5	Comitted Expenditure in Plain .. .. .				92.03
	Total for Plain .. .. .		395		138.00
6	<b>Posts for Hills</b>				
	(i)	Senior Auditor .. .. .	12	4.20	
	(ii)	Telephone for Pauri Range .. .. .		0.15	4.35
	(iii)	Comitted Expenditure for Hills .. .. .			7.65
	Grand Total		407		150.00



## CHAPTER 9

### WATER AND POWER DEVELOPMENT

#### (1) IRRIGATION

1. Irrigation provides the most important input for increasing agricultural yields and has been receiving high priority in the allocation of Plan resources. The severe drought of the year 1979 revealed that irrigation coverage through State and private works is still extremely inadequate both as regards total area covered as well as the quality of irrigation. The Sixth Plan proposals lay emphasis on both these aspects.

2. *Surface water resources of the State*—The report of the National Irrigation Commission (1972) assessed the surface water potential of the sub-basins of the Ganga basin as 446 m. basin below.

Serial no.	Name of sub-basin	Run-off available (in m.a.f.)
7.	Ghagra .. .. .	92.65
8.	Right Bank Tributaries below Sone	36.60
9.	Left Bank Tributaries below Ghagra	141.60
10.	Main Ganga .. .. .	34.50
	Total ..	445.96
	Say ..	446.00

3. Out of the total of 446 m.a.ft. of water, about 270 m.a.ft. flows through Uttar Pradesh\*. It is considered feasible to utilise at least 160 m.a.ft. water for development of irrigation in the State. It is also assessed that 145 m.a.f. out of 160 m.a.f. utilisable water can be harnessed for irrigation through major and medium schemes and 15 m.a.f. through surface minor schemes to create an irrigation potential of 200 lakh hectares and 15 lakh hectares respectively. Thus, the assessed ultimate irrigation potential from surface water resource is 215 lakh hectares. Potential of 60.28 lakh hectares had been created from major and medium irrigation schemes by the end of 1979-80. Plan-wise details of creation of potential is shown below :

Serial no.	Name of sub-basin	Run-off available (in m.a.f.)
1.	Chambal River Basin ..	19.71
2.	Yamuna River Basin ..	53.20
3.	Ramganga Basin .. ..	15.10
4.	Tons River Basin .. ..	5.09
5.	Gomti Basin .. .. .	6.86
6.	Sone and other basins between Tons and Sone.	40.65

Serial no.	Period	Expenditure incurred Rs. in crores		Potential created lakhs Hectares	
		During	Cumulative	During	Cumulative
1	2	3	4	5	6
1	Pre-Plan .. .. .	..	..	25.53	25.53
2	I-Plan (1951—56) .. ..	30.81	30.81	3.30	28.83
3	II-Plan (1956—61) .. ..	25.73	56.54	2.71	31.54
4	III-Plan (1961—66) .. ..	54.90	111.44	3.57	35.11
5	3 Adhoc Plan (1966—69) .. ..	48.93	160.37	0.96	36.07
6	IV Plan (1969—74) .. ..	172.48	332.85	4.97	41.04
7	V Plan (1974—78) .. ..	371.59	704.44	13.68	54.72
8	Annual Plan (1978—79) .. ..	137.30	841.74	3.00	67.72
9	Annual Plan (1979—80) .. ..	158.78	1000.52	2.56	60.28

\*Annexure -I

4. It will be seen that the rate of growth of irrigation potential was slow up to the end of Fourth Plan (1969–73), being nearly 1.78 lakh hectares per year. During the Fifth Plan period (1974–78) the rate of growth of irrigation potential was stepped up to 3.42 lakh hectares per year.

5. *Perspective of development up to the year 2000 A. D.*—The geographical area of Uttar Pradesh is 298 lakh hectares. The net area sown is 172 lakh hectares and the gross area sown is 231 lakh hectares the intensive of agriculture being 134 per cent. The net area irrigated by the end of 1977-78 from all sources, state and private, was 84.93 lakhs hectares giving an intensity of irrigation with respect to the net area sown as 48 per cent only. For a State in which about 78 per cent of the population is dependent upon agriculture, this low coverage by irrigation sources is very inadequate. Expeditious utilisation of surface and ground water resources is necessary.

6. The ground water resources of the State are assessed to be adequate for irrigation of 140 lakh hectares, details of which are given in the chapter on minor irrigation. The total irrigation potential of the State will, thus, be 355 lakh hectares (215 lakh hectares from surface water schemes and 140 lakh hectares from ground water schemes). This is sufficient for providing irrigation intensity of the order of 200 per cent for the cultivated area of the State. On an average, the intensity of irrigation is higher in the plain areas and lower in the Hill areas, which have better rainfall.

7. *Perspective of development for the period, 1980–85*—Nearly 49.86 m.a.f. surface run-off has been utilised up to the end of 1979-80. An additional 12.61 m.a.f. surface run-off is expected to be utilised during the Sixth Plan period. A potential of 60.28 lakh hectares has been created up to the end of 1979-80 through major and medium irrigation schemes and an additional potential of 15.98 lakh hectares is proposed to be developed during the 1980–85 Plan.

8. Outlays and potential proposed for Sixth Plan are indicated below :

Year	Outlays proposed (Rupees in crores)	Proposed irrigation potential additional (lakh ha).
1	2	3
1980-81	168.00	2.97
1981-82	226.00	2.96
1982-83	291.53	2.32
1983-84	357.72	3.41
1984-85	420.75	4.32
Total	1464.00	15.98

9. In formulating the Sixth Plan (1980–85) proposals, a judicious mix of multi-purpose, major and medium projects has been aimed at and includes short and long gestation projects to keep an even pace for creation of irrigation potential. A mix of continuing and new projects has also been proposed for the same reason. Important new projects proposed under multi-purpose and major heads are Kotlibhel, Pancheshwar, Karnali, Bhaloobang and Parallel Sarda Canal.

10. Attempt has also been made to minimise regional imbalances. Eleven medium sized dams are proposed for benefiting the Bundelkhand and the Eastern regions.

11. *Creation and utilisation of irrigation potential*—The definition of potential created as defined by the Planning Commission is reproduced below :

“The irrigation potential created by a project at a given time during or after the construction is the aggregate gross area that can be irrigated annually by the quantity of water that could be made available by all the connected and completed works up to the end of the water

courses or the last point in the water delivery system up to which the Government is responsible for construction.”

12. The definition for irrigation potential utilised, as approved by the Planning Commission, is as follows :

“The irrigation potential utilised is the total gross area actually irrigated during the year under consideration. The figure relating to the stabilisation of ‘old areas’ should be

furnished separately in this case since these will not be in addition to the gross area irrigated.”

13. The utilisation of irrigation potential created can take place only in the year following the creation of such potential. The irrigation potential created up to the end of the preceding year is compared with potential utilised next year to give a fair picture.

The position of utilisation of irrigation potential up to 1979-80 including previous Plans has been shown below :

(Lakh Hectare)

Period	Potential created (cumulative)	Utilisation (cumulative)	Percent
1	2	3	4
Pre-Plan	25.53	25.53	100
I-Plan	28.83	26.57	92.2
II-Plan	31.54	29.76	94.4
III-Plan	35.11	33.41	95.2
3 Adhoc Plan	36.07	35.21	97.6
IV-Plan	41.04	38.63	94.1
V-Plan	54.72	43.99	80.4
1978-79	57.72	46.77	81.0
1979-80	60.28	49.41	82.0
1980-81 (Anticipated)	63.26	52.79	83.5

14. The position with regard to immediate utilisation of irrigation potential has shown some deterioration during the Fifth Plan in comparison to earlier Plans. One of the reasons of under utilisation in case of Sarda Sahayak and Gandak Canals is that cultivators have still not taken to paddy irrigation and continue to depend upon rains. The command area development authorities are doing

extension work in this regard. The main reason of under utilisation on lift canals is the indefinite and inadequate availability of electric power.

15. This gap between potential and utilisation is being reduced by the construction of water courses for farm blocks of 5 to 8 hectares and by lining 100 metre of outlet guls in the head reach. It is

planned that almost all of the potential created by the end of Fifth Plan should be utilised by the end of 1982-83. Yearwise

phasing of potential created and utilisation proposed during 1980-85 is given below :

(In lakh hectares)

Serial no.	Year	Potential to be created	Proposed utilisation	Per cent utilisation	
				With respect to same year	With respect to previous year
1	2	3	4	5	6
1	1980-81	63.26	52.79	83%	88%
2	1981-82	66.23	56.06	85%	88%
3	1982-83	68.55	58.56	85%	88%
4	1983-84	71.96	60.77	85%	89%
5	1984-85	76.27	63.46	83%	88%

16. *Projects proposed for implementation during the Sixth Plan 1980-85*—The strategy for formulation and implementation of irrigation programmes for the period 1980-85 would be as follows :

(a) Creation of additional irrigation potential by completing on going schemes and taking up new schemes to maintain an even tempo of creation of fresh potentials.

(b) Modernisation and renovation of existing canal irrigation systems to cater to the needs of modern agriculture.

(c) Development of conjunctive use of surface and ground water resources.

(d) To accelerate construction of new storage schemes in the Himalyan region for development of water as well as power potential and also minimise heavy flood damages from year to year.

*Creation of additional irrigation potential by completing on going schemes and taking up new projects.*

17. *Continuing Schemes*—In planning outlays for the 1980-85 plan, the pro-

gramme of works of all continuing projects of pre-fifth Plan and the fifth plan period have been scrutinised carefully in view of the foreseeable escalating prices. Maximum outlays subject to technical feasibility have been provided year by year for the continuing projects.

18. In all, there are 71 continuing schemes under the following sub-heads of classification.

(a) Multipurpose projects	..	4 Schemes
(b) Major Irrigation projects	..	28 „
(c) Medium Irrigation projects	..	23 „
(d) Modernisation schemes	..	12 „
(e) Schemes for conjunctive use of water.	..	4 „

19. *Multipurpose Projects*—Out of 4 multipurpose projects the Ram Ganga and the Tehri Dams are pre-Fifth Plan Schemes. The Ram Ganga Dam will be completed by the end of 1981-82. Work on Kishau Dam is in a preliminary stage and progress will depend on the early finalisation of inter-state agreement with the Himachal Pradesh government. Sufficient outlays have been provided for early

construction of the Tehri and the Lakhwar Vyasi Dams. Total outlays provided under this sub-head are Rs.197.95 crores against the actual expenditure of Rs.166.99 crores upto 1979-80 over these projects.

20. *Major Irrigation Projects*—Out of 28 Major Irrigation Projects, 19 projects are scheduled to be completed during the Sixth plan period. An outlay of Rs.571.80 crores has been provided for these schemes against an expenditure of Rs.601.83 crores upto 1979-80 on the schemes. The notable schemes scheduled to be completed are—Gandak Canal, Sarda Sahayak, Kosi Irrigation, Adwa Dam, East Baigul Reservoir, Dohrighat Sahayak, Parallel Lower Ganga Canal, Sone Pump Canal, Raising Meja Dam, Shahzad Dam, Okhla Barrage, Suheli Irrigation, Madho Tanda Irrigation and Remodelling of Bhimgoda Head Works. Quite a few of the above schemes are located in the backward Eastern and Bundelkhand regions and their completion will usher in a new era of prosperity for these regions.

21. *Medium Irrigation Schemes*—All of the 23 medium irrigation schemes are scheduled to be completed during the Sixth Plan period except the Paisuni Diversion, which is a inter-state scheme and progress has not gained momentum due to non-concurrence of the Madhya Pradesh government. An outlay of Rs.22.41 crores has been provided for these schemes against an expenditure of Rs.47.88 crores upto 1979-80.

22. *Modernisation Schemes*—There are twelve modernisation schemes taken up so far to modernise the existing canal systems and works according to the present need for better performance to intensity the irrigation intensities etc. The total cost of these schemes according to the present price level is Rs.82.71 crores. Out of this an expenditure of Rs.25.33 crores has already been incurred upto the end of 79-80. Outlay provided during the Sixth Plan on these schemes is Rs.54.87 crores.

23. *Schemes for conjunctive use of water*—There are four schemes under this sub-head costing Rs.46.08 crores. An

expenditure of Rs.15.86 crores was incurred upto 1979-80 and an outlay of Rs.25.25 crores is provided for Sixth Plan period on these schemes.

24. In general a total outlay of Rs.872.28 crores has been proposed for on going projects which is approximately 60 per cent of the total outlay of Sixth Plan 1980-85. It is expected that out of the 71 continuing schemes ; 50 will be completed during the Sixth Plan period and most of the remaining schemes will attain an advanced stage of construction. Due to these accelerated efforts, a potential of 15.96 lakh hectares is estimated to be created through continuing schemes against the ultimate estimated potential of 66.76 lakh hectares on these schemes. A potential of 23.09 lakh hectares has already been created by these schemes till 1979-80 leaving a balance of 27.70 lakh hectares to be created during future plans.

25. *Constraints*—Availability of land and material are the main constraints experienced so far for the speedy implementation of irrigation projects.

(i) *Land*—Acquisition for land for construction of irrigation projects and rehabilitation of inhabitants takes a very long time. The time lag between the submission of the land acquisition cases and handling over of possession is considerable and in a large number of cases the cultivators do not allow the work to proceed smoothly even after the possession of land has been officially handed over to the department.

(ii) *Material*—The execution of irrigation projects require timely supply of large quantities of constructing materials mainly cement, coal, diesel and explosives etc. Planning Commission have constituted working groups to assess the requirements of these materials and suggest ways for making them available. The requirements\* for major medium irrigation schemes are shown in the statement.

26. *Irrigation rates*—Prevalent irrigation rates are given in statement I. F.-12

(in Volume III) for principal crops. The financial returns\*\* for irrigation projects including multipurpose, major, medium and lift canals are given. It is expected that an accelerated programme of utilisation of irrigation potential and improvement in power availability for lift canals will lead to reduction in the present losses on irrigation works.

27. *Losses on irrigation works*—The continuing financial losses on irrigation works are a cause for concern. The rates for irrigation from canals in the State were revised, first in 1969 and again in 1972 bringing about an increase of nearly

20 to 25 per cent each time. Keeping in view the recommendations of the first conference of the State Irrigation Ministers held in July 1975 in New Delhi and also taking account of the increased cost of construction of irrigation projects, the irrigation rates were further revised by about 50 per cent to 75 per cent with effect from April 1, 1975. The irrigation rates in any one State, however, cannot differ markedly from those in others, specially the neighbouring States. In this connection, the information presented in table below regarding irrigation rates prevalent in different States needs consideration at the national level.

*Average Irrigation Rates of Various States of India*

Serial no.	States					Average water rate in rupees per hectares	Date of enforcement
1	2					3	4
<i>Southern Region :</i>							
1	Andhra Pradesh	..	..	..	..	70.66	1-7-74
2	Karnataka	..	..	..	..	68.44	1-7-74
3	Maharashtra	..	..	..	..	158.67	1-7-75
4	Kerala	..	..	..	..	65.50*	1-4-74
5	Orissa	..	..	..	..	7.61†	4-12-74
6	Tamil Nadu	..	..	..	..	23.64	4-12-74
						Data is available for six districts out of 14 districts. Hence average rate has not been computed.	
<i>Northern and Eastern Region :</i>							
1	Assam	..	..	..	..	No water rate;	
2	Bihar	..	..	..	..	58.92	17-8-74
3	Gujarat	..	..	..	..	126.82	16-6-76
4	Haryana	..	..	..	..	56.44	Kharif 1975
5	Jammu and Kashmir	..	..	..	..	13.07	15-3-72
6	Madhya Pradesh	..	..	..	..	49.53	1-8-72
7	Punjab	..	..	..	..	27.07	20-6-74
8	Rajasthan	..	..	..	..	39.26	Kharif 1974
9	Uttar Pradesh	..	..	..	..	67.29	4-12-75
10	West Bengal	..	..	..	..	52.64	11-12-74

\*\* I. F. 13 (Volume III)

NOTE : \*Inclusive of rates for rice.

†Exclusive of rice.

28. *Organisation development: Improvement in capability for investigations, planning, preparation of projects, designs and research and monitoring*—In view of the proposed programme for the Sixth Plan 1980–85, the present structure of department needs substantial augmentation. Such restructuring is under consideration of the State Government. The investigation and planning organisation will have to be strengthened further. Other measures proposed are :

(i) Strengthening the design, research and training wings.

(ii) Adoption of modern management techniques.

(iii) Streamlining the recruitment policies and measures for equitable promotions among various constituents of the Engineering cadres.

(iv) Streamlining of decision making procedures and issue of sanctions.

29. *Innovations for increasing efficiency and decreasing cost*—Uttar Pradesh is one of those State of India which have been a pioneer in irrigation works and several irrigation systems are more than a century old now. These systems now need modernisation as their design was based on protective basis of irrigation. For modern agriculture, assured and timely irrigation is necessary. As already discussed above, 12 modernisation schemes are already in progress. It is proposed to modernise the Upper Ganga Canal System under a World Bank Project for which an outlay of Rs.297.60 crores is proposed to be provided in the Sixth Plan.

30. Beside, the proposed modernisation of Bariyarpur Weir, Dhasan Canal and Betwa Canal, Rs.10.00 crores have also been provided to modernise the Telecommunication system on the canals. Another sum of Rs.80.00 crores have also been provided for *warbandi*/structural improvements, water courses and field channels for 5 to 8 hectares blocks to accelerate the utilisation of created potential and make the benefit of irrigation available to the weaker sections of the society.

31. *Development of conjunctive use of surface and ground-water resources*—Although no major schemes have separately been classified under this sub-head, yet many of the pre-Sixth Plan schemes and new schemes proposed during the Sixth Plan period are meant for the development of conjunctive use of water. Construction of augmentation tubewells, State tubewells and private tubewells is being encouraged in the command of existing canal systems. Simultaneously new reservoirs are also proposed for enabling new canal system for the arid zones and areas marked by serious ground-water depletion.

32. *To accelerate construction of new storage schemes*—As already discussed earlier the State has been able to harness only about 30 per cent of its resources of utilisable water wealth so far, mainly through diversion schemes. Major diversion schemes are not feasible now and the State has to depend on construction of dams and reservoirs. Five major dams are proposed on the northern rivers and as many as 11 medium size dams are proposed to be constructed on other rivers. All the medium size dams are proposed to benefit the backward areas. The notable Pancheshwar, Karnali and Bhaloobang dam need international† agreement with the Royal Government of Nepal.

33. *Employment Content*—The Sixth Plan for major and medium and flood control schemes provides opportunities of employment to rural population not only during construction but also after the completion by creating permanent employment opportunities in the agriculture sector. Ample opportunities of additional employment\*\* would be created during 1980–85 Plan under major medium and flood control sector.

34. *Special Component*—The benefits of major and medium irrigation schemes flow to the scheduled castes land holders as were and it is not possible to quantify it separately.

35. *Outlays for the Hill and physical programmes*—A sum of Rs.690 lakhs has been provided during 1980–85 under the major and medium schemes. Out of this

73 lakhs are to be spent on identified and continuing schemes and the balance of Rs.617 lakhs on schemes which are under investigation and have yet to be identified.

## (2) FLOOD CONTROL

36. Floods are a regular feature in Uttar Pradesh. The damages on account of floods in this State are the highest in the country. A study of the damages by floods shows that out of the total area of 294.4 lakh hectares in Uttar Pradesh an area of 24.71 lakh hectares, in an average, is affected by floods annually and the annual loss to crops, property and cattle is Rs.70.72 crores. In 1978, which was a year of very heavy floods, as much as 73.36 lakh hectares and 23 per cent population of the State was affected, and the loss to crops property and cattle was estimated at about Rs.500 crores. This magnitude of the problem of flood control, therefore, merits special attention and adequate allocation of resources.

A high priority has been accorded to this sector in the 1980-85 Plan.

37. Up to the year 1954, there were isolated flood control works and the flood problem was dealt in an *ad hoc* way and often by agencies other than the Government. The flood control activity was not based on any scientific planning in the State as also in the country. To tackle this problem, in a rational and scientific manner, flood control organisations were set up both at the Centre and in the States after the devastating floods of 1954. At the State level, a State Flood Control Board assisted by a Technical Advisory Committee was set up. The flood control activity in the State after 1954 was thus geared to some extent in the right direction. During the Plan periods, a few flood protection works have been executed in the State but these were quite inadequate considering the flood damages. The allocation of funds in the Plan periods in U. P. vis-a-vis other States are given below :

State	Expenditure in crores of Rupees							Total
	Ist Plan	2nd Plan	3rd Plan	1966-69	IVth Plan	Vth Plan 1974-78		
Uttar Pradesh	2.76	7.99	6.20	3.11	21.80	37.69	79.55	
Bihar	5.16	19.88	13.65	5.31	23.62	60.30	127.92	
West Bengal	1.64	2.31	4.33	2.75	22.65	55.17	88.85	
Punjab	0.11	3.89	20.60	5.97	12.81	22.30	65.68	
Haryana	..	1.34	8.33	3.71	3.83	7.55	24.06	

38. The damages and areas benefitted in Uttar Pradesh vis-a-vis other States are tabulated below :-

State	Maximum area affected in lakh hectares	Area benefitted in lakh hec. up to 1978	Percentage of area benefitted to area affected
Uttar Pradesh	73.36	9.16	12.50
Bihar	42.60	15.66	37.00
West Bengal	26.5	10.01	37.00
Punjab	37.00	24.07	65.00
Haryana	23.50	10.95	46.00



39. The above table clearly reveal that although the State is the worst affected State but percentage of area benefitted to area affected is the lowest in the State. The flood control activity in Uttar Pradesh has to be greatly accelerated to mitigate flood damages and human misery.

40. *Proposed outlay for Sixth plan*—The growth of expenditure on flood works during the Fifth Plan period 1974–78 and subsequent two years 1978–80 is indicated below :

Year	Expenditure in crores of Rupees
1974-75	5.37
1975-76	6.51
1976-77	12.81
1977-78	13.00
1978-79	19.70
1979-80	20.91

41. The above figures indicate a step up from Rs.5.37 crores in 1974-75 to Rs.20.91 crores in 1979-80 which gives an average annual set-up of 35 per cent. The outlay for the year 1980-81 has already been fixed at Rs.22.50 crores. Assuming the same rate of growth as achieved in the last six years 1974–80, the outlay for the Sixth Plan period (1980–85) works out to Rs.230.00 crores. The question of providing this Plan outlay was considered by the Working Group constituted by Government of India for this purpose and they have recommended a Plan outlay of Rs.218.00 crores for the Sixth Plan.

42. The proposed year-wise break-up of this outlay is as follows :

Year	Outlay in Rupees crores
1980-81	22.50
1981-82	27.00
1982-83	40.00
1983-84	56.00
1984-85	72.50
Total	218.00

43. *Strategy for the Sixth Plan*—As the occurrence of floods in the rivers is a natural phenomenon, it is recognised that absolute control of protection from floods can seldom be achieved and even if it is technically feasible, it may not be economically justifiable. However, the damages due to floods and the human misery caused on this account can be considerably mitigated by judicious combination of various methods.

44. *Comprehensive/Master Plans for flood control*—Various attempts have been made to prepare comprehensive river basin Plans. The Ganga basin has international and inter-state aspects. The Ganga Flood Control Commission, which was asked to prepare comprehensive plan of the Ganga basin, prepared an outline Plan in 1973, which involved an outlay of Rs.300 crores for Uttar Pradesh. Further detailed Plan for Ghaghra and Gomti basins were prepared by Ganga Flood Control Commission 1975 and 1977 which were in some-what greater detail. However these plans were mere outline Plans and were not based on investigation and surveys. Exercises to prepare comprehensive Plans have also been carried out in the State Irrigation Department from time to time. As the preparation of comprehensive/master Plan will take a long time on account of various reasons enumerated above, it will be advisable, in the mean time, to prepare 5 to 7 years' action Plans which should be prepared carefully so as to fit in the Master Plan. An action Plan which integrates watershed management on the upstream with Engineering Works on the downstream as well as necessary, administrative measures to safeguard against damages and to provide relief has already been finalised by the Working Group constituted by the Government of India.

45. *Engineering Methods*—The main element of flood control as far as Engineering Methods are concerned, are construction of reservoirs on rivers to moderate floods, construction of marginal embankments (or levels) to contain the flood within the embankments, river improvement works to increase their discharge carrying capacities, flood-ways and diversion works, construction of drain to improve the drainage of flood affected areas, anti-erosion and town protection works.

46. The administrative measures are provision of proper flood warning and flood forecasting arrangements, flood plain zoning regulations and management, flood fighting evacuation and relief measures.

47. *Review and Expeditionary completion of on-going Schemes*—The flood protection work initiated in U. P. include the various engineering, administrative measures enumerated above. These are proposed to be augmented during the Sixth Plan.

48. A few schemes taken up in the previous plan periods have yet to be completed. It is absolutely necessary that all the on-going schemes are reviewed in detail to determine which of the schemes are still considered viable taking into account changed conditions and present day estimated costs. This has now been done by the State Irrigation Department and it has been planned to complete all such schemes by 1984-85 with the exception of "Hulwana Diversion Drain".

49. *Stabilisation of existing benefits*—Since some of the works taken up earlier were on the basis of inadequate hydrological data, their inadequency has been proved in recent floods. It is, therefore, necessary to stabilise the benefits in the areas already protected by raising and strengthening some of the embankments including extension, provision of proper drainage facilities etc. All the major existing works are required to be criti-

cally examined and concrete proposals framed with factual data of specific schemes to stabilise existing benefits.

50. A proper maintenance of flood control and drainage works is of utmost importance in safeguarding the works and consequently ensuring the promised protection to the people.

51. *Surveys and Investigations*—Although some work of surveys and investigations is being done by the available staff for formulation of individual projects, no programme of surveys and investigations for preparation of comprehensive plans could be made for want of proper infra-structure. Apart from the data for preparation of river basin plans, it is also necessary to collect hydrological data on scientific basis as well as data on the river characteristics including regular L-section and Cross-sections at flood intervals, study of changes in river course, etc., for future planning as well as for taking timely steps for safeguarding existing works. Scientific collection and analysis of hydrological and river data is in the larger national interest and adequate attention could not be given by the State in this regard in the past. It will be necessary to strengthen the organisation and provision of funds for this purpose has been made in the plan.

52. *Plan Provision*—The plan for 1980-85 for flood control and drainage schemes envisages the following provisions :—

(Rupees in crores)				
Serial no.	Name of works	Pre Sixth Plan schemes	Sixth Plan schemes	Total
1	2	3	4	5
1	Embankments Schemes	19.09	52.49	71.58
2	Drainage Schemes	22.12	46.08	68.20
3	Town Protection Schemes	2.81	15.57	18.38
4	Anti Erosion Schemes	6.51	28.33	34.84
5	Other Reservoir Schemes	..	8.00	8.00
6	Disaster Preparedness	..	1.00	1.00
7	Flood Forecasting	..	2.00	2.00
8	Flood Plain Regulations	..	1.00	1.00
9	Flood Proof Shelters	..	1.00	1.00
10	Emergent and Unforeseen Schemes	..	5.00	5.00
11	Hydrological Analysis	..	1.00	1.00
12	Survey and Investigation of Schemes	..	4.00	4.00
13	Preparation of Master Plan Monitoring, Evaluation etc.	..	2.00	2.00
	Total	50.53	167.47	218.00

53. This plan envisages protection to an area of about 7.25 lakh hectares.

54. In physical terms, the works executed till 1979-80 and proposed during the Sixth Plan 1980-85, are as follows :

Serial no.	Item	Unit	Constructed up to end of Fifth Plan (1977-78)	Constructed during 1978-79 and 1979-80	Sixth Plan 1980-85 (Target)
1	2	3	4	5	6
1	Length of Embankments .. ..	Kms.	1174.19	215	1,200
2	Town Protection Works .. ..	Nos.	53	5	10
3	Raising of Villages .. ..	Nos.	4,500	..	..
4	Length of drainage channels .. ..	Kms.	11953.52	480	2,800
5	Area to be benefited .. ..	Lakh hectares	9.155	2.40	7.25

55. *Organisation*—This plan includes a large number of schemes which though named have not yet been investigated for want of proper infra-structure. To implement a plan of Rs.218 crores, proper organisational set up will have to be created. At present only one and half circles are doing investigation of floods schemes and five circles are executing as well as investigating small schemes. The result is that investigation of flood schemes as well their execution is not possible on a large scale.

56. Uttar Pradesh has many river basins viz. Ganga, Yamuna, Ramganga, Gomti, Ghaghra, Rapti, Gandak. For comprehensive planning of these river basins it is essential to set up proper organisation for each River Basin. It is proposed to augment the existing organisation for survey and investigation during the plan period.

57. The organisation for flood control has to match the plan envisaged above, and it has to be geared up.

### (3) POWER

58. Power shortages in the State have made it clear that the State's economy

would remain severely handicapped unless adequate and uninterrupted supply of power is ensured. There is a rapid increase in demand for power on account of acceleration in the rate of development in the various fields of activities. In order to reduce relative backwardness of the State, by increasing productivity under agriculture as well as in industry, the State has not only to overcome the present shortage of power but also to meet the future demand keeping in view the size of the State and growing expectations of the people.

59. Before the commencement of the Planning era, the State had an installed capacity of 178.54 MW which increased to 370.15 MW at the end of Second Plan. Thereafter, concentrated efforts were made by U. P. to accelerate the capacity for power generation and 539.97 MW was added during the Third Plan. During the three Annual Plans (1966-69), further a net capacity of 399.89 MW, including 125 MW from Renuagar, was created. During the Fourth Plan, a net capacity of 363.73 MW was added bringing the total installed capacity to 1,673.74 MW. The additions during the period 1974-79 were almost as much as the total installed

capacity up to the commencement of that period, and another 1,518 MW capacity was created.\* By the commissioning of another unit at Obra, another 200 MW capacity was added during 1979-80 bringing the

total installed capacity of the State at the commencement of the Sixth Plan to 3378.95 MW. Table below gives Plan-wise details of additions in the installed capacity :

*Installed Capacity added in various Plans*

(Megawatt)

Period ending	Additions during the plan period	Cumulative at the end of Plan period**
1	2	3
Pre-Plan .. .. .	.. .. .	178.54
First Plan .. .. .	109.33	287.87
Second Plan .. .. .	82.28	370.15
Third Plan .. .. .	539.97	910.12
Three Annual Plans (1966-69) .. .. .	438.99	1310.01
Fourth Plan .. .. .	437.25	1673.74
Fifth Plan (1974-78) .. .. .	1318.00	2982.35
1978-79 .. .. .	200.00	3186.95
1979-80 .. .. .	200.00	3378.95

60. The total installed capacity in the State at the beginning of the First Plan was 178.54 MW. The total installed capacity of utilities increased to 2857 MW at the end of 1977-78, giving an average annual growth rate of 59 per cent against the all-India average of 51 per cent†. In terms of percentage increase Orissa (684), Haryana (334), Assam (201), Himachal Pradesh (180), Kerala (114), Madhya Pradesh (108), Andhra Pradesh (95), Jammu and Kashmir (84), Rajasthan (82), Punjab (80), and Bihar (70) were

ahead of this State. Thus among 17 States, this State stood 12th in this sphere. The installed capacity on *per capita* basis works out to 29 Watts as against 38 Watts at all-India level.

61. In the year 1978-79 Uttar Pradesh had an installed capacity of 3062 MW which was 13.5 per cent of the total all-India installed capacity of 22,682 MW for utilities. The inadequacy of power generation in a State of the size and population of Uttar Pradesh becomes obvious from the

\*Project-wise details in Annexure-V.

\*\*After taking retirement into account.

†Annexure-VI.

fact that at the end of 1978-79 its *per capita* power consumption was only 88.56 Kwh as against 131.34 Kwh. for the country as a whole.\* Amongst the 17 larger States, U. P. occupied the 13th position. It was behind Punjab (307.61 Kwh.), Gujarat (230.29 Kwh.), Maharashtra (227.51 Kwh.), Haryana (212.03 Kwh.), Tamil Nadu (184.55 Kwh.), Karnataka (150.68 Kwh.), West Bengal (122.23 Kwh.), Orissa (117.98 Kwh.), Kerala (100.81 Kwh.), Madhya Pradesh (95.89 Kwh.), Rajasthan (93.48 Kwh) and Andhra Pradesh (90.97 Kwh.). It is thus clear that the four most developed States have more than double consumption of electricity *per capita* than U.P. Drastic and effective measures are essential to improve electricity supply position in this State so as to remove a major constraint to its development. Without rectifying the power availability situation it would be futile to expect any reduction in inter-State disparities and regional imbalances.

62. In this connection it would be essential that new projects of the State pending with CEA and Planning Commission are cleared immediately, and adequate finances and materials are allocated for their speedy and timely execution. However, State resources alone cannot fully provide for the deficiencies in the situation, and a more active Central energy generation programme would have to supplement the State's efforts. There is a strong case for more power generation projects to be taken up in the Central sector for meeting the demand of this State.

63. *Objectives of U. P.'s power programme for the Sixth Plan*—Plan proposals have been formulated keeping in view the following objectives :

(i) Creation of additional capacity for power generation should be stepped up. This has to be achieved by speeding up implementation of ongoing schemes and undertaking new schemes keeping in view the future demand. Efforts will be made to complete some of the new schemes during the Plan period itself.

(ii) Keeping in view the forecast of power demand, survey and investigation of new hydel projects have to be undertaken very intensively for choice of projects which can be implemented in future Plans. Similarly, start of construction work on projects which would fructify during the Seventh Plan will be made.

(iii) Strengthening of transmission and distribution system for proper power management and reduction of line losses.

(iv) Taking steps for improvement in the plant load factor in the thermal units.

(v) Specific attention will be paid to monitoring of schemes to avoid slippages. Greater stress will be laid on proper organisation development, materials management, man management to improve both the implementation of new projects and the performance of the existing units.

(vi) Even at the end of the Sixth Plan, U. P. would continue to face power shortage necessitating resort to planned system of power cuts and rostering with a view to optimise the use of power and to minimise the economic loss to the State.

(vii) The power sector programmes would be dove-tailed with other sector provisions with a view to provide the necessary infra-structure and support for implementation of various special schemes and schemes for the benefit of the backward and weaker sections. Stress will be laid on rural electrification including electrification of Harijan bastis.

(viii) In view of the gap in power supplies, an objective is to ensure that greater share of power is obtained through inter-State joint projects and from various generation schemes being taken up in the Central sector.

64. *Forecast of power demand*—The load forecast provides a crucial link between planning for the power sector and planning for the rest of the economy. It also provides the essential frame of reference for assessing the investment resources that should be allocated to the power sector. It is, therefore, important that load forecast is realistic and is consistent with the plan for development of other sectors of the economy. Central Electricity Authority, Government of India conducts Annual Electric Power Surveys for realistic assessment of power requirements in each State of the country. The latest in the series of these surveys is the Eleventh Annual Electric Power Survey (XI-APS)\* which has recently been concluded and its assessments have been communicated.

65. Year-wise forecast in XI-APS\*\* has been made upto 1983-84 on the basis of micro study of various sectors using electricity. In case of large industries having a demand of 1 MW or more individual analysis of each industry has been made. The study has correlated their production with the computed energy requirements, specially in case of core industries such as steel, aluminium, fertilizer, caustic soda, etc. For power requirement in respect of irrigation and agricultural loads the programme of minor irrigation and State tubewells as indicated by Irrigation Department has been adopted, alongwith the programme of energisation of private tubewells/pump-sets envisaged by the State Electricity Board under rural electrifications schemes. Requirement for railway traction has been incorporated on the basis of railways electrification programme in Uttar Pradesh indicated by Indian Railways. For the rest of categories like small and medium industries (less than 1 MW), domestic and commercial, etc., projections have been made on the basis of past trends.

66. The XI-APS Committee has already indicated its projections upto 1983-84 based on micro-approach, but has not indicated its projections beyond 1983-84 which are to be worked out with micro-approach.

67. Projections upto 1983-84 adopted here are as finalised by XI-APS Committee. Projections beyond 1983-84 and upto 1989-90 have been worked out from XI-APS projections by tapering down the growth rate for 1979-84 by 1.25 per cent per annum from 13.70 per cent in 1979-84 to 12.50 per cent for the period 1984-90. Thus, following demand projections (inclusive of Renusagar) have been adopted.

Year	Energy Requirement (MU)	Peak Load (MW)
1980-81	15,562	3,000
1981-82	17,586	3,400
1982-83	19,788	3,824
1983-84	21,810	4,234
1984-85	24,500	4,750
1985-86	27,500	5,340
1986-87	31,000	6,030
1987-88	34,800	6,780
1988-89	39,200	7,640
1989-90	4,400	8,600

68. In the above projections, the average growth rate during 1979-84 works out to 15 per cent for industries having a demand of less than 1 MW and 10 per cent for industries having a demand of 1 MW and above (excluding Hindalco). This gives a growth rate of 13 per cent for the industries sector. Irrigation and de-watering are provided for at an average growth rate of 16 per cent, domestic and commercial of 12 per cent, and railway traction of 8 per cent.

69. As regards share of different categories in the total electricity consumption in the State, it increases from 21 per cent in 1979-80 to 23 per cent in 1984-85 in respect of industries having a demand of less than 1 MW, indicating growth rate

\*Annexure-VIII

\*\*Annexure-IX

higher than the average growth. The share of industries with 1 MW and above (excluding Hindalco) declines from 23 per cent to 20 per cent. However, the overall share of industries taken together (excluding Hindalco) remains around 43 per cent indicative of steady trend. Share of Hindalco reduces from 14.91 per cent to 12.38 per cent, with a fixed consumption from 1983-84 onwards. Share of irrigation and dewatering increases from 24.56 per cent to 28.39 per cent. The domestic and commercial category remains around 10 per cent indicating stabilised growth in this category.

70. *Basic assumptions for generation programme formulation*—The power generation programme for the State during the Sixth Five Year Plan for the period from 1980-81 to 1984-85 has been worked out on the basis of tentative load forecast as per Eleventh Annual Power Survey, carried out by the Central Electricity Authority, Government of India, in the years 1979 and 1980. While working out the requirement of power generation for meeting the power/energy demands as envisaged in Eleventh Annual Power Survey (XI-APS), the following criteria have been adopted :

(i) The peaking capability of thermal units has been taken as 65.5 per cent of the stabilised capacity on the basis of standard practice followed by CEA/Planning Commission. The factor of 65.5 per cent was obtained as a product  $0.98 \times 0.81 \times 0.815 = 0.655$ , on taking the following margins :—

- |  |          |
|--|----------|
| (a) Capital maintenance and Planned maintenance of boiler. | 2%       |
| (b) Partial outage and consumption in auxiliaries.         | 19%      |
| (c) Forced outage  | .. 18.5% |

(ii) Past experience shows that full peaking capability from new thermal units is not available for a few months after commissioning. The CEA has adopted the following criteria for working out stabilised

capacity in the month of December (peak demand month) from new thermal units :—

- |   |         |
|---|---------|
| (a) For First 3 months after commissioning                    | .. Nil  |
| (b) For remaining 9 months of the first year of commissioning | .. 50%  |
| (c) Second year, and onwards                                  | .. 100% |

(iii) For working out peaking capability of existing thermal units, CEA has taken into account the derated capacity.

(iv) The CEA have adopted the following criteria in the XI APS for estimating generation from newly commissioned thermal/nuclear units:

- |  |                        |
|--|------------------------|
| (a) During first year of commissioning.              | 2500 kwh/<br>kw/year.  |
| (b) During second year of commissioning              | 4,000 kwh/<br>kw/year. |
| (c) During third year of commissioning.              | 5,000 kwh/<br>kw/year. |
| (d) During fourth year of commissioning and onwards. | 5,350 kwh/<br>kw/year. |

(v) The peaking capability of nuclear turbine units has been adopted at 85 per cent of stabilised capacity in December.

(vi) Peaking capability from the run-of-river hydro schemes has been taken as 87 per cent of power available on the basis of water availability under low head conditions (which is generally the month of December), as per guidelines of CEA.

(vii) As per the past experience, average energy generation from various hydro schemes in the State over the last ten years from 1968-69 to 1977-78 works out to about 86 per cent of their design generation figures. However, the actual average generation from Rihand reservoir alone over the above period works out 85 per cent of the design figure. Accordingly, the energy availability from hydro units has been assumed at 85 per cent of their design figure in the present exercise.

(viii) The energy consumption in the auxiliaries has been assumed as follows :—

- (a) Hydro 0.5%  
(b) Thermal/nuclear 10.0%

(ix) The CEA have in the XI APS adopted a plant retirement @ 0.5 per cent of the capacity of both hydro and thermal units available. The same criterion has been followed in the present exercise.

71. Power position during the Sixth Five Year Plan 1980—85—As per XI APS,

peak load and energy requirement at the end of the Sixth Plan i.e. in the year 1984-85 would be 4,750 MW and 24,500 million units respectively.

72. The installed capacity of the State at the end of 1979-80 was 3378.95 MW—1068.35 MW hydro and 2310.60 MW thermal\*. During the Sixth Five Year Plan 1980—85, additional installed capacity of 1934 MW would be available from the following on-going scheme.\*\*

*Physical Benefits from on-going schemes.*

Name of the Scheme	Installed capacity involved	Benefits (MW)		
		To end of 1979-80	During 1980—85	Beyond 1984-85
1	2	3	4	5
<i>A—Thermal</i>				
1. Obra Extension Stage II and III ..	5×200	600	400	..
2. Parichha .. .. .	2×110	..	220	..
3. Anpara 'A' .. .. .	3×210	..	630	..
4. Tanda .. .. .	4×110	..	330	110
Sub-Total (A) Thermal	2290	600	1580	110
<i>B—Hydel</i>				
1. Garhwal-Rishikesh-Chilla ..	4×36	..	144	..
2. Yamuna Stage-II Part -II (Khodri) ..	4×30	..	120	..
3. Maneri Bhali Stage-I ..	3×30	..	90	..
Sub-Total (B) Hydel ..	354	..	354	..
Total (A+B) ..	2644	600	1934	110

Besides, according to present indications, generation from 700 MW capacity would be available to Uttar Pradesh from Central projects of Singrauli Super Thermal (600 MW) and Atomic Power

Station at Narora (100 MW). The share of the State from Central projects has to be increased significantly to meet the increased power requirements and keeping in view backwardness of the State.

\*Annexure-X.

\*\*Salient features in Annexure-XI.



73. Considering the aforesaid existing and continuing schemes, the peaking capa-

bility and energy availability has been briefly summarised below :—

*Power demand and supply during Sixth Plan*

Item	1979-80	1980-81 Target	1980-81 Anticipated	1981-82	1984-85
1	2	3	4	5	6
<i>I—Peaking Capability (MW)</i>					
1. Peak load .. .. .	2697	3000	3000	3400	4750
2. Available peaking capability from existing/ continuing schemes	2324	2443	2273	2459	3464
3. Net deficit (—) or surplus (+) ..	(—)373	(—)557	(—)727	(—)1941	(—)1286
<i>II—Energy availability (MKWH)</i>					
1. Energy requirement	14935	15562	15562	17586	24500
2. Energy availability from existing/continuing schemes	10815	11814	10977	14602	22996
3. Net deficit (—) or surplus (+) ..	(—)4120	(—)3748	(—)4585	(—)2984	(—)1504

74. *Benefits from new schemes during the plan period 1980—85*—Out of several thermal and hydro schemes\* submitted to Government of India for sanction, there are two such schemes, the work on which is being started and whose benefits are expected to be available during the Plan period 1980—85. These schemes are (i) Unchahar Thermal Power Station with an installed capacity of 2×210 MW and (ii) Khara Hydel Scheme with an installed capacity of 3×27 MW. Power and energy benefits from both schemes are expected to be available in the year 1984-85 and onwards.

75. The above power position reveals that despite the aforesaid massive thermal development programme, there would be both peak power and energy shortages throughout the Plan period which will have to be met by peak time restrictions and imports from the neighbouring States.

76. *Benefits from new schemes during Plan period 1985—90*—The XI APS forecasts a peak load of 8600 MW and energy requirement of 44000 million units by the end of 1989—90.

77. The State would have to depend mainly on additional thermal generation during 1980—85, so as to achieve quick benefits. This approach would result in a somewhat non-optimal development resulting in a proportionately higher thermal installation as compared to hydro-capacity. It is anticipated that the ratio of hydro to thermal capability in the system would be reduced from 32 : 68 in 1979-80 to 26.74 by end of the year 1984-85.

78. It is a well recognised technical requirement that for optimum operation of power system a hydro thermal capability ratio around 40 : 60 is desirable. Accordingly, it would be desirable to achieve this ratio of hydro-thermal mix in generating capacity in the State during the Seventh Plan period 1985—90. For this purpose, a number of new hydel schemes are proposed to be started during the Plan period 1980—85. Major hydro schemes have a long gestation period and normally take 7 to 13 years for commissioning from the date of commencement. Accordingly, in order that as much hydro generation capacity as possible is available in time to meet the power demand during 1985—90, construction work of several new hydro

schemes would have to be started as early as possible during Plan period 1980-85.

79. An exercise carried out to work out the requirement of new hydro and thermal generation capacity to meet the peak

demands and energy requirements, during 1985-90 indicates that the following schemes would have to be taken up for construction during the Sixth Plan period 1980-85, for commissioning during the Plan period 1985-90 and thereafter :

*Physical benefits during Seventh Plan (1985-90)*

						(MW)
Name of Scheme	Installed capacity involved	Year of commencement	Benefits during Plan period 1985-90 (MW)	Commissioning schedule	Remarks	
<b>A—CONTINUING SCHEMES</b>						
<i>(a) Thermal</i>						
1. Tanda	.. 4x110	1977-78	110	6/85	3 x 110 M W commissioning anticipated during 1980-85.	
<i>(b) Hydro</i>						
1. Lakhwar-Vyasi	.. 3x100 +2x60	1976-77	420	1987-88	..	
2. Vishnu Prayag	.. 4x65.5	1978-79	262	1988-89	..	
3. Tehri Dam	.. 4x250	1976-77	1000	1988-89	..	
Sub-Total (A) : Continuing Schemes ..			1792			
<b>B—NEW SCHEMES</b>						
<i>(a) Thermal</i>						
1. Anpara 'B'	.. .. 2x500	1980-81	1000	1986-88	..	
2. Unchahar	.. .. 2x210	1980-81	..	1984-85	Benefit anticipated during 1980-85.	
3. Rosa	.. .. 3x210	1981-82	630	1986-88	..	
4. Jawaharpur	.. .. 3x210	1982-83	630	1987-89	..	
5. Anpara 'C'	.. .. 3x500	1983-84	1000	1988-91	1x500 MW commissioning anticipated during 1990-95.	
6. Dohrighat	.. .. 2x210	1982-83	420	1987-88	..	
7. Parichha Extn.	.. .. 2x210	1983-84	420	1988-89	..	

Name of Scheme	Installed capacity involved	Year of commencement	Benefits during Plan period 1935-90 (MW)	Commissioning schedule	Remarks
8. Narora	4×210	1984-85	420	1989-91	2×210 MW commissioning anticipated during 1990-95.
<i>(b) Hydro</i>					
1. Maneri Bhali-II	3×52	1978-79	156	1986-87	
2. Khara	3×27	1979-80	..	1984-85	Benefits anticipated during 1980-85
3. Pala Maneri	3×47.5	1980-81	142.5	1987-88	..
4. Srinagar	3×56	1981-82	168	1987-88	..
5. Loharinag Pala	3×94	1981-82	282	1989-90	..
6. Koteswar Dam	4×45	1981-82	180	1988-89	..
7. Kishau Dam	4×150	1981-82	..	1991-92	Benefits anticipated during 1990-95.
8. Other Hydel Schemes	200	1982-83	200	1988-89	..
Sub-Total (B): New Schemes			5648.5		
Total (A+B)			7440.5		

Presently it has been assumed that only 350 MW of installed capacity will also be available from the two Central Projects of Super Thermal at Singrauli (250 MW) and Atomic Power Station at Narora (100 MW).

80. Thus, total installed capacity in the State is anticipated to rise from 814 MW at the end of Plan period 1980-

85 to 13254 MW (4314 MW Hydro and 8940 MW Thermal) at the end of Plan period 1985-90. The benefits from Central sector projects will be in addition to this.

81. Considering these new schemes, the position of peaking capability and energy availability have been worked out for 1985-90, and is summarised below :

*Power demand and Supply during Seventh Plan*

Sl. no.	Item	1985-86	1986-87	1987-88	1988-89	1989-90
1	2	3	4	5	6	7
<i>I—Peaking capability (MW)</i>						
1.	Peak load	5340	6030	6780	7640	8600
2.	Available peaking capability including new schemes	4034	4788	5642	6757	8612
3.	Net deficit (—) or surplus (+)	(—)1306	(—)1242	(—)1138	(—)883	(+)12
<i>II—Energy availability (MU)</i>						
1.	Energy requirement	27500	31000	34800	39200	44000
2.	Energy availability including new schemes	25449	29176	33230	39105	47403
3.	Net deficit (—) or surplus (+)	(—)2051	(—)1824	(—)1570	(—)95	(+)3403

82. The above position reveals that the energy deficit of 7.5 per cent in the year 1985-86 is progressively reducing and will be almost wiped out in the year 1988-89, and that during the year 1989-90 there would be a surplus of about 7.7 per cent. However, as per latest instructions from Central Government, efforts have to be achieved about 10 per cent surplus. The requirements of the above programme are therefore fully justified.

83. The commissioning schedule of various new generation schemes at the time of project preparation and Plan formulation is usually taken on a fairly tight basis considering that all necessary inputs e.g., timely clearance of project estimate, ade-

quate and timely finances, timely delivery of plant, equipment and construction material, smooth working of construction activities (without any labour troubles etc.) would be available. However, in actual practice one or more of these factors would be found to disturb smooth working resulting in substantial delays in actual commissioning of power projects. As planning is done without any margin to take care of such delays, these ultimately appear as inevitable power shortages.

84. A comparison of the targetted and achieved generation capacities (net addition) during various Plan periods shows the following over-all picture :

*Installed Capacity in Public sector—Target and Achievement*

(MW)

Plan period	Target	Achievement	Percentage Achievement
1	2	3	4
(i) Second Plan (1956—61)	395.00	74.45	18.8
(ii) Third Plan (1961—66)	763.42	539.47	70.7
(iii) Three Annual Plans (1966—69)	392.25	313.99	80.0
(iv) Fourth Plan (1969—74)	1169.75	393.48	33.6
(v) Fifth Plan (1974—78)	2009.60	1513.21	75.3
(vi) Annual Plan, 1978-79			
(vii) Annual Plan, 1979-80	236.00	192.00	81.4

If the slippage factor is also taken into account the net deficit in peaking capability and energy availability during the Plan periods, 1980—85 and 1985—90 will increase further considerably.

85. *Optimisation of usage of energy*—In spite of large investments made in the power sector, both in the earlier Plans as well as those proposed in the Sixth Plan, U. P. will continue to face power shortages throughout the Plan period. The expected short-fall by the end of 1984-85 would be 1286 MW in peaking and 1504 MW in the energy generation at busbar. It is therefore necessary to optimise use of available energy with a view to maximise its benefit to the State's economy, in the face of shortages. It would be necessary to con-

sciously plan in advance for both inter and intra-sectoral allocation of available power consonance with overall growth objectives. While assuming for this purpose, the incremental benefits of energy in its various applications, several peculiarities of individual sectors will have to be kept in view. The agricultural and rural sector fed from rural feeders receives energy not only for lighting of villages, small towns, Harijan bastis, running tubewells and pump sets, but also for rural industries, cold storages, etc. While power demand for agricultural operations has marked seasonal characteristics, demand remains constant throughout the year for lighting and rural industries.

86. For expansion of the industrial sector provision of power is essential.

Incentives may of exemption from power cuts for new units have to be considered in this context. At the same time, certain industries are basic for growth of other sectors, for example, cement, steel, aluminium, fertilizers, etc. Other industries have a direct impact on the cost index, e.g. sugar, vanaspati, etc. Certain towns have clusters of 'mini-industries'. The rostering of power to urban areas affects various industries in different ways. While planning the consumption of available energy, all these factors have to be carefully studied keeping in view, the overall objectives of the Plan.

87. It is clear that in spite of large investments in the power sector, U. P. would face a peaking capacity shortage of 27.10 per cent in 1984-85. In this year, the peaking capacity overall would be 3464 MW against an unrestricted demand estimate of 4750 MW. If slippages take place, or full funding of proposed projects is not ensured, the shortage would adversely affect the development of this backward State. The situation may be aggravated by management problems, and other unforeseen contingencies. In the light of these circumstances, it is absolutely necessary that a number of Central generation projects are taken up in U. P. Additionally, U. P.'s share in the various regional projects already cleared should be fixed keeping in view not only the power shortages in the State, but also its developmental requirements. A figure of 700 MW has been taken as U. P.'s share from the Singrauli Super Thermal Power Project and Narora Atomic Project for the purpose of Plan formulation. This share is totally inadequate to meet the minimum requirements of the State. The basis of U. P.'s power share in various Central projects needs re-examination, taking into account the need to assist in accelerating the pace of its development. Power sharing should be used as a means of reducing inter-regional imbalances, judged with performance to general indicators like *per capita* income, and specific indicators like consumption of electricity by various sectors (after excluding distorting elements like power intensive industries). Power is a necessary input in the process of economic growth and unless adequate power availability is

ensured for poorer States the inequalities would only increase.

88. *Transmission and Distribution*—Development of Transmission and Distribution lines in a power system is as important as generation. Proper utilisation of the power which is generated is possible only if there exists a transmission system capable of transmitting power to consumption centres efficiently and reliably. A poor and inefficient transmission system which does not keep pace with the changing spatial and functional pattern of demands for power could not only cause very high transmission losses but also prevent balanced regional development. Therefore, great importance is being laid on the transmission and distribution programme. One of the major objectives of the programme proposed during the Plan period is to reduce the line losses to 18 per cent.

89. Before the planning era, the State had a network of transmission lines of only 66 kV. and below. There were only 473 Ckt. Kms. lines of 66 kV. and 1,426 Ckt. Kms. of secondary lines. During the First Plan, transmission lines of 132 kV. were introduced. At the end of the Second Plan, there were 346 Ckt. Kms. lines of 132 kV., 1654 Ckt. Kms. of 66 kV. and 3,462 Kms. of secondary lines. During the Third Plan period 1807 Ckt. Kms. of 132 kV., 460 Ckt. Kms. of 66 kV. and 3274 Ckt. Kms. of secondary lines were commissioned. The programme of higher voltage transmission lines was continued and 220 kV. transmission lines are taken up by the State during the three Annual Plans (1966-69). At the end of the Fourth Plan, the State had 2,327 Ckt. Kms. of 220 kV. lines, 4,904 Ckt. Kms. lines of 132 kV., 2,789 Ckt. Kms. lines of 66 kV. and 16,703 Ckt. Kms. of secondary lines. During the Fifth Plan of U. P. was the first State in India to commission the 400 kV. lines.

90. During the period 1974-79 U. P. added 375 Ckt. Kms. of 400kV., 662 Ckt. Kms. of 220 kV, 1,832 Ckt. Kms. for 132 kV. 209 Ckt. Kms. of 66 kV. and 2462 Ckt. Kms. of secondary lines. During 1979-80, another 387 Ckt. Km. of 400 kV. 221.2 Ckt. Kms. of 220 kV., 745.3 Ckt. Kms. of 132 kV. 22.23 Ckt. Kms. of 66 kV. and 445 Ckt. Kms. of secondary lines were added.\*

91. While planning the power transmission system of U. P., a unique feature of the State has to be kept in view. The State's major thermal power generation is concentrated in the south-east on account of the proximity of Singrauli coal fields, while the major hydel power generation is concentrated in the north-west on account of large hydro potential in the Himalayas. On the other hand, the consumption centres are spread all over the State, with high con-

centration in the Central and Western parts. Thus, the peculiar configuration of generation and consumption centres requires a strong transmission system with a view to enable bulk transmission of power over long distances.

92. The annual transmission system development programme for the Sixth Plan is as follows :

(Ckt. Kms.)

Line	Sixth Plan (1980-85) Programme					
	1980-81	1981-82	1982-83	1983-84	1984-85	Total
1	2	3	4	5	6	7
400 kV .. .. .	395	342	..	385	..	1122
220 kV .. .. .	201	696	1101	590*	850**	3438
132 kV .. .. .	800	780	383	836*	844*	3643
Total .. .. .	1396	1818	1484	1811	1694	8203

NOTES 1. 400 kV lines above do not include 1400 Ckt. Kms. of 400 kV SC lines approved for NTPC for construction in U. P. during VI-Plan.

2. Each of the three figures marked with single asterics includes 500 Km. unidentified grid and radial lines.

3. Figure of 850 marked with double asterics consists of 500 Km. unidentified grid and radial lines PLUS 350 Kms. identified but unapproved evacuation lines.

4. All other lines and associated sub-stations have already been approved by Govt. of India.

93. Besides, completion of the above lines and associated sub-stations by end of Sixth Plan, work will be in hand on a large number of lines and sub-stations which will be required during early Seventh Plan.

94. With the production and handling of larger chunks of power the transmission voltage levels are gradually stepping-up. 132 kV is rapidly being relegated to the status of a distribution voltage and is being replaced by 220 kV and 400 kV. It is already being felt that in near future even 400 kV. will not suffice to meet the requirement of evacuation from super thermal stations like Singrauli and Anpara being set-up in Uttar Pradesh near Singrauli coal fields. A proposal has already been submitted to Government of India for introducing 800 kV. Work on 800 kV. class system will commence during the Sixth Plan period.

95. There are several differences between transmission development and

generation development. These differences have a marked effect on the relative investments. Some important differences are indicated below :

(a) Generating schemes have long gestation periods while the corresponding transmission system is completed in less than half the time. Consequently the investment on generation begins much earlier than on corresponding transmission system.

(b) Price escalation of generating plant has been much more than of transmission and transformation equipment.

(c) Technological advancement provides much larger savings on transmission than on generation.

(d) Reliability of transmission system is much higher than that of generating units under Indian conditions. This results in lower availability of generating capacity and

reduced requirement of transmission system for a given installed capacity.

(e) Transmission system planned for feeding load centres is sufficiently strong and does not have to be supplemented with every stage on generation development.

96. It has been decided by Government of India to operate power systems on regional basis. Strong interconnection between adjoining States are therefore being provided. The following inter-State lines connecting U. P. with adjoining States already exist :—

Name of line	Length (Ckt Km)	Remarks
1	2	3
<b>220 kV</b>		
1. DC Muradnagar-Patparganj/Badarpur (Delhi)	79.3	Inter-State line for power exchange between UP. and Delhi.
2. SC Mughalsarai-Dehri (Bihar) ..	37	Inter-State line for power exchange between U. P. & Bihar, U. P. portion ready. Bihar portion under construction.
<b>132 kV</b>		
3. DC Mughalsarai-Karamnasa (Bihar) ..	76.7	Inter-State radial feeder for railway traction and Bihar.
4. DC Pipri-Amarkantak (Madhya Pradesh) ..	59.2	Inter-State line for power exchange between U.P. and Madhya Pradesh.
5. DC Pipri-Sonenagar (Bihar) .. ..	5.0	Inter-State line for power exchange between U. P. and Bihar.
6. SC Yamuna-Giri Bata (Himanchal Pradesh)	7.0	Inter-State line for power exchange between U.P. and Himachal Pradesh.
7. SC Mathura-Bharat-pur (Rajasthan) ..	40	Inter-State line for power exchange between U. P. and Rajasthan.

97. Following new inter-State lines will be constructed during the Sixth Plan.

Name of line	Length (Ckt K.m.)	Remarks
1	2	3
<b>400 kV</b>		
1. Muradnagar-Panipat (Haryana) (SC) ..	100	NTPC line for export of Singrauli power to Delhi, Punjab and Haryana. Under construction.
2. Panki-Jaipur (SC) .. .. .	500	NTPC line for export of Singrauli power to Rajasthan. Approved.
<b>220 kV</b>		
3. Harduaganj-Alwar SC (on DC Towers) ..	200	Inter-State line for power exchange between U. P. and Rajasthan. Approved.

98. *Secondary Transmission and Distribution Programmes (66 kV and above)*—The development of requisite net work of secondary transmission and distribution system is also very important. In order to provide effective and reliable power supply, the existence of suitable secondary

transmission and distribution net work is needed which should be commensurate with the requirement of better load management and proper consumer service. A good distribution system is also desirable for the purpose of providing proper supply voltage and lesser line losses.

99. The following physical programme is envisaged or the Sixth Five-Year Plan

Programme	For the Period		
	1980—85	1980-81	1981-82
1	2	3	4
(a) Construction of Lines (Ckt. Kms.)			
(i) 66 kV .. .. .	15	15	..
(ii) 33 kV .. .. .	5690	900	948
(iii) 11 kV .. .. .	13273	2500	2575
(iv) L. T. .. .. .	15397	2900	2987
(b) Increasing capacity of existing 66/11 kV Sub-stations ..	88	14	15
(c) Construction of new 33/11 kV Sub-stations:			
(1) Numbers .. .. .	375	61	64
(2) MVA .. .. .	1565	284	298
(d) Increasing capacity of existing 33/11kV Sub-stations (MVA) ..	841	136	140
(e) Installation of 11 kV shunt capacitors (MVAR) .. .. .	390	70	74

100. Transmission system has been developed to meet the requirement of power evacuation from generating stations and of feeding the various load centres, keeping in view load development in each area and the programme of power generation etc. Computer studies have been conducted on the computer at the IIT., Kanpur, to evolve an optimum system suitable from considerations of power flow, stability, reliability, etc.

101. Approvals have already been received from Government of India for transmission works required up to 1982-83. Additional proposals are being worked out for the remaining two years of the Sixth Plan—1983-84 and 1984-85.

102. The entire transmission and distribution programme is being proposed keeping in view as a main objective—the reduction of line losses. During the Plan period it is proposed to reduce line losses from 18.8 per cent to 18 per cent by the end of 1984-85.

103. Outlays proposed for the Sixth Plan period for transmission and distribution total, to Rs. 752.25 crores, details of which are as follows :

*Distribution of outlay under Transmission and Distribution during Sixth Plan.*

Programme	(Rs. in lakhs)	
	1980—85	Outlay proposed
400 kv works .. .. .	..	18,064
220 kv works .. .. .	..	20,606
132 kV works .. .. .	..	16,560
66 kV works .. .. .	..	200
33 kV works .. .. .	..	10,580
11 kV and LT works .. .. .	..	8585
Works for reduction of line losses .. .. .	..	630
<b>Total T and D .. .. .</b>	..	<b>75225</b>



104. *Rural Electrification Programme*—Uttar Pradesh is predominantly an agricultural State. Only 110 villages which had been electrified before the First Plan and 310 villages were electrified during that Plan. The concept of providing electricity to the interior parts of the State and energisation of State and private tube-wells started taking shape only in the Second Plan. During that Plan 662 villages were electrified and 2,137 private tube wells/pump-sets and 1618 State tube-wells were energised. With the establishment of a good distributional infra-structure rural electrification gained momentum during the Third Plan. During this Plan 4,773 villages, were electrified and 5,717 private tube-wells and 1,615 State tube-wells were energised. In the year 1964-65, a special programme for development of four eastern district of Deoria, Jaunpur, Ghazipur and Azamgarh was also taken up in accordance with the recommendation of the Patel Study Team. This programme was extended to two more districts viz., Basti and Ballia in 1965-66. During the Third Plan a number of small hill schemes were also taken up. Twelve micro generation schemes with a total capacity of 891 kW were taken up in the hilly region of the State. During the three Annual Plans (1966-69), 56,230 private tube-wells and pump-sets and 905 State tube-wells were energised and 7,071, villages were electrified.

105. In spite of substantial performance, rural electrification in U. P. remained below the national average. According to 1971 Census, there are 1,12,561 villages in the State. The level of electrification of villages in U. P. *vis-a-vis* other States as on March 31, 1979 was as below :

Name of State	Percentage level of village electrification (as on 31-3-1979)*
1	2
Haryana .. .. .	100.0
Punjab .. .. .	100.0
Tamil Nadu .. .. .	98.6
Kerala .. .. .	98.4

\*Annexure XIV

1	2
Jammu and Kashmir .. .. .	68.1
Maharashtra .. .. .	65.4
Karnataka .. .. .	58.7
Andhra Pradesh .. .. .	56.9
Gujarat .. .. .	51.8
Himachal Pradesh .. .. .	49.2
Rajasthan .. .. .	37.0
Orissa .. .. .	33.1
Uttar Pradesh .. .. .	32.2
West Bengal .. .. .	32.0
Bihar .. .. .	28.1
Madhya Pradesh .. .. .	27.1
Assam .. .. .	13.6
All India	40.5

106. The provision of electricity to all the villages of the State will require huge investment. Because of financial constraints it is not possible to plan for 100 per cent electrification of villages by 1984-85. The Plan programme proposes to electrify at least 60 per cent of the villages by the end of 1984-85.

107. *Electrification of Harijan bastis*—Removal of Socio Economic disparities and special attention to the problems of harijans and tribals, who are the weakest sections of the rural society is one of the important objectives of National Planning. In this context, electrification of Harijan Bastis has been awarded high priority. Electrification of bastis not only brings light to their doors but also affords to them other opportunities for development.

108. The following programme of rural electrification has been proposed during the Sixth Plan period :—

- |   |          |
|---|----------|
| (i) Energisation of private tubewells/pumps,ts. | 2,81,000 |
| (ii) Electrification of villages .. .. .        | 33,110   |
| (i) Elect.ification of Harijan Bastis .. .. .   | 21,261   |

109. Hill areas—The rural electrification programme in Hill areas of the State is also being given priority and 7344 villages and harijan bastis are further proposed to

be electrified. Proposed physical year-wise targets are given below :

Year	Electrification of village	Energisation of P.T.W.
(i) 1980-81	587	460
(ii) 1981-82	757	540
(iii) 1982-83	1660	620
(iv) 1983-84	1970	690
(v) 1984-85	2370	740
Total	7344	3,050

110. The proposed financial outlays for rural electrification during Sixth Plan are as below :—

	Rs. in Lakhs
(i) State Normal	6390
(ii) REC Normal	7054
(iii) MNP	7,800
Total	21,244

111. *Programme of survey and investigations*—The indications are that power demand in Uttar Pradesh during the period 1980–2000 AD. would be as shown below. These projections are based on tentative forecast of peak load of 8600 MW and energy requirement of 44000 MU for the year 1989-90, and load growth of 10.5 per cent per annum during the period 1990–95 and 8 per cent per annum during the period 1995–2000 :

Year	Peak Load Demand in MW	Energy Requirement in MU
1989-90	8,600	44,000
1994-95	14,100	73,000
1999-2000	20,800	1,07,000

112. It is clear from the above table that despite a conservative load growth rate adopted, peak load meeting capability

*Details of hydro projects under survey and investigation during 1980–85*

Serial no.	Name of Scheme	Proposed Capacity (MW)	Estimated Cost (Rs. in crores)	Period of investigation
1	2	3	4	5
<i>Yamuna Valley</i>				
1	Katapathar	40	24.00	1980–82
2	Kuwa Damta	71	50.00	
3	Tuini Palasu	50	30.00	
4	Barkot Kuwa	50	30.00	1980–85
5	Paber Tons	120	70.00	

Progress during previous Plan periods, Inter State achievement and year wise and programme-wise details for Sixth Plan in Annexures XV, XVI, XVII, and XVIII.

of the U. P. power system in 1999–2000 would have to be increased to more than two times of that anticipation in 1989-90.

113. *Steps for harnessing hydro potential*—In the report of the Working Group on Energy Policy issued in November, 1979, it has been recommended that hydro power development should receive high priority, and in this connection the Group have suggested the following measures :

(a) A time-bound programme for completing quickly the reassessment of hydel potential and the survey and investigation required to formulate hydel project.

(b) Recognising the long gestation of hydro power stations and the limited resources of the State in each Plan period, evolving a well-conceived scheme of financial and technical assistance from the Central Government to the State Government to encourage State Governments.

(c) Speedy resolution of inter-State disputes and evolving procedures for taking up large river valley projects jointly by the States and the Centre.

(d) Prompt and pragmatic examination of their impact on environment.

(e) Developing appropriate organisational structure to manage large hydel projects located in small States and remote areas.

114. In this context, U. P. State Electricity Board in co-ordination with Irrigation Department, have proposed to include the following hydro-electric projects, in the Five Year Plan 1980–85 for Survey and investigation during this period :

1	2	3	4	5
	<i>Ganga Valley</i>			
6	Koteshwar Dam .. .. .	180	108.00	1978—81
7	Srinagar .. .. .	168	100.00	1980—82
8	Bowala Nand Prayag .. .. .	130	75.00	} 1980—85
9	Utyasu Dam .. .. .	900	500.00	
10	Tapovan Vishnugad .. .. .	220	120.00	
11	Rishiganga .. .. .	89	50.00	
12	Bhaironghati .. .. .	900	500.00	
13	Kotli Bhel .. .. .	1040	600.00	
14	Bhuindar Ganga .. .. .	20	15.00	
	<i>Sarda Valley</i>			
15	Eastern Ramganga .. .. .	80	64.06	} 1980—85
16	Dhauliganga .. .. .	900	500.00	
17	Goriganga .. .. .	450	250.00	
	Total .. .. .	5408 MW		

115. Out of the above schemes the benefits in respect of Koteshwar Dam and Srinagar projects have been accounted in the Power Plan upto 1989-90. The benefits from Kishau Dam project (4×150 MW) and Tehri Dam Project Stage-II (4×250 MW) are also envisaged to accrue during the period 1990—2000. Tehri Stage-I (4×250 MW) is already under construction and is anticipated to be completed by 1988-89 provided adequate finding arrangements are ensured.

116. *Proposals or Thermal capacity required to meet power requirement during 1990—2000*—The hydel schemes under investigation together with Kishau and Tehri Stage-II would, in all, provide a peaking capability of about 4200 MW. This combined with the peaking capability

of 8600 MW anticipated to be available by end of 1989-90, would give a capability of about 12800 MW. The peaking capability required by year 2000 AD, would be 20800 MW, as noted earlier. Thus, considering benefits from hydel schemes there would be a deficit of about 8000 MW in the peaking capability by the year 2000. This deficit in the peaking capability is proposed to be met from new thermal projects. Thermal installation required to meet the capability of 8000 MW would be of the order of 12000 MW, considering a thermal peaking capability factor of 65.5 per cent. Presently, the following thermal schemes are under investigation, and project reports are expected to be finalised during the five year period 1980—85 :

*Details of thermal projects under survey and investigation during 1980—85*

Serial no.	Name of Scheme	Proposed capacity (MW)	Estimated cost (Rs. in Crores)	Period of Investigation
1	2	3	4	5
1	Narora .. .. .	4×210	480.00	} 1980-81
2	Allahabad .. .. .	5×210	600.00	
3	Ramganga .. .. .	4×210	480.00	} 1981-82
4	Bijnor/Garh .. .. .	5×210	600.00	
5	Gorakhpur .. .. .	3×210	360.00	
6	Singrauli region .. .. .	10×500	2750.00	1980—85
	Total .. .. .	9410 MW		

117. To undertake above proposed programme of Survey and Investigation an outlay of Rs.175 lakhs has been approved during 1980-81. During the period 1981-85, an outlay of Rs.825 lakhs has been proposed, i.e. a total outlay of Rs.1,000 lakhs during the Plan period.

118. *Special Component Plan for scheduled castes*—The only divisible pro-

gramme under power sector is that of rural electrification which is implemented on district level basis. In the Sixth Plan, an outlay of Rs.212.44 crores has been proposed which includes Rs.12.08 crores for programme which will benefit scheduled castes. With this investment it is proposed to electrify 21,261 harijan bastis besides energisation of private tubewells and pumping sets.

## ANMEXURE I

*Surface Water Potential of U. P.—River Basin-wise*

Serial no.	Name of Sub-basin	Run-off available in m.a.f.	Utilisable run-off in m.a.f.
1	2	3	4
1	Ganga	34.50	32.02
2	Yamuna (including Tons)	58.20	26.04
3	Ram Ganga	15.10	16.01
4	Gomti and Ghagra	99.55	77.00
5	Yamun and Sone Doab	11.45	8.73
6	Gandak and other left bank tributories upto international border	..	2.60
7	Chambal	19.70	7.92
8	Sone	34.30	1.25
	<b>Total</b>	272.81	163.66
	<b>Say</b>	270 m.a.f.	160 m.a.f.

## ANNEXURE II

*List of Inter-State and International Projects*

Serial no.	Name of Projets	Beneficiary States
1	2	3
<i>A. Multi-purpose Pojects :</i>		
1	Kishau Dam .. ..	Uttar Pradesh, Himanchal Pradesh.
2	Karnali Dam .. ..	Uttar Pradesh, Nepal.
3	Pancheshwar Dam .. ..	Uttar Pradesh, Nepal
4	Bhaloo bang Dam .. ..	Uttar Pradesh, Nepal
<i>B. Mojar Irrigation Projects :</i>		
5	Gandak Canal .. ..	Uttar Pradesh, Bihar, Nepal
6	Rajghat Dam .. ..	Uttar Pradesh, Madhya Pradesh
7	Okhla Barrage .. ..	Uttar Pradesh, Haryana, Rajasthan.
8	Rajewala Barrage .. ..	Uttar Pradesh, Haryana
9	Bansagar Dam .. ..	Uttar Pradesh, Madhya Pradesh, Bihar.
10	Urmil Dam .. ..	Uttar Pradesh, Madhya Pradesh.
11	Remodelling Bariyarpur Weir. .. ..	Uttar Pradesh, Madhya Pradesh.
12	Paisuni Diversion .. ..	Uttar Pradesh, Madhya Pradesh.

## ANNEXURE III

## Progress under earmarked projects

(Rupees in lakhs)  
(Potential in '000 Hectares)

Serial no.	Name of Projects	Latest estimate	Expenditure during 79-80	Expenditure up to the end of 79-80	Balance	Proposed	Phasing of outlays 1980-85					Ultimate Potential	Potential created up to 1979-80	Addi. Pot.	
							1980-81 (Appr.)	1981-82 (Prop.)	1982-83 (Prop.)	1983-84 (Prop.)	1984-85 (Prop.)			1980-81 Anticipated	1981-82 Proposed
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Tehri Dam														
	Irrigation .. 34,600	} 34,600	1310.48	2976.08	31623.92	14,100	1,600	2,000	2,500	3,500	4,500	270	..	..	..
	Power .. 48,130														
	Total .. 82,730														
2	Gandak Canal ..	8,555	741.19	6432.02	2122.98	1,700	600	600	500	..	..	308.39	307.37	1.02	
3	Sarda Sahayak ..	31,485	2099.94	30351.92	1133.08	4,335	2,375	1,800	160	..	..	1582.00	1069.00	200	224
4	Parallel Lower Ganga Canal.	4942.72	980.95	3276.47	1666.25	1,666	700	500	400	66	..	90.00	..	10	20
5	Rajghat—														
	(i) Dam U. P.	6,160	} 766.62	1540.47	6507.53	5,000	800	1,200	1,000	1,000	1,000	153.00	..	..	..
	(ii) Canal U.P.	1,888													
6	Okhla Barrage ..	2,537	292.24	1114.24	1422.89	1,450	450	500	400	100	..	..	..	..	..
7	Tajewala Barrage ..	622	..	..	622	400	10	90	100	100	100	..	..	..	..
8	Bansagar														
	(i) Dam U.P.	2,282	} 320	498.80	11283.20	3,350	10	300	700	600	500	204.00	..	..	..
	(ii) Feeder U.P.	2500													

## ANNEXURE IV

*Irrigation Schemes benefiting drought prone-areas*

Serial no.	Name of Schemes	Districts Benefited
1	2	3
1	Adwa Dam .. ..	Mirzapur, Allahabad
2	I/C of Narainpur Pump Canal .. ..	Varanasi, Mirzapur, Ghazipur.
3	Sone Pump Canal .. ..	Mirzapur
4	Raising Meja Dam .. ..	Mirzapur, Allahabad.
5	Rajghat Dam .. ..	Lalitpur, Jhansi, Jalaun, Hamirpur.
6	Shahzad Dam .. ..	Lalitpur
7	Kanhar Irrigation Schemes .. ..	Mirzapur
8	Maudaha Dam .. ..	Hamirpur
9	Bansagar Dam .. ..	Varanasi, Allahabad, Mirzapur.
10	Urmil Dam .. ..	Hamirpur
11	Chillimal Pump Canal .. ..	Banda
12	Remodelling Ken Canal .. ..	Banda
13	Augasi Pump Canal .. ..	Banda
14	Rohini Dam .. ..	Lalitpur
15	Sajnam Dam .. ..	Lalitpur
16	Paisuni Diversion .. ..	Banda
17	Dongri Dam .. ..	Jhansi
18	Dhewaan Dam .. ..	Mirzapur
19	Revised Tons Pump Canal .. ..	Allahabad
20	Lining of Channels .. ..	Varanasi, Allahabad, Mirzapur, Banda, Hamirpur, Jhansi, Lalitpur.
21	Mod. of Ghaggar Canal .. ..	Mirzapur.
22	Mod. of Lachura Head Works .. ..	Hamirpur.
23	Gyanpur Pump Canal .. ..	Mirzapur.



## ANNEXURE ▼

Installed Capacity—Station-wise achievements during Fifth Plan (1974—79) and Annual Plan 1979-80  
(Megawatts)

Serial no.	Name of Scheme	Fifth Plan Revised Target (1974—79)	Achievements						1974-79 Total	1979-80
			1974-75	1975-76	1976-77	1977-78	1978-79			
1	2	3	4	5	6	7	8	9	10	
1	Yamuna Hydel, St. II									
	(a) Chhibro Power Station ..	240	3×60	1×60	..	..	..	240	..	
	(b) Khodri Power Station ..	..	..	..	..	..	..	..	..	
2	Yamuna Hydel, St. IV, Part I	30	1×10	2×10	..	..	..	30	..	
3	Ramganga Hydel ..	198	..	1×66	2×66	..	..	198	..	
4	Maneri Bhali Hydel, Part-I	..	..	..	..	..	..	..	..	
5	Garhwal-Rishikesh-Chilla Hydel.	108	..	..	..	..	..	..	..	
6	Obra Thermal Extension Stage-II and II.	800	..	..	..	1×200	1×200	400	1×200	
7	Obra Thermal Extension St. I	200	1×100	1×100	..	..	..	200	..	
8	Panki Thermal Extension ..	220	..	..	2×110	..	..	220	..	
9	Harduaganj Thermal St-V ..	110	..	..	..	1×110	..	110	..	
10	Harduaganj Thermal Stage-VI	110	..	..	1×60*	1×60*	..	120	..	
	Total ..	2016	290	246	412	370	200	1518	200	

\*Harduaganj Stage-VI units earlier being reckoned at 55 MW each have been lately confirmed by BHEL to be rated as 60 MW.

## Statement showing the relative picture of Installed Capacity of

Sl. No.	Name of State	12/51	12/56	3/61	3/66
1	2	3	4	5	6
1	Andhra Pradesh .. .. .	59	132	270	299
2	Assam .. .. .	3	5	19	160
3	Bihar .. .. .	47	204	351	672
4	Gujarat .. .. .	142	224	333	651
5	Haryana .. .. .	8	14	11	280
6	Himachal Pradesh .. .. .	..	..	..	..
7	Jammu and Kashmir .. .. .	6	13	13	31
8	Karnataka .. .. .	115	190	191	456
9	Kerala .. .. .	33	90	137	197
10	Madhya Pradesh .. .. .	39	82	268	311
11	Maharashtra .. .. .	339	533	760	1,305
12	Orissa .. .. .	5	34	136	315
13	Punjab .. .. .	58	156	336	433
14	Rajasthan .. .. .	31	44	71	247
15	Tamil Nadu .. .. .	154	250	517	1,314
16	Uttar Pradesh .. .. .	179	288	370	910
17	West Bengal .. .. .	546	539	754	1,292
<i>All India—</i>					
	Utilities .. .. .	1,712	2,695	4,653	9,027
	Non-Utilities .. .. .	588	723	1,001	1,146
	Total .. .. .	2,300	3,418	5,654	10,173

Source; CEA General Review 1975-76, 1976-77 and 1977-78.

VI  
Uttar Pradesh vis-a-vis other States (Megawatts)

Achievement by the end of						Average annual growth in Installed Capacity during 1951-78	Per Capita Installed Capacity at the end of 1977-78			
3/69	3/74	3/75	3/76	3/77	3/78		In per-Cent	Ranking	In Watts	Ranking
7	8	9	10	11	12	13	14	15	16	
625	670	890	990	1,200	1,520	95	7	31	9	
158	197	197	167	160	163	201	3	9	16	
239	604	604	604	712	890	70	11	14	15	
662	954	1,173	1,361	1,595	1,711	45	13	56	3	
504	504	557	617	617	742	344	2	64	2	
5	51	53	53	53	113	180	4	29	10—1	
40	82	94	102	101	136	84	8	25	12	
799	967	967	1,056	1,056	1,145	37	15	34	8	
547	625	625	755	1,013	1,012	114	5	41	5	
699	777	776	895	895	1,135	108	6	23	13	
1,639	1,822	2,070	2,480	2,600	2,812	31	16	49	4	
502	684	803	863	923	923	684	1	37	7	
682	771	886	999	976	1,246	80	10	82	1	
498	583	581	581	581	684	82	9	22	14	
1,471	1,645	1,654	1,764	1,764	1,824	44	14	40	6	
1,185	1,549	1,832	2,078	2,490	2,857	59	12	29	10—2	
1,209	1,333	1,279	1,399	1,385	1,387	9	17	27	11	
12,957	16,664	18,317	20,117	21,468	23,669	51	..	38	..	
1,340	1,792	2,028	2,132	2,287	2,506	16	..	4	..	
14,297	18,456	20,345	22,249	23,755	26,175	42	..	42		

## ANNEXURE

Statement showing the relative picture of per capita consumption

Sl. no.	Name of State	Per capita power		
		1951	1956	1960-61
1	2	3	4	5
1	Andhra Pradesh	N.A.	5.55	19.20
2	Assam	„	0.91	3.60
3	Bihar	„	8.28	41.50
4	Gujarat	„	..	52.01
5	Haryana	„	..	..
6	Himachal Pradesh	..	..	N.A.
7	Jammu and Kashmir	..	..	14.25
8	Karnatak	„	63.72	44.20
9	Kerala	„	N.A.	28.75
10	Madhya Pradesh	„	..	19.59
11	Maharashtra	„	N.A.	52.00
12	Orissa	„	0.98	42.80
13	Punjab	„	18.20	32.90
14	Rajasthan	„	3.33	11.50
15	Tamil Nadu	„	21.03	50.50
16	Uttar Pradesh	„	8.72	15.10
17	West Bengal	„	66.40	83.90
	All India	17.80	26.40	38.20
	U. P. as percentage to All India	..	33.0	39.5

N. A. :—Not Available.

Source :—(i) C E A General Review 1975-76, 1976-77. and 1977-78

(ii) CEA-Electricity Supply Industry salient Data (1978-79).

VII  
of power in U. P. vis-a-vis other States

(Kwh.)

consumption during							
1965-66	1968-79	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79
6	7	8	9	10	11	12	13
30.90	43.06	60.58	62.00	65.78	77.44	83.41	90.97
7.80	14.90	25.60	26.59	28.46	33.82	35.27	36.12
57.70	60.96	71.03	70.81	84.11	88.59	87.32	88.13
85.30	116.11	153.60	177.30	179.93	192.31	209.88	230.29
..	75.22	140.78	124.88	152.87	173.98	171.95	212.03
9.36	16.02	56.96	48.79	61.27	64.49	54.18	55.52
N.A.	33.18	42.96	52.73	57.65	69.37	65.02	69.81
55.10	69.82	120.95	122.35	141.49	148.40	135.58	150.68
41.80	67.58	84.75	83.12	89.67	93.32	97.76	100.81
37.79	48.68	68.42	70.51	82.98	89.93	93.55	95.89
85.30	137.07	169.60	177.18	177.80	198.95	212.22	227.51
79.40	88.51	92.85	91.30	109.39	112.43	114.74	117.98
101.60	164.97	196.51	155.22	231.59	241.52	227.35	307.61
21.40	32.79	61.13	64.98	72.68	83.29	84.78	93.48
88.70	115.00	133.25	133.14	144.06	146.27	162.85	184.55
29.90	49.04	57.85	60.88	73.35	85.88	80.02	88.56
114.30	118.27	115.85	113.87	119.34	125.19	120.08	122.23
61.30	77.88	97.48	98.99	109.95	119.38	120.73	131.34
48.8	53.0	59.3	61.5	66.7	71.9	66.3	67.4

## ANNEXURE VIII

Peak demand as envisaged in various Annual Power Surveys (APS) and actual achievements for different years  
(Megawatts)

Year	First A.P.S. 1963	Seco- nd A.P.S. 1964	Thi- rd A.P.S. 1965	Fou- rth A.P.S. 1966	Fifth A.P.S. 1968	Sixth A.P.S. 1970	Sev- enth A.P.S. 1972	Eig- hth A.P.S. 1973	Nin- th A.P.S. 1975	Ten- th A.P.S. 1977	Ele- venth A.P.S. 1980	Actual Peak De- mand
1	2	3	4	5	6	7	8	9	10	11	12	13
1963-64	..	420	..	..	..	..	..	..	..	..	..	..
1964-65	..	487	551	..	..	..	..	..	..	..	..	..
1965-66	..	735	708	679	..	..	..	..	..	..	..	560
1966-67	..	830	869	893	712	..	..	..	..	..	..	675
1967-68	..	930	1023	1118	889	..	..	..	..	..	..	675
1968-69	..	1040	..	1394	1022	970	..	..	..	..	..	989
1969-70	..	1180	..	..	1167	1230	1202	..	..	..	..	1138
1970-71	..	1430	..	..	1538	1500	1400	..	..	..	..	1281 (1351)*
1971-72	..	..	..	..	..	1670	1587	1416	..	..	..	1267 (1397)*
1972-73	..	..	..	..	..	1860	1785	1605	1641	..	..	1279 (1588)*
1973-74	..	..	..	..	..	2050	2056	1814	1870	..	..	1269 (1735)*
1974-75	..	..	..	..	..	..	..	2061	2151	2039	..	1217 (2000)*
1975-76	..	..	..	..	..	..	..	..	2411	2250	..	1744 (2157)*
1976-77	..	..	..	..	..	..	..	..	2703	2493	2063	1911 (2345)*
1977-78	..	..	..	..	..	..	..	..	..	..	2284	1795 (2197)*
1978-79	..	..	..	..	..	..	..	..	..	..	2552	2256 (2491)*
1979-80	..	..	..	..	..	..	..	..	..	..	2859	2642 2324 (2697)*

\*Unrestricted Peak Demand.

## ANNEXURE IX

*Requirement of Energy and Peak Load in Uttar Pradesh: XI APS Forecast*

Sl. no.	Category	1979-80		1980-81		1981-82	
		Million units	%	Million units	%	Million units	%
1	2	3	4	5	6	7	8
1	Industries						
	(a) L.T ..	1553	14.30	1787	14.51	2055	14.70
	(b) H. T. less than 1 MW	736	6.78	846	6.87	973	6.96
	(c) H. T. above 1 MW	2484	22.87	2763	22.45	3098	22.17
	Sub-Total	4774	43.95	5396	43.83	6126	43.83
2	Hindalco ..	1620	14.91	1800	14.62	1980	14.17
3	Irrigation and Dewatering ..	2668	24.56	3147	25.56	3660	26.19
4	Railway Traction ..	387	3.56	392	3.18	439	3.14
5	Domestic & Commercial	1143	10.53	1279	10.38	1433	10.25
6	Others ..	270	2.49	298	2.43	337	2.42
7	Total consumption ..	10,862	100.00	12,312	100.00	13,975	100.00
8	T & D losses .. ..	2910	21.13	3250	20.88	3611	20.53
9	Energy Requirement at Generating Bus (7+8)	13,772		15,562		17,586	
10	Peak Load in MW ..	2649		3000		3400	

## ANNEXURE—IX—(Concl.)

Sl. no	Category	1982-83		1983-84		1984-85 (Interpolated)		Percentage growth rate(1983-84 over 1978-79)
		Million units	%	Million units	%	Million units	%	
1	2	9	10	11	12	13	14	15
1	Industries							
(a)	L. T. ..	2363	14.96	2718	15.57	3052	15.57	15.00
(b)	H. T. less than 1 MW	1119	7.09	1287	7.37	1445	7.37	15.00
(c)	H. T. above 1 MW	3350	21.22	3563	20.42	4002	20.42	10.50
		6832	43.27	7568	43.36	8499	43.36	12.75
2	Hindalco	2160	13.68	2160	12.38	2426	12.38	13.00
3	Irrigation and Dewatering	4317	27.34	4954	28.39	5564	28.39	16.50
4	Railway Traction	482	3.05	518	2.97	582	2.97	7.60
5	Domestic & Commercial	1611	10.20	1809	10.36	2031	10.36	12.10
6	Others	389	2.46	443	2.54	498	2.54	12.00
7	Total consumption	15,791	100.00	17,452	100.00	19,600	100.00	13.50
8	T & D losses ..	3997	20.20	4358	19.98	4900	20.00	
9	Energy Requirement at Generating Bus (7+8)	19,788		21,810		24,500		
10	Peak Load in MW	3824		4234		4750		



## Annexure X

Installed Capacity/Derated Capacity of U.P. Power System as on 31-3-1980

Sl. no.	Name of Power Station	Installed capacity (MW)	Derated Capacity (MW)
1	2	3	4
<i>A—Thermal</i>			
1	Obra .. .. .	5×50 = 250	250
2	Obra Extension I .. .. .	3×100 = 300	300
3	Obra Extension II & III .. .. .	3×200 = 600	600
4	Panki .. .. .	2×32 = 64	61
5	Panki Extension .. .. .	2×110 = 220	220
6	R. P. H., Kanpur .. .. .	5×15 = 75	65
7	Harduaganj 'A' .. .. .	3×30 = 90	70
8	Harduaganj 'B' .. .. .	2×50 +2×55 = 210	210
9	Harduaganj V & VI .. .. .	2×60 +1×110 = 230	170*
10	Small Power Stations .. .. .	146.60	131
11	Renusagar .. .. .	2×62.5 = 125	125
Total : Thermal		2310.60	2202
<i>B—Hydel</i>			
1	Rihand .. .. .	6×50 = 300	300
2	Obra .. .. .	3×33 = 99	99
3	Matatila .. .. .	3×10 = 30	30
4	Khatima .. .. .	3×13.8 = 41.40	41.40
5	Ganga Canal .. .. .	45.20	45.20
6	Ramganga .. .. .	3×66 = 198	198
7	Chibro (Yamuna, stage II) .. .. .	4×60 = 240	240
8	Dhakrani (Yamuna, stage I) .. .. .	3×11.25 = 33.75	33.75
9	Dhalipur (Yamuna, stage I) .. .. .	3×17 = 51	51
10	Kulhal (Yamuna, stage IV, Part I) .. .. .	3×10 = 30	30
Total : Hydel:		1068.35	1068.35
Total : Thermal & Hydel		3378.95	3270.35

\*One 60 MW unit was damaged beyond repairs in Nov. 1977.

Sl. no.	Name of Project	Installed Capacity (MW)	Estimated cost of project (Rs. in crores)	Location of the Project
1	2	3	4	5
<i>A—Hydro</i>				
1	Garhwal-Rishikesh Chilla	4×36	97.76	Barrage at 5 Km. downstream of Rishikesh on River Ganga and Power Station at Chilla at 14.3 Km of Power Channel.
2	(a) Yamuna Stage II Part-I (Chibro).	4×60		Already commissioned
	(b) Yamuna Stage-II Part-II (Khodri)	4×30	138.48	Power House 1.5 Km upstream of Dak Pathar Barrage on right bank of river Yamuna.
3	Maneri Bhali Stage-I	3×30	68.20	Barrage at Maneri across river Bhagirathi about 15 Km upstream of Uttarkashi.
4	Lakhwar-Vyasi (Multi-purpose).	3×100 +2×60	137.09	Lakhwar Dam & P. H. 20 Km up stream of Kalsi and 72 Kms from Dehradun. Vyasi Dam 5 Km downstream of Lakhwar, Hathiari P. H. 9.5 Km. down stream of Lakhwar.
5	Tehri Dam (Multi-purpose).	4×250	481.30	Dam on river Bhagirathi 1 1/2 Km down stream of the confluence of Bhagirathi with river Bhilnganga near Tehri town. P. H. underground on left bank.
6	Vishnuprayag ..	4×65.5	104.51	Barrage at Joshimath. P. H. at the confluence of Vishnugad with river Alaknanda.
<i>B—Thermal</i>				
7	Obra Extension Stage II & III.	5×200	374.40	Near village Obra on the banks of river Rihand 120 Km South-East of Mirzapur.
8	Parichha ..	2×110	125.56	On the bank of Parichha Reservoir on river Betwa 24 Km. from Jhansi on Jhansi-Kanpur National High way.
9	Anpara 'A' ..	3×210	360.00	Near Village Anpara on the left bank of Rihand Reservoir near Renusagar TPS at 24 Km from Rihand Dam on Pipri Singrauli Road.
10	Tanda ..	4×110	212.09	On the west of Mehripur Pumping Station on the bank of river Ghaghra 8 Km from Tanda on Tanda-Faizabad Road.

## XI

approved and under execution

Particulars of Dam/barrage	Length/diameter of Tunnel or channel	Head	Source of cooling Water	Annual Energy Generation (MU)	Cost of generation paise Kwh	Programme of completion
6	7	8	9	10	11	12
Barrage 312m long	Power channel 14.83 Km TR Channel, 1.2 Km.	325 m	..	Pre-Tehri -725.5 post-Tehri 920.0	14.66	7/80, 11/80, 7/80, 12/80
..	..	..	..	..	..	Already commissioned.
..	HRT 5.6 Km long 7.5 m dia in 4.628 Km and three tunnels of smaller dia in remaining length.	63.85m	..	485	19.85	1/83, 2/83, 3/83, 4/83
Concrete Gravity Dam 39m high.	HRT 10.5 Km long 4.75m dia.	182 m	..	592	..	1/83, 2/83, 3/83.
Lakhwar Dam-cored Gravity 192m, Vyasi Dam-Gravity type 61m high.	Vyasi-Hathiari Tunnel 2.5 Km long and 7m dia.	Lakhwar 150 m Vyasi 112m.	..	852	17.29	1987-88
Rock fill dam 245.5m high above river bed	..	217.5m	..	2969	17.69	1988-89
Barrage-70m long	Tunnel 12 Km long and 3m dia.	943m	..	1494	7.99	1988-89
..	..	..	Obra Hydrel Reservoir alongwith cooling towers.	5500	13.1	2/81, 9/81, (3 units already commissioned).
..	..	..	Parichha Reservoir.	880	22.80	8/82, 2/83
..	..	..	Rihand Reservoir.	3371	15.46	6/83, 12/83, 6/84.
..	..	..	Mehripur pumping station of Tanda Canal system and Daryabad link channel.	2354	16.46	12/83, 6/84, 12/84, 6/85.

**ANNEXURE XII**

*Salient Features of new Generation Projects Proposed*

Serial no.	Name of Project	Installed Capacity (MW)	Estimated cost of project (Rs. in crores)	Location of the project	Particulars of Dam/Barrage	Length/diameter of tunnel or channel	Head	Source of cooling water	Annual Energy Generation (MU)	Cost of generation (Paise/kwh)	Programme of completion
1	2	3	4	5	6	7	8	9	10	11	12
<i>A—Hydro</i>											
1	Maneri Bhali-II	3×52	82.63	Near Uttarkashi town on river Bhagirathi.	Barrage 135 m long.	15.4 km of 6.0 m dia. tunnel.	248.6 (net)	..	913	9.79	1986-87
2	Khara	22×7	60.74	Left Bank of tail race channel of Kulhal Power Station on river Yamuna.	Head Regulator 86.5 m. long.	Channel 20 Kms (including 1.85 Km of tunnel and 6.6 Km tail race channel)	48	..	377	17.54	1984-85
3	Pala Maneri	3×47.5	118.44	Near Pala on Uttarakashi-Gangotri Road on river Bhagirathi	Dam 86.5 m. high.	8.7 Km of 4.8 m. dia tunnel.	231.45 (net)	..	725	17.59	1987-88
4	Srinagar	3×56	100.00	3 Km. upstream of Srinagar town on river Alakhnanda.	Dam 65 m. high	1 Km long 9.3 m dia. tunnel and 4 Km. long channel.	66 (net))	..	728	..	1987-88
5	Loharinag Pala	3×94	126.92	Near Loharinag on Uttarkashi Gangotri Road on river Bhagirathi.	Barrage 67.5 m. long.	13.6 Km. of 4.8 m. dia. tunnel.	442.5 (net)	..	1,427	9.81	1989-90
6	Koteshwar Dam	4×45	108.00	16 Km. downstream of Tehri on river Bhagirathi.	Dam 71.3 m high.	..	60	..	842 (after Tehri)	..	1988-89
7	Kishau (Multipurpose)	4×150	278.84	32 Km. upstream of Kalsi in District Dehradun (UP) and District Sirmour (HP) on river Tons	Dam 253 m high.	..	177	..	1,822	15.95	1991-92

**B—Thermal**

8	Anpara 'B'	..	2×500	472.09	Near village Anpara on left bank of Rihand Reservoir.	..	..	..	Rihand Reservoir.	5,500	13.89	1986—88
9	Unchahar	..	2×210	219.58	Unchahar (Mustafabad) in District Raebareli.	..	..	..	Allahabad branch of Sarda Shahayak Canal and Purwa Branch canal.	2,310	14.01	1984-85
10	Rosa	..	3×210	319.54	Rosa, 11 Km. from Shahjahanpur on Hardoi road.	..	..	..	River Garrah	3,370	19.08	1986—88
11	Jawaharpur	..	3×210	324.23	Jawaharpur (Kamsan) 11 Km. from Etah on Fundla road.	..	..	..	Lower Ganga Canal (also upper Ganga Canal and Kalinadi)	3,370	19.87	1987—89
12	Dohrighat	..	2×210	229.15	At Dohrighat in district Azamgarh.	..	..	..	Dohrighat Pump Canal.	2,310	16.10	1987-88
13	Anpara 'C'	..	3×500	643.97	Near village Anpara on left bank of Rihand Reservoir.	..	..	..	Rihand Reservoir.	8,025	18.00	1988—91
14	Parichha Extension.	..	2×210	212.10	Parichha in District Jhansi.	..	..	..	Parichha Reservoir.	2,247	17.60	1988-89
15	Narora	..	4×210	480.00	Narora in district Bulandshahr.	..	..	..	River Ganga	4,494	..	1989—91

## ANNEXURE XIII

*Transmission and Distribution—Plan-wise details*

Period	(In Ckt. km.)					
	400 kV	220 kV	132 kV	66 kV	Total 66 kV and above	Secondary lines
1	2	3	4	5	6	7
Pre-Plan	..	..	..	473	473	1,426
At the end of—	..	..	..	..	..	..
First Plan	..	..	168	1,028	1,196	2,264
Second Plan	..	..	346	1,654	2,000	3,462
Third Plan	..	..	2,153	2,114	4,267	6,736
Three Annual Plans (1966-69)	..	1,785	4,085	2,443	8,313	9,828
Fourth Plan	..	2,327	4,904	2,789	10,020	16,703
1974-75	..	2,445	4,915	2,790	10,150	17,378
1975-76	..	2,532	5,418	2,794	10,744	17,881
1976-77	..	2,761	5,727	2,883	11,371	18,213
1977-78	..	375	2,904	5,792	2,963	12,034
1978-79	..	375	2,985	6,736	2,998	13,098
1979-80	..	762	3,210	7,481	3,020	14,473

## ANNEXURE XIV

Statement showing the relative picture of Villages electrified in Uttar Pradesh vis-a-vis other States.

(Numbers)

Serial no.	Name of State	Total number of villages as per census 1971	Achievement at the end of											Villages electrified till 31-3-79 as % of Total villages
			12/51	12/56	3/61	3/66	3/69	3/74	3/75	3/76	3/77	3/78	3/79	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Andhra Pradesh	27,221	119	517	2,433	4099	5,535	10,262	10,430	11,358	13,470	14,627	15,490**	56.9
2	Assam	21,995	..	..	13	66	331	1,146	1,359	1,769	1,997	2,176	3,001	13.6
3	Bihar	67,566	4	300	2,305	3,744	6,350	9,775	13,375	16,565	18,160	18,204	18,973**	28.1
4	Gujarat	18,275	37	130	678	1,671	2,869	5,638	6,026	6,307	7,108	8,121	9,464	51.8
5	Haryana	6,731	..	99	570	1,179	1,464	6,669	6,731	6,731	6,731	6,731	6,731	100.0
6	Himanchal Pradesh	16,916	9	93	670	1,438	2,191	4,500	6,276	6,721	7,246	7,753	8,329	49.2
7	Jammu and Kashmir	6,503	..	..	32	383	614	1,380	1,741	2,196	2,829	4,014	4,428	68.1
8	Karnataka	26,826	551	1,570	2,920	4,627	7,225	12,644	13,730	14,209	14,703	15,160	15,736	58.7
9	Kerala	1,268	159	381	872	1,083	1,137	1,173	1,182	1,202	1,212	1,224	1,248	98.4
10	Madhya Pradesh	70,883	9	47	373	1,133	2,754	10,703	11,304	11,822	13,829	16,350	19,350	27.1
11	Maharashtra	35,778	33	237	764	4,273	9,450	16,933	18,643	19,309	20,206	21,480	23,384	65.4
12	Orissa	46,992	..	25	118	534	821	8,466	10,128	11,507	13,061	14,161	15,568	33.1
13	Punjab	12,126*	42	369	1,712	3,697	5,018	7,078	7,717	9,926	12,126	12,126	12,126	100.0
14	Rajasthan	33,305	2	5	46	1,115	2,075	5,778	6,326	7,053	8,361	9,999	12,335	37.0
15	Tamil Nadu	15,735	1,495	2,430	5,919	7,830	9,472	13,805	15,416	15,509	15,516	15,522	15,525	98.6
16	Uttar Pradesh	1,12,561	110	420	1,082	5,855	12,926	29,765	30,798	31,862	33,098	35,026	36,296	32.2
17	West Bengal	38,074	386	553	920	1,594	2,433	8,708	9,257	9,825	10,981	11,669	2,163	32.0
	All-India	5,75,784	3,061	7,294	21,754	45,148	73,739	1,56,729	1,72,169	1,85,806	2,02,843	2,16,863	2,33,042	40.5
	U. P. as percentage to All-India	19.51	3.56	5.8	5.0	13.0	17.5	19.0	17.9	17.2	16.3	16.2	15.6	..

\* Includes 62 villages which have been declared inhabited later.

\*\*Provisional.

Source— CFA General Review 1975-76 and 1976-77 and Electricity Supply Industry Salient Data (1978-79).

## ANNEXURE XV

*Rural electrification : Electrification of Villages and Harijan Basties*

Period	Electrification of Villages								Electrification of Harijan Basties	
	Normal		REC		MNP (REC)		Total		Addi- tion	Cumulative
	Addi- tion	Cumu- lative	Addi- tion	Cumul- ative	Addi- tion	Cumu- lative	Addi- tion	Cumu- lative		
1. Pre-Plan .. ..	110	110	..	..	..	..	110	110	..	..
2. First Plan (1951—56) .. ..	310	420	..	..	..	..	310	420	..	..
3. Second Plan (1956—61) .. ..	662	1,082	..	..	..	..	662	1,082	..	..
4. Third Plan (1961—66) .. ..	4,773	5,855	..	..	..	..	4,773	5,855	..	..
5. Three Annual Plans (1966—69) .. ..	7,071	12,926	..	..	..	..	7,071	12,926	..	..
6. Fourth Plan (1969—74) .. ..	15,817	28,743	1,022	1,022	..	..	16,839	29,765	5,960	5,960
7. 1974-75 .. ..	345	29,088	688	1,710	..	..	1,033	30,798	351	6,311
8. 1975-76 .. ..	686	29,774	346	2,056	32	32	10,64	31,862	1,390	7,701
9. 1976-77 .. ..	240	30,014	696	2,752	300	332	1,236	33,098	1,304	9,005
10. 1977-78 .. ..	273	30,287	1,224	3,976	431	763	1,928	35,026	1,991	10,996
11. 1978-79 .. ..	242	30,529	591	4,567	439	1,202	1,272	36,298	1,457	12,453
12. Fifth Plan (1974—79) .. ..	1,786	30,529	3,545	4,567	1,202	1,202	6,533	36,298	6,493	12,453
13. 1979-80 .. ..	265	30,794	1,564	6,131	450	1,652	2,279	38,577	1,561	14,014



ANNEXURE XVI  
Rural Electrification : Energisation of Private Tube-wells/Pump-sets

Period	Normal		REC		MNP		ARDC		SPA		Consumer Deposite		Total			
	Addi- tion	Cumu- lative	Addi- tion	Cumu- lative	Addi- tion	Cumu- lative	Addi- tion	Cumu- lative	Addi- tion	Cumu- lative	Addi- tion	Cumu- lative	Addi- tion	Cumu- lative		
1. Pre-Plan .. ..	635	635	..	..	..	..	..	..	..	..	..	..	..	..	635	635
2. First Plan (1951—56) ..	794	1429	..	..	..	..	..	..	..	..	..	..	..	..	794	1429
3. Second Plan (1956—61) ..	2137	3566	..	..	..	..	..	..	..	..	..	..	..	..	2137	3566
4. Third Plan (1961—66) ..	5717	9283	..	..	..	..	..	..	..	..	..	..	..	..	5717	9283
5. Three Annual Plans (1966—69)	56230	65513	..	..	..	..	*	*	..	..	*	*	..	..	56230	65513
6. Fourth Plan (1969—74) ..	145939	211452	4994	4994	..	..	*	*	..	..	*	*	..	..	150933	216446
7. 1974-75 ..	9059	220511	2252	7246	..	..	*	*	..	..	3529	3529	14840	231286		
8. 1975-76	7624	228135	1153	8399	33	33	*	*	..	..	1783	5312	10593	241879		
9. 1976-77 ..	3224	231359	1610	10009	164	197	6410	6410	..	..	445	5757	11853	253732		
10. 1977-78 ..	11484	242843	4055	14064	350	547	7009	13419	..	..	1990	7747	24888	278620		
11. 1978-79 ..	11846	254689	4426	18490	548	1095	10957	24376	..	..	1593	9340	29370	307990		
12. Fifth Plan (1974—79) ..	43237	254689	13496	18490	1095	1095	24376	24376	..	..	9340	9340	91544	307990		
13. 1979-80 .. ..	15289	269978	6127	24617	840	1935	11615	35991	325	325	1949	11289	36145	344135		

\*Included in normal programme.

## ANNEXURE XVII

Statement showing the State-wise number of pumping sets energised (including State Tube-wells)

(Numbers)

Serial no.	Name of State	Achievement at the end of											
		12/51	12/56	3/61	3/66	3/69	3/74	3/75	3/76	3/77	3/78	3/79	
1	2	3	4	5	6	7	8	9	10	11	12	13	
1	Andhra Pradesh	..	N. A.	N. A.	17968	57225	123167	261989	284614	294017	306795	328784	359003*
2	Assam	..	..	..	..	..	55	705	867	1012	1054	1054	1250
3	Bihar	..	47	697	3200	10600	50005	96922	104034	118055	132322	139982	143615
4	Gujarat	..	910	2825	6963	14155	42085	102683	113723	121854	137916	156028	177798
5	Haryana	..	N. A.	743	3526	15220	45385	127947	134953	141885	153679	166631	181232
6	Himachal Pradesh	..	..	2	20	88	306	1032	1202	1320	1415	1464	1548
7	Jammu and Kashmir	..	N. A.	10	85	104	162	402	417	744	789	834	902
8	Karnataka	..	2460	8003	16888	42371	91826	189688	208009	224910	242471	262362	277482
9	Kerala	..	N. A.	N. A.	2666	6957	13909	37661	41549	47525	53148	58922	66240
10	Madhya Pradesh	..	..	30	1822	7314	24631	115560	133295	146739	80282	215925	244853
11	Maharashtra	..	142	2166	7219	44978	124981	342665	380844	412068	448796	488706	537295
12	Orissa	..	N. A.	N. A.	N. A.	N. A.	477	2759	3515	4524	5428	6427	9266
13	Punjab	..	N. A.	3095	8514	25296	59112	129566	138902	146475	167815	196548	233218
14	Rajasthan	..	30	47	1038	6861	18362	74696	86793	93826	108080	128378	155794
15	Tamil Nadu	..	14373	32440	117695	256594	410119	681258	706914	742746	780816	809606	843046
16	Uttar Pradesh	..	..	..	9626	16956	74293	228661	244333	255591	267878	298590	324177
17	West Bengal	..	N. A.	N. A.	56	437	1199	6535	7694	10701	17132	20346	22426
	All India	..	21010	56050	198890	512730	1088750	2441550	2611657	2785873	3029163	3299901	3599328
	U. P. as percentage to All India.	..	3.0	2.5	1.8	1.8	6.0	8.9	9.0	8.9	8.5	9.0	9.0

\*Provisional.

## ANNEXURE XVIII

*Physical Targets : Sixth Five- Year Plan 1980-85—Rural Electrification*

(Nos.)

Programme	1980-81 Targets	1981-82 Estimate	1982-83 Estimate	1983-84 Estimate	1984-85 Estimate	Total for 1980-85
<b>I. Electrification of Villages (By CEA definition)</b>						
1. <i>Plan works</i>						
(i) State Normal .. ..	1150	1046	1183	1260	1333	5972
(ii) REC Normal .. ..	1140	1322	1670	2024	2352	8508
(iii) MNP .. ..	1350	1512	1867	2456	2995	10180
Sub-Total I-1 .. ..	3640	3880	4720	5740	6680	24660
2. <i>Additive Resources :</i>						
(i) ARDC .. ..	640	750	800	850	950	3990
(ii) S.P.A. .. ..	700	680	700	840	920	3840
(iii) Consumer Deposit ..	120	120	120	130	130	620
Sub-Total I-2 .. ..	1460	1550	1620	1820	2000	8450
Total-I .. ..	5100	5430	6340	7560	8680	33110
<b>II. Energisation of PTW/Pump-sets</b>						
1. <i>Plan works</i>						
(i) State Normal .. ..	16200	15000	17000	18000	19000	85200
(ii) REC Normal .. ..	8200	8900	9700	10500	11400	48700
(iii) MNP .. ..	4100	4800	5000	5500	6000	25400
Sub-Total II-1 .. ..	28500	28700	31700	34000	36400	159300
2. <i>Additive Resources :</i>						
(i) A.R.D.C. .. ..	9180	10800	11450	12200	13600	57230
(ii) S.P.A. .. ..	10620	9800	10100	12000	13150	55670
(iii) Consumer Deposit ..	1700	1700	1750	1800	1850	8800
Sub-Total II-2 .. ..	21500	22300	23300	26000	28600	121700
Total-II .. ..	50000	51000	55000	60000	65000	281000
III. Electrification of Harijan Bastis	2735	3305	3945	5103	6173	21261
IV. Electrification of Villages (By Laying LT Mains).	2730	3305	3945	5103	6173	21256

## Statement showing the relative picture of gross

Serial no.	State	1950-51		1955-56		1960-61		1965-66		1968-69	
		Energy		Energy		Energy		Energy		Energy	
		Gen.	Sold	Gen.	Sold	Gen.	Sold	Gen.	Sold	Gen.	Sold
1	2	3	4	5	6	7	8	9	10	11	12
1	Andhra Pradesh	104	98	239	177	900	502	1320	1048	2346	1638
2	Assam ..	9	6	11	9	36	29	98	71	249	190
3	Bihar ..	132	119	603	353	1597	889	3227	1933	627	1584
4	Gujarat ..	374	329	791	694	1271	984	2207	1796	3280	2680
5	Haryana ..	10	N. A.	11	N. A.	8	N. A.	1101	N. A.	1674	655
6	Himachal Pradesh ..	..	..	..	..	..	..	..	..	16	67
7	Jammu and Kashmir.	26	17	24	18	44	51	N. A.	N. A.	134	131
8	Karnataka	539	384	826	632	1058	935	1936	1382	2518	1915
9	Kerala ..	154	168	350	269	582	486	842	750	1623	1320
10	Madhya Pradesh	73	58	169	140	477	406	1208	1028	2030	1572
11	Maharashtra	1541	1314	2249	1927	3268	2720	5635	4717	7665	6390
12	Orissa ..	7	5	21	15	490	488	1156	977	1383	1250
13	Punjab ..	173	103	414	236	982	580	1819	2350	2447	2256
14	Rajasthan	64	47	90	65	108	99	729	326	1311	652
15	Tamil Nadu	720	547	1084	831	2214	1665	4209	3222	5661	4354
16	Uttar Pradesh	570	458	743	586	1252	976	3033	2372	5326	4255
17	West Bengal	1207	1034	1779	1755	2319	2493	4041	4065	4016	4129
	All India— Utilities	5858	4793	9662	7959	16937	13953	32990	26735	47433	7352
	Non-Utilities	1656		2210		3186		3835		4208	
	Total ..	7514		11872		20123		36825		51641	

Gen.—Generated.

Source—CEA General Review 1975-76 and 1976-77, Electricity Supply Industry salient data 1978-79.

## XIX

*every generated and sold within state by Uttar Pradesh vis-a-vis other States*

(Million Kwh)

1973-74		1974-75		1975-76		1976-77		1977-78		1978-79	
Energy		Energy		Energy		Energy		Energy		Energy	
Gen.	Sold	Gen.	Sold	Gen.	Sold	Gen.	Sold	Gen.	Sold	Gen.	Sold
13	14	15	16	17	18	19	20	21	22	23	24
3290	2473	3489	2569	3791	2797	4938	3433	5200	3733	6194	4202
524	380	570	424	449	436	586	531	589	570	659	598
1990	2687	2153	2881	2135	3765	2465	4095	2578	4164	2473	4342
4678	4045	5530	4793	5588	5012	6361	5500	7134	6065	7952	6851
2421	1401	1839	1239	2565	1602	2914	1866	3020	1892	3870	2410
173	200	169	209	182	221	189	235	213	202	368	224
225	209	303	261	305	291	308	357	325	340	542	394
4578	3634	4703	3641	5389	4414	5381	4684	4549	4324	5872	4899
2561	1793	2659	1829	2783	1997	3151	2130	4471	2319	5190	2422
3268	2541	3624	2779	4140	3386	4459	3736	5194	4077	5243	4282
9823	8812	10795	9371	10787	9491	12713	10802	14482	11654	15491	12851
2142	1558	2331	1630	3235	2095	3094	2147	3201	2299	3320	2425
3528	2773	2690	2210	3841	3380	4216	3585	4416	3434	6073	4726
2153	1328	2135	1560	2433	1821	2456	2107	2817	2255	3605	2601
4868	5513	5076	5559	5722	6205	4929	6379	5619	7027	6608	8178
5889	4152	6204	4682	8020	5925	9640	7072	9289	6760	10130	7688
4509	5064	4492	5095	4685	5503	5165	5856	5150	5654	5146	5969
66689	50246	70190	52632	79231	60246	88333	66609	91369	68963	102432	77429
6107		6488		6695		7282		7559		7600	
72796		76678		85926		95615		98928		110032	

## ANNEXURE XX

## Statement showing State-wise System Losses

(Per cent)

Serial no.	State	System Losses during											
		1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78*	1978-97	
1	2	3	4	5	6	7	8	9	10	11	12	13	
1	Andhra Pradesh	25.62	24.42	25.41	26.84	28.46	25.42	26.15	25.54	25.04	22.97	20.20	
2	Assam	20.54	12.05	17.71	16.87	15.56	19.43	18.85	16.50	19.08	19.96	20.00	
3	Bihar	17.80	19.80	22.87	15.22	20.60	24.68	20.27	18.41	19.81	24.45	23.93	
4	Gujarat	13.85	14.70	14.57	16.04	19.20	20.78	18.48	18.47	18.31	17.92	16.42	
5	Haryana	30.90	28.65	27.96	28.52	24.57	27.68	24.40	23.19	21.54	21.76	21.36	
6	Himachal Pradesh	15.32	19.94	12.00	12.06	17.56	17.25	15.86	19.62	25.91	23.07	N. A.	
7	Jammu and Kashmir	29.29	23.34	21.49	18.50	30.28	28.66	23.49	23.34	23.77	34.06	N. A.	
8	Karnataka	15.84	19.26	14.69	15.86	16.72	18.65	18.72	17.21	16.34	15.96	N.A.	
9	Kerala	16.92	15.72	12.99	17.29	15.35	16.86	15.51	16.79	14.40	11.61	11.49	
10	Madhya Pradesh	15.84	13.78	14.70	19.24	14.85	18.81	20.22	18.80	18.75	18.86	20.08	
11	Maharashtra	13.17	12.57	13.67	12.66	12.34	16.35	16.26	17.09	17.56	16.83	17.40	
12	Orissa	9.96	7.88	6.17	4.75	9.30	10.48	11.39	13.92	15.36	13.65	15.64	
13	Punjab	18.96	18.71	22.37	24.19	21.96	18.90	19.11	15.08	17.51	20.08	18.50	
14	Rajasthan	24.96	23.89	13.06	23.62	30.21	26.30	30.56	25.79	24.50	25.00	22.64	

15	Tamil Nadu	..	18.92	17.89	17.68	19.05	20.98	18.66	21.06	18.53	18.42	18.54	18.10
16	Uttar Pradesh	..	19.74	19.94	24.48	26.14	29.32	29.76	24.51	22.03	24.03	20.13	18.44
17	West Bengal	..	9.98	10.68	10.17	13.39	11.87	11.11	9.83	11.87	11.20	12.75	N. A.
	All India	..	17.0	16.8	17.5	18.8	19.9	20.5	20.2	19.4	19.8	19.26	19.81

Source—A General review 1976-77 Table 6.1.8 and Electricity Supply Industry Salient Data Table No. 11.

\*These figures are for State Electricity Boards of respective states.

## ANNEXURE XXI

Category-wise consumption of power in U. P. vis-a-vis other States

(Million Kwh)

Serial no.	State	1960-61										1973-74				
		Domes- tic	Com- mer- cial	Indus- trial	Public lighting	Trac- tion	Agri- cultural	Public water works and Sewage Pumping	Misc.	Total	Domes- tic	Com- mer- cial	Indus- trial	Public lighting	Trac- tion	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
1	Andhra Pradesh	..	1 (0.2)	30 (6.0)	393 (78.3)	15 (3.0)	..	55 (11.0)	8 (1.5)	..	502 (100.0)	243 (9.8)	1337 (54.1)	29 (1.2)	..	
2	Assam	..	10 (34.5)	4 (13.8)	12 (41.4)	2 (6.9)	..	1 (3.4)	..	..	29 (100.0)	78 (20.5)	185 (48.6)	4 (1.1)	..	
3	Bihar	..	44 (5.0)	30 (3.3)	776 (87.3)	4 (0.4)	5 (0.5)	18 (2.1)	12 (1.4)	..	889 (100.0)	117 (4.4)	2007 (74.7)	6 (0.2)	323 (12.0)	
4	Gujarat	..	71 (7.3)	32 (3.2)	806 (81.9)	15 (1.6)	..	20 (2.0)	40 (4.0)	..	984 (100.0)	146 (3.6)	2779 (68.7)	46 (1.2)	..	
5	Haryana	..	..	..	..	..	..	..	..	..	..	77 (5.5)	698 (49.8)	5 (0.4)	..	
6	Himachal Pradesh	..	..	..	..	..	..	..	..	..	..	20 (10.0)	31 (15.5)	2 (1.0)	..	
7	Jammu and Kashmir	..	23 (45.1)	1 (2.0)	22 (43.1)	1 (2.0)	..	1 (2.0)	3 (5.8)	..	51 (100.0)	21 (10.1)	72 (34.4)	5 (2.4)	..	
8	Karnataka	..	75 (8.0)	21 (2.3)	732 (78.3)	19 (2.1)	..	29 (3.0)	59 (6.3)	..	935 (100.0)	76 (2.1)	2813 (77.4)	78 (2.2)	..	
9	Kerala	..	51 (10.5)	4 (0.8)	397 (81.6)	8 (1.7)	..	18 (3.8)	8 (1.6)	..	486 (100.0)	90 (5.0)	1402 (78.2)	30 (1.7)	..	
10	Madhya Pradesh	..	46 (11.3)	21 (5.1)	301 (74.3)	9 (2.2)	..	4 (0.9)	25 (6.2)	..	406 (100.0)	139 (5.5)	1957 (77.0)	28 (1.1)	58 (2.3)	



11	Maharashtra	..	260 (9.5)	198 (7.3)	1853 (68.1)	20 (0.7)	339 (12.5)	15 (0.6)	35 (1.3)	..	2720 (100.0)	803 (9.4)	562 (6.4)	6081 (69.1)	82 (0.9)	505 (5.7)
12	Orissa	..	18 (3.7)	8 (1.6)	458 (93.9)	1 (0.2)	..	1 (0.2)	2 (0.4)	..	488 (100.0)	47 (3.0)	41 (2.6)	1357 (87.1)	7 (0.4)	50 (3.2)
13	Punjab	..	70 (12.0)	61 (10.6)	356 (61.3)	9 (1.6)	75 (12.9)	9 (1.6)	..	..	580 (100.0)	209 (7.5)	97 (3.6)	1661 (59.9)	9 (0.3)	..
14	Rajasthan	..	21 (21.2)	16 (16.2)	34 (34.3)	5 (5.1)	..	4 (4.1)	19 (19.1)	..	99 (100.0)	94 (7.1)	76 (5.7)	764 (57.5)	13 (1.0)	..
15	Tamil Nadu	..	153 (9.2)	157 (9.4)	910 (54.6)	34 (2.0)	15 (0.9)	382 (23.0)	14 (0.9)	..	1665 (100.0)	390 (7.1)	478 (8.7)	2714 (49.2)	78 (1.4)	78 (1.4)
16	Uttar Pradesh	..	123 (12.6)	75 (7.7)	504 (51.6)	14 (1.4)	..	200 (20.5)	60 (6.2)	..	976 (100.0)	404 (9.7)	125 (3.0)	2445 (58.9)	27 (0.6)	167 (4.0)
17	West Bengal	..	354 (14.2)	116 (4.6)	1808 (72.5)	23 (0.9)	95 (3.8)	1 (0.1)	96 (3.9)	..	2493 (100.0)	704 (13.9)	277 (5.5)	3519 (69.5)	38 (0.7)	351 (6.9)
	All India	..	1492 (10.7)	848 (6.1)	9697 (69.5)	193 (1.4)	454 (3.2)	833 (6.0)	436 (3.1)	..	13953 (100.0)	4645 (9.3)	2987 (6.0)	32481 (64.6)	553 (1.1)	1531 (3.0)

NOTE—Figures in brackets are of percentage consumption against total consumption.

## ANNEXURE XXI—(Contd.)

Serial no.	State	1973-74					1976-77				
		Agricultural	Public Water Works and Sewage Pumping	Miscellaneous	Total	Domestic	Commercial	Industrial	Public lighting	Traction	Agricultural
1	2	17	18	19	20	21	22	23	24	25	26
1	Andhra Pradesh	588 (23.8)	52 (2.1)	13 (0.5)	2473 (100.0)	311 (9.0)	357 (10.4)	1870 (54.5)	33 (1.0)	..	771 (22.4)
2	Assam	2 (0.5)	7 (1.8)	60 (15.9)	380 (100.0)	48 (9.0)	19 (3.6)	286 (53.8)	3 (0.6)	..	2 (0.4)
3	Bihar	74 (2.7)	42 (1.6)	8 (0.3)	2687 (100.0)	146 (3.6)	113 (2.7)	2922 (71.3)	6 (0.1)	449 (11.0)	399 (9.8)
4	Gujarat	628 (15.6)	111 (2.7)	18 (0.4)	4045 (100.0)	467 (8.5)	222 (4.0)	3555 (64.6)	57 (1.0)	103 (1.9)	923 (16.8)
5	Haryana	528 (37.6)	..	5 (0.4)	1401 (100.0)	138 (7.4)	102 (5.5)	878 (47.0)	8 (0.4)	..	720 (38.6)
6	Himachal Pradesh	1 (0.5)	12 (6.0)	95 (47.5)	200 (100.0)	46 (19.6)	23 (9.8)	60 (25.5)	2 (0.8)	..	3 (1.3)
7	Jammu & Kashmir	16 (7.6)	21 (10.1)	..	209 (100.0)	127 (35.6)	36 (10.1)	116 (32.5)	8 (2.2)	..	27 (7.6)
8	Karnataka	259 (7.1)	103 (2.8)	..	3634 (100.0)	461 (9.8)	134 (2.9)	3455 (73.7)	55 (1.2)	..	396 (8.5)
9	Kerala	92 (5.2)	17 (0.9)	7 (0.4)	1793 (100.0)	234 (11.0)	131 (6.1)	1590 (74.7)	37 (1.7)	..	103 (4.8)
10	Madhya Pradesh	126 (4.9)	70 (2.8)	..	2541 (100.0)	212 (5.7)	173 (4.6)	2897 (77.5)	29 (0.8)	98 (2.6)	227 (6.1)
11	Maharashtra	488 (5.5)	158 (1.8)	106 (1.2)	8812 (100.0)	1170 (10.8)	880 (8.1)	6709 (62.1)	118 (1.1)	777 (7.2)	919 (8.5)
12	Orissa	8 (0.5)	22 (1.4)	26 (1.8)	1558 (100.0)	73 (3.4)	56 (3.6)	1855 (86.4)	9 (0.4)	79 (3.7)	15 (0.7)

13 Punjab	..	710 (25.6)	5 (0.2)	82 (2.9)	2773 (100.0)	280 (7.8)	177 (4.9)	2128 (59.4)	10 (0.3)	..	973 (27.1)
14 Rajasthan	..	281 (21.2)	80 (6.0)	20 (1.5)	1328 (100.0)	134 (6.4)	106 (5.0)	1239 (58.8)	15 (0.7)	..	430 (20.4)
15 Tamil Nadu	..	1605 (29.1)	46 (0.8)	124 (2.3)	5513 (100.0)	541 (8.5)	523 (8.2)	3378 (52.9)	77 (1.2)	49 (0.8)	1694 (26.5)
16 Uttar Pradesh	..	841 (20.3)	90 (2.2)	53 (1.3)	4152 (100.0)	673 (9.5)	88 (1.2)	3996 (56.5)	32 (0.5)	261 (3.7)	1855 (26.2)
17 West Bengal	..	30 (0.6)	145 (2.9)	..	5064 (100.0)	655 (11.2)	597 (10.2)	3874 (66.2)	43 (0.7)	400 (6.8)	68 (1.2)
All India		6310 (12.6)	1117 (2.2)	622 (1.2)	50246 (100.0)	6336 (9.5)	4142 (6.2)	41606 (62.5)	594 (0.9)	2168 (3.3)	9621 (14.4)

NOTE—Figures in brackets are of percentage consumption against total consumption.

## ANNEXURE XXI—(Contd.)

1978-79

Serial no.	State	Public Water works and Sewage Pumping	Miscellaneous	Total	Domestic	Commercial	Industrial	Public Lighting	Traction	Agricultural	Public Water works and Sewage Pumping	Miscellaneous	Total
1	2	27	28	29	30	31	32	33	34	35	36	37	38
1	Andhra Pradesh	61 (1.8)	30 (0.9)	3433 (100.0)	425 (10.1)	413 (9.8)	2469 (58.8)	39 (0.9)	..	840 (20.0)	..	16 (0.4)	4202 (100.0)
2	Assam	8 (1.5)	165 (31.1)	531 (100.0)	55 (9.2)	22 (3.7)	424 (70.9)	4 (0.7)	..	5 (0.8)	11 (1.8)	77 (12.9)	598 (100.0)
3	Bihar	49 (1.2)	11 (0.3)	4095 (100.0)	176 (4.1)	137 (3.2)	3345 (77.0)	6 (0.1)	383 (8.8)	209 (4.8)	50 (1.2)	36 (0.8)	4342 (100.0)
4	Gujarat	146 (2.7)	27 (0.5)	5500 (100.0)	567 (8.3)	289 (4.2)	4485 (65.5)	66 (0.9)	129 (1.9)	1115 (16.3)	171 (2.5)	29 (0.4)	6851 (100.0)
5	Haryana	20 (1.1)	..	1866 (100.0)	182 (7.6)	115 (4.8)	1159 (48.1)	8 (0.3)	..	918 (38.1)	23 (0.9)	5 (0.2)	2410 (100.0)
6	Himachal Pradesh	..	101 (43.0)	235 (100.0)	50 (22.3)	27 (12.0)	68 (30.4)	2 (0.9)	..	6 (2.7)	24 (10.0)	47 (21.0)	224 (100.0)
7	Jammu and Kashmir	36 (10.1)	7 (1.9)	357 (100.0)	82 (20.8)	69 (17.5)	121 (30.7)	6 (1.5)	..	33 (8.4)	39 (9.9)	44 (11.2)	394 (100.0)
8	Karnataka	183 (3.9)	..	4684 (100.0)	523 (10.7)	100 (2.0)	3878 (79.2)	56 (1.1)	..	341 (7.0)	1 (0.0)	..	4899 (100.0)
9	Kerala	23 (1.1)	12 (0.6)	2130 (100.0)	283 (11.7)	149 (6.1)	1837 (75.8)	36 (1.5)	..	77 (3.2)	29 (1.2)	11 (0.5)	2242 (100.0)
10	Madhya Pradesh	96 (2.6)	4 (0.1)	3736 (100.0)	270 (6.3)	195 (4.5)	3250 (75.9)	33 (0.8)	101 (2.4)	282 (6.6)	151 (3.5)	..	4282 (100.0)
11	Maharashtra	223 (2.1)	6 (0.1)	10802 (100.0)	1418 (11.1)	913 (7.1)	7758 (60.4)	133 (1.0)	811 (6.3)	1380 (10.7)	256 (2.0)	182 (1.4)	12851 (100.0)
12	Orissa	27 (1.3)	33 (1.5)	2147 (100.0)	97 (4.0)	82 (3.4)	2056 (84.8)	8 (0.3)	80 (3.3)	49 (2.0)	28 (1.2)	25 (1.0)	2425 (100.0)

13 Punjab	..	7 (0.2)	10 (0.3)	3585 (100.0)	394 (8.3)	247 (5.2)	2393 (50.6)	13 (0.3)	..	1650 (34.9)	7 (0.2)	22 (0.5)	4726 (100.0)
14 Rajasthan	..	103 (4.9)	80 (3.8)	2107 (100.0)	178 (6.8)	132 (5.1)	1557 (59.9)	19 (0.7)	..	512 (19.7)	122 (4.7)	81 (3.1)	2601 (100.0)
15 Tamil Nadu	..	61 (1.0)	56 (0.9)	6379 (100.0)	665 (8.1)	645 (7.9)	4452 (54.4)	87 (1.1)	48 (0.6)	2158 (26.4)	57 (0.7)	66 (0.8)	8178 (100.0)
16 Uttar Pradesh	..	101 (1.5)	66 (0.9)	7072 (100.0)	758 (9.9)	75 (1.0)	3974 (51.7)	32 (0.4)	274 (3.5)	2415 (31.4)	109 (1.4)	51 (0.7)	7688 (100.0)
17 West Bengal	..	158 (2.7)	50 (1.0)	5856 (100.0)	698 (11.7)	477 (8.0)	3943 (66.0)	47 (0.8)	448 (7.5)	105 (1.8)	136 (2.3)	115 (1.9)	5969 (100.0)
All India	..	1444 (2.2)	698 (1.0)	66609 (100.0)	7560 (9.8)	4769 (6.2)	47855 (61.8)	635 (0.8)	2275 (2.9)	12133 (15.7)	1376 (1.8)	826 (1.0)	77429 (100.0)

\*Included in column no. 32.

## CHAPTER 10

### INDUSTRY AND MINERALS

#### BRIEF REVIEW OF THE PROGRESS OF INDUSTRIALISATION

The State of Uttar Pradesh briefly continues to be industrially backward. Inadequate investment in the earlier Plans has been prime reason for slow industrial development. Of the total State Plan outlay for the period from the First to Fifth Plans, the outlay for the industry and mining sector worked out to 5.3 per cent against the corresponding figure of 24.8 per cent for the country. Further, central sector investment in the State upto 1977-78 accounts for only 4.2 per cent of the total investment made in the country. The State Government has been making consistent efforts, with the available resources, to build-up a suitable climate by developing infrastructure and setting up of institutional frame work for industrial growth, as also to promote such industries as sugar, textiles, cement, etc., which have comparatively higher backward and forward linkages. Besides, in order to accelerate the pace of industrialization a number of joint sector projects were also undertaken and private entrepreneurs were encouraged to set up industries in the State by giving them various kinds of assistance and concessions. Industrial growth being the result of cumulative effort of government, financial institutions and entrepreneurs, there has been genuine concern among all these partners in the process of industrial growth about its slow pace. In spite of concerted efforts, the number of industrial projects established till now in the State, Central and joint sectors, is not encouraging. So far only 16 projects in the State sector, 22 projects with the total investment of Rs.500 crores in the Central sector, and 20 projects, having an investment of Rs.50 crores in the joint sector could be set-up in the State.

2. In the large and medium industries sector, private sector units registered under

the Indian Factories Act in 1965 were 221, producing goods worth Rs.346 crores. The number of factories rose only to 242 by 1970 and to 340 in 1978, producing goods worth Rs.501 crores and Rs.1,462 crores respectively. Capital investment also increased from Rs.426 crores in 1970 to Rs.1,085 crores in 1978. Employment in the large and medium sector in the corresponding years was 1.67 lakhs and 1.80 lakhs respectively.

3. The number of factories, production, investment and employment in major groups of industries\* in 1970 and 1978 has been given. It will be seen that though investment has increased from Rs.426 crores in 1970 to Rs.1,085 in 1978, the increase in employment from 1,67,574 to 1,78,371 is marginal. This is mainly because of considerable decrease in employment in textile sector. Similarly, employment in Agro-based industries is also stagnant. This is mainly due to poor performance of sugar and textile industries in the private sector.

4. There has been increase in investment, production and employment in sugar and textile sectors, mainly in the co-operative and public sectors, which are not reflected in the above data. It is estimated that with an investment of Rs.780 crores in Central and State sectors additional employment of about 80,000 has been created. Thus, total employment in large and medium sector in 1978, was 2.60 lakhs.

5. The trends of growth also indicate that growth of engineering and chemical industries has been far more impressive than what it is in traditional sectors like textiles and leather. Agro-based industries also have shown an accelerated rate of growth.

\*Annexure I

## GROWTH RATE OF ORGANISED INDUSTRY

6. The average annual growth rate of industrial production in the registered sector of manufacturing, based on Industrial Production Index of U. P., comes to 4.6 per cent for the period from 1970-71 to 1979-80. This estimate of growth rate should be considered to be very firm inasmuch as it is based on volume index of each of these ten years. A study of such growth rates at 2 digit level of National Industrial Classification (1970) brings out the real condition of various industries during the past decade. Growth rates were excellent in case of six industries, *viz.* rubber, plastics, etc. (15.3 per cent), electrical machinery (13.1 per cent), paper, printing and publishing (11.0 per cent), machinery, except electrical (10.3 per cent), and beverages, tobacco and products (10.2 per cent). Progress was satisfactory in following four industries: Transport equipment and parts (7.9 per cent), non-metallic mineral products (7.4 per cent), basic metal alloy industries (6.0 per cent) and leather and fur products (5.7 per cent). Development pace was moderate to nominal in seven industries, *viz.* jute and mesta (3.3 per cent), miscellaneous manufacturing industries (2.9 per cent), chemicals (except product of petroleum and coal) (2.7 per cent), metal products (except machinery and transport equipment) (2.3 per cent), wool, silk and synthetic textiles (1.6 per cent) and food manufacturing (1.1 per cent). The industries which have shown a negative growth during the decade are textile products (-6.8 per cent), cotton textiles (-4.1 per cent) and wood and wood products (-0.1 per cent).

7. Village and small industries have a significant role in providing more employment opportunities with lower capital component, requiring most of their raw material available at the local level. Keeping in view heavy pressure of population on land, emphasis has been laid on the development of village and small industries sector. There has been rapid growth of these industries in the State as a result of various promotional programmes, under-

taken for development and diversification of small industries in rural and semi-urban areas. It is evident from the fact that there were 12,851 small scale units in 1972-73 which rose to 43,159 in 1979-80. Beside this, the number of small scale units registered under Factories Act also rose from 3431 in 1970 to 4284 in 1978. The small scale sector now has 47,443 units providing employment to 5.38 lakh persons in the State and producing goods worth Rs.980 crores. Still this sector suffers from different bottlenecks/difficulties which need to be tackled and solved. Lack of entrepreneurship and inadequate infrastructure facilities are the major handicaps for the growth and development of small scale industries. To overcome these difficulties entrepreneurial development programme has been launched in the year 1978-79. These programmes are being expanded rapidly and are proposed to be implemented at the district and regional levels. Current evaluation has proved the success of the programmes and a much more ambitious programme has been, therefore, launched this year. There are certain areas where specific type of small scale industries are concentrated. To help the growth of these industries, detailed studies in respect of 5 selected industries were also undertaken. Simultaneously to provide them testing facilities, testing laboratories by the department as well as in collaboration with their associations have also been set up. Various concessions and facilities have helped in the diversification of the industries in backward areas.

8. In order to ensure speedier and balanced growth of industries in rural and backward areas of the State, special emphasis has been laid on development of small scale industries because of their relatively higher labour-oriented character. In 1977, on a productive capital investment of Rs.1.00 crore, 654 persons got employment in the small scale industries sector as against only 189 persons in the large and medium industries. In this background, the development of small scale industries is very important in view of the growing unemployment and under-employment in the State. The growth\* of the small scale industries indicates that in the organised

\*Annexure II

sector (factories registered under Factories Act) the number of small scale units in 1965 was 2,852 which increased to 4,284 in 1978 and the production increased from Rs. 119 crores in 1965 to Rs. 618 crores in 1978. About 1.00 lakh persons were employed in this sector in 1965. This number increased to about 1.78 lakh persons in 1978. The product mix and growth of different categories of industries in the small scale sector indicate that there has been considerable growth in agro-based, engineering, chemical and electronic industries. The average annual growth rate in the small scale sector is 12-15 per cent.

9. Authentic data on small scale industries in the unorganised sector is not readily available and this has been the major constraint in the projection of growth of small scale industries. Some measures are proposed to be taken during Sixth Plan for strengthening the collection of data of small scale units in the unorganised sector. However, it is estimated\* that there were hardly 3,107 units in 1960-61 which increased to 47,443 in 1979-80. Production of small scale units both in organised and unorganised sectors was of the order of Rs. 983 crores by the end of 1979-80. Data for 1978-79 indicates that the total production in small scale sector was worth Rs. 880 crores of which approximately Rs. 618 crores was from units in the organised sector and Rs. 260 crores from units in unorganised sector. The total employment in the small scale sector by the end of 1979-80 was estimated to be of the order of 5,38,260.

10. Small and cottage industries including handicraft, handloom, khadi and village industries in the organised and unorganised sectors are also of significant importance as these are less capital intensive and more employment oriented. These do not provide full time employment alone, but supplement the income of under-employed persons by providing them part time work opportunities. In the unorganised sector on a production of Rs. 1.00 crore, 1,179 persons got employment in 1979-80, which is, itself indicative of

higher employment potential of this sector.

11. There are about 20 lakh artisans working in the handicrafts sector in the country, of which nearly 5.45 lakhs are in Uttar Pradesh. Carpet, art metalwares, chikan, wood carving are the main handicrafts of U. P. About 5.45 lakh persons are engaged in handicraft industries. Of the total production of Rs. 146 crores about 73 per cent of the production (Rs. 107 crores) was exported.

12. Handicrafts, representing our great cultural heritage, occupy an important place in the national economy from the point of view of employment generation and exports. The capital investment in this sector is low, ranging between Rs. 2,500 and Rs. 3,000 per worker. Carpets, art metalware, brassware, wood carving, chikan, etc. occupy a prominent place in the handicrafts. It has been the endeavour of the State Government not only to increase the productivity of the workers, engaged in handicraft industries by providing various inputs and facilities, but also to improve craftsmanship to boost production as well as exports. During the last three years, special training programmes were envisaged for the development of carpet industry. More than 15,000 persons have already been trained in various crafts such as carpet, chikan, wood carving, art metalware, etc.

13. The State Government have set up a Shilpgram in Agra for improving the living conditions of artisans. One more Shilpgram in Varanasi and other functional industrial estate at Moradabad are being set up to help the artisans to have a better living condition. Special studies for the development of four handicrafts, viz. choon-roop, wooden toys, zaris and zardozi, marble, etc. have also been undertaken. In view of the fact that considerable potential for carpet, chikan, metal artware, etc. exists, the network of training centres, common facilities services and marketing arrangements are being strengthened. It is estimated that the production of handicrafts is of the order of Rs. 180 crores per annum and 4.35 lakh artisans are employed in the sector.



14. The main problems of the handloom industry are low wages and inadequate infrastructure. The programmes included in Sixth Plan proposals have taken into account these constraints and some of training programmes have been linked with IRD/Trysem schemes.

15. Khadi and village industries have a significant role in the economic development of the State, because of their capacity to provide sufficient employment opportunities to the rural masses with small investments. The Khadi and Village Industries Board is the premier institution to implement the programmes under the aegis of Khadi and Village Industries Commission. Special emphasis has been given for the development of Khadi and Village Industries Sector in view of the IRD and Trysem programmes. Consequent upon the reorganisation of Board and its functions in 1967, various programmes under KVI sector have helped in generating employment at the end of 1979-80 to the tune of 6.18 lakh persons producing goods worth Rs. 79 crores.

16. For rural employment generation, handloom sector is next to agriculture. There are 5.10 lakh looms in the State. The problems relating to finance, availability of yarn on reasonable price and marketing are being progressively looked after through various schemes so that economic condition of the weavers may improve. While spinning mills have been established to provide yarn of required counts at reasonable prices, finances are being arranged from the institutional sources. Marketing channels are also being organised for handloom products. Special programmes to overcome these problems of the weavers, along with schemes for expansion of facilities like dye-houses, modernisation of looms, etc., have also been undertaken by the State Government. To assist weavers more and more looms are being brought into the co-operative fold, while individual weavers are being helped through Intensive Development Projects. The various facilities provided, resulted into production of 450 million metres of cloth in 1979-80 in

this sector. To encourage large number of measures to take up their own production, efforts have been made to help loomless weavers.

17. This decentralised sector is providing livelihood to over 3 lakh families engaged in weaving and other allied activities. The industry is mainly concentrated in 44 districts of the State and has a potential of much greater development.

18. Some of the important programmes undertaken for raising the production level by activising looms and also diversifying their production are given\* alongwith their achievements. With a view to meeting the requirements of cloth at reasonable rates Janta Cloth was produced. The production increased from 153.28 lakh sq. metres during 1974-78 to 666.79 lakh sq. metres in 1979-80.

19. The objective of the Khadi and Village Industries Board in promoting the Khadi and Village Industries programme has been mainly through the co-operatives. However, of late promotion of Khadi and Village Industries units on individual basis has also been taken up and has yielded fruitful results. The following table indicates the position of production and employment in respect of units assisted by the Khadi and Village Industries Board :—

Year	Production (Rs. in lakhs)	Employment (No.)
1	2	3
1977-78	3503.29	1,93,122
1978-79	3860.00	2,10,556

20. By the end of 1979-80 the number of Khadi and Village Industries units functioning were of the order of 28,066, producing goods worth Rs. 7,900 lakhs. As many as 6.18 lakh persons are getting employment under Khadi and Village Industries sector.

#### *Present Status*

21. Taking large and medium and small industries together, the industries

sector has constituted proportion of the State income. The position is given below :—

*Contribution of Industries Sector to State Income at current prices*  
(in crores Rs.)

Year	Total State Income	Manufacturing		Total
		Regis-tered	Un-regis-tered	
1	2	3	4	5
1970-71 ..	42	187	192	879
1978-79 ..	9420	522	471	993

Source : Economics and Statistics Department report.

The contribution of manufacturing sector in total State income rose from 8.9 per cent in 1970-71 to 10.6 per cent in 1978-79.

22. The details of sectoral investments in 1980-81 are stated below :

Sector	Investment
(Rupees in crores)	
1. Central Sector .. ..	562
2. State Sector (relating to Industries Department)	379
3. Joint Sector (relating to Industries Department)	29
4. Co-operative Sector (relating to Industries Department)	10
5. Private Sector—	
(a) Organised .. ..	1510
(b) Un-organised .. ..	185
Total .. ..	2675

The above figures indicate that the share of public sector (Central and State) in total investment is 46 per cent, of corporate sector 2 per cent, and of private sector 52 per cent.

*Large and medium industry*

23. A review of the performance and functions of the Corporations and progress of promotional programmes, is given in the following paragraphs.

24. *State Textile Corporation*—The State Textile Corporation has set up 8

spinning mills in the State sector and 2 co-operative spinning mills, each having a capacity of 25,000 spindles. These units have started production and are supplying yarn to handloom weavers. However, there is considerable gap between the demand of yarn and the existing production. The demand of cloth is also increasing. During 1979-80, the production of yarn was to the tune of 211.25 lakh kgs.

25. *State Cement Corporation*—This Corporation is already running Dalla and Churk Cement Factories which have an installed capacity of 8.8 lakh tonnes. The Kajrahat Cement project with 16 lakh tonnes capacity having an investment of Rs.80 crores is in an advanced stage of implementation and is likely to go into production by the end of 1980-81. During 1979-80, the production of cement was 4.5 lakhs tonnes, which means nearly half of the capacity remained unutilized.

26. *The Pradeshiya Industrial and Investment Corporation of U. P. Ltd. (PICUP)*.—This Corporation is providing financial assistance and consultancy services to the Large and Medium Industries. It has set up a joint sector project for drugs in collaboration with I.D.P. L. The corporation is also providing sales tax loan to industries as an agency of the State Government. The PICUP has sanctioned Rs.35 crores to 117 projects, which will have total investment of Rs.250 crores.

Main achievements during 1979-80 are as under :

Serial no	Item	Amount sanctioned
(Rupees in lakhs)		
1	2	3
7.	Long term loans .. ..	467.24
2.	Underwriting of shares .. ..	20.00
3.	Direct Equity Participation/Private placement.	28.25
4.	Sales Tax Loan Scheme .. ..	118.28
5.	Capital subsidy Scheme .. ..	8.40

27. *U. P. State Industrial Development Corporation (UPSIDC)*—The Corporation has obtained 31 licences for setting up of joint/State sector projects, with an investment of Rs.117 crores. Five projects have already started production and five more are in the various stages of implementation, which are expected to start production by 1980-81. The Corporation has provided equity to the extent of Rs.2.65 crores in these projects. Apart from implementation of existing licences in the joint sector, it is proposed to continue with the capital participation scheme through underwriting. The corporation has provided underwriting assistance to the tune of Rs.5.0 crores to new companies. A major activity of the corporation is to develop industrial plots and provide infrastructure facilities to industries. The corporation has also acquired 14,000 acres of land in 28 places. A sum of Rs.20 crores has been invested in the industrial areas.

28. *U. P. Electronics Corporation (U.P. L. C.)*—The State Electronics Corporation has set up 7 joint sector companies and 4 state sector projects for the production of electronic items. The following table contains the details of investment and their stages of production :

Serial no	Joint Sector Projects	Investment (Rupees in lakhs)	Production
1	2	3	4
1	Hindustan Computers Ltd.	40.50	26 lakhs
2	Uptron Anand Ltd. (T V Tubes).	81.00	1 lakh capacity to go in production.
3.	Uptron Power=tronic Ltd.	55.65	Just started production.
4.	Uptron Components Ltd.	15.62	Being revived
5.	Uptron Sritronics Ltd.	294.46	To go in production shortly
6	Uptron Sempac Ltd.	16.00	Being revived.
7	Uptron Devices Ltd.	228.00	To go in production in January, 1981

1	2	3	4
<i>State Sector Projects</i>			
1	Uptron Video Ltd.		
	(a) Allahabad Unit	30.00	} 13,546 T.V. Sets
	(b) Lucknow unit	22.67	
2	Uptron Capacitors Ltd.	91.43	6 lakh capacitors p.a. 1980.
3.	Uptron Digitals Ltd.	78.40	Production started in February, 1980.
4.	Uptron instruments Ltd.	18.50	To go in production shortly.

29. Apart from the above, U. P. L. C., has set up Electronic Complexes in Panki (Kanpur), Rae Bareli, Sahibabad (Ghaziabad), Noida (Bulandshahr) and Agra in which small entrepreneurs have been provided package assistance. An electronics testing and development laboratory is already being managed by UPLC. The Corporation has also set up marketing and R. & D. Organisation for development of electronics industries in the State.

30. *U. P. Financial Corporation (U. P. F. C.)*—The State Financial Corporation is providing loans to medium and small industries. During 1979-80, the Corporation sanctioned more than 2700 applications amounting to Rs.33 crores.

31. *Tool Room Project*—A Tool Room Project is being set up in Lucknow under the supervision of PICUP. The State Government had already released part of the funds for this project and its collaboration has also been finalised. This project will be completed by 1981-82. It is proposed to set up 2 extension centres for the tool room, one in eastern and the other in western U P. for providing tool room services to the engineering industries. The building is under construction and installation of machines will be taken up.

32. *U. P. Auto Tractors Ltd.*—The State Government has promoted a company namely U. P. Auto Tractors Works

Ltd. for setting up of a tractor manufacturing unit in Pratapgarh. The project is in the advance stage of implementation and is expected to go in production by 1981-82. The factory will produce 15,000 tractors per annum and is expected to have investment of Rs.20 crores.

33. *New Okhla Industrial Development Authority (NOIDA)*—The State Government has developed an Industrial-cum-Commercial Complex on the Delhi—U. P. Border. This is an integrated project where 4,000 factories are proposed to be set up. The industrial sheds are being financed from the funds of the industries department. It is proposed to provide loan to NOIDA for expansion of its activities and completion of existing work.

#### *Village and Small Industries Sector*

34. The main programmes for small scale industries taken up in the previous Plan were :

1. Development of infra-structure facilities, specially setting up of industrial estates.

2. Creation of common facilities, testing and development facilities for small scale industries.

3. Taking up industrial potentiality and techno-economic surveys for identification of potential growth areas and of suitable industries based on resources.

4. Creation of adequate administrative and institutional frame work for providing inputs and assistances to the small entrepreneurs.

5. Setting up of industrial complexes in potential growth centres and provisions of package of incentives.

These programmes coupled with incentives and concessions made tremendous impact in the growth of small scale industries, specially, in the development of glass and ceramics, chemicals, engineering and electronic industries.

35. Notable achievement were : (a) creation of institutional frame work by setting up specialised corporations such as UPSIC, UPFC, U. P. Export Corporation and U. P. State Leather Development Corporation in different years (b) setting up of DICs during 1978-79 and 1979-80 for encouraging industries in potential growth centres in rural area and (c) setting up of industrial complexes for specific industries like hosiery, readymade garments, leather, plastic, electronics, scooter and air-craft ancillaries, etc.

36. With a view to encouraging new entrepreneurship, specially in semi-urban areas, a comprehensive programme of organising industrial campaigns, identification of entrepreneurs and motivating them for setting up of small scale industries and provide adequate training to entrepreneurs was taken up.

37. Consultancy services and credit facilities through banks and Financial Corporations have also been expanded. Last year, the scheme of providing composite loans to small artisans was introduced, which made tremendous effect in creating entrepreneurship in rural areas.

38. Apart from the above programmes, the programme for integrated rural development and TRYSEM were introduced in selected blocks for identified families. Under this, 8,089 artisans-based units and 5,808 small scale units were encouraged in 1979-80, providing employment to 90,449 persons.

39. *Handicrafts*—In the Handicrafts Sector, emphasis was given on expansion of skills by setting up of training centres. The strategy is to widen the area of concentration of artisans by opening training centres in the periphery of existing crafts. Common facility services, supply of inputs, designs and marketing arrangements are being strengthened through the institutional framework of U. P. Export Corporation, Brassware Corporation and Handicrafts Societies. More than 15,000 artisans have been trained in carpet, chikan, wood carving and metal artware. Assistance in the form

of credit, raw-materials, improved designs etc. is also being provided. The existing show rooms of U. P. Export Corporations are being expanded. Brassware Corporation has also set up sales depots. Export of handicrafts is also being encouraged and assisted. On account of these facilities in the past, the production of handicrafts has increased from Rs.120 crores in 1976-77 to Rs.180 crores in 1979-80.

40. *Handlooms*—The Handloom Sector is a very important sector and needs serious attention because a large number of weavers is dependent on it. More than 2 lakh weavers have been brought under co-operative fold so far and 5 intensive projects have been started covering 10,000 weavers each in their area of operation. According to an estimate the turnover of Handloom Corporation has increased from Rs.10 crores to Rs.40 crores from 1976-77 to 1979-80. Programmes under handloom sector have resulted in increase of earning capacity of weavers. The assistance programmes which have made impact on weavers are :—

(a) Supply of yarn at reasonable prices through the yarn spinning mills of U. P. State Textile Corporation.

(b) Setting up of Dye-houses.

(c) Marketing arrangements through the show rooms of Handloom Corporation and UPICA.

41. *Khadi and Village Industries*—The State K.V.I. Board implements the programmes by utilizing funds provided by the Khadi and Village Industries Commission. During 1979-80, assistance amounting to Rs.1.75 crores from KVIC was utilized in assisting more than 3,000 units relating to village oil, soap making, matches, leather, bee-keeping, carpentry, smithy, khandsari, etc. The State Government released funds only for schemes for which KVIC was not providing finance on individual pattern. Funds were utilized for rebate on khadi cloth, and dal and rice processing units, etc.

#### CONSTRAINTS ON INDUSTRIAL GROWTH

42. It has been identified that the main reasons for the industrial backwardness of the State have been low level of investment in the Central and State Sectors and inadequate

incentives for attracting investment from outside the State. Lack of adequate infra-structure facilities, shortage of power, timely supply of critical raw materials, etc. have also impeded industrial growth. Though entrepreneurship is scarce, it can be stimulated, by introducing adequate package of incentives on a long-term basis.

and Social infrastructure specially in Industrial area.

1. Lack of infra-structure.
2. Lack of Entrepreneurship.
3. Inadequate housing facilities and Social infra-structure specially in Industrial areas.
4. Power problems.
5. Raw material shortages.
6. Lack of marketing facilities.
7. Sales Tax and incidence taxes like octroi, etc.

#### STRATEGY FOR THE SIXTH PLAN PERIOD

44. Overall objectives of industrial development plan are :—

(i) Creation of larger employment opportunities.

(ii) Ensuring better utilization of existing investments on infra-structure, capacities already created and available natural resources.

(iii) Creation of comparable testing and development, quality control and marketing facilities.

(iv) Encouraging improved productivity, modernization and utilization of improved technologies.

45. *Large and Medium Sector*—The approach during 1980—85 plan would be :—

(i) To increase the investment in the Central sector projects.

(ii) To increase the investment in the State/Joint sector projects and ensure balanced regional dispersal of such projects.

(iii) To give priority to those large and medium industries which utilize technologies for increasing production and create larger employment opportunities. With this aim, medium sized factories would be given preference for bulk of the new investments. Even in case of medium sized projects, emphasis would be laid on expansion and diversification activities within the existing industrial establishments

which would result in a more efficient utilization of capital and a shorter gestation period.

(iv) To devise an attractive package of incentives for attracting investment in the State.

46. Measures for better utilisation of capacities being taken up would include : (a) Adequate supply of power, (b) Encouraging installation of generating sets, (c) Setting up of captive power plants in specified industrial areas, (d) Improvement and strengthening of infra-structure facilities, and (e) Revival of such sick units which can become viable.

47. *Small Scale Sector*—The overall targetted growth of economy is 6 per cent for the Sixth Five-Year Plan (1980–85). In view of this the growth rate for small scale sector is proposed to be kept at 15-16 per cent. The approach to be adopted for achieving this objective would be to introduce the following measures :—

(i) Development of rural/semi-urban industrial estates in the potential growth centres, so that atleast each district headquarter has an industrial estate and suitable industrial estate in other growth areas.

(ii) Development of new industrial complexes having improved technologies for potential industries.

(iii) Identification and development/training of entrepreneurs and assisting them in setting up of units. Product oriented training of skills for industries to be set up in rural areas.

(iv) Creating suitable linkages for adequate supply of inputs, specially credit facilities to the small entrepreneurs. It is, also proposed to set up rural marketing centres for supply of raw materials to the rural artisans and small industries and providing marketing channels to their products.

(v) Providing adequate testing and quality control facilities for improving the quality of products manufactured in the small scale sector.

(vi) Introduction of suitable incentives/concessions to make the pro-

ducts of small scale units competitive and off-setting the locational disadvantages for the development of backward areas.

(vii) An integrated project for identification and assistance for the revival of sick units is proposed to be adopted with the existing administrative and institutional frame work.

(viii) The strategy for small scale sector also includes suitable steps for improving the data base for village and small industries sector and strengthening of monitoring system for better flow of information.

(ix) There is considerable gap in training needs and existing set up. Therefore, training of skills for various potential industries of the area should be undertaken by the concerned department.

48. *Handicrafts*—Handicrafts are labour intensive. Capital investment per worker in the handicrafts sector is very low, ranging between Rs.2,500, and Rs.3,000. Thus, the handicrafts sector can provide additional employment with relatively low investment. However, any expansion of production capacity in this sector suffers from the constraint of limited availability of trained personnel, and, therefore, the training of artisans becomes necessary for increasing production. Fashions and tastes are constantly changing in the handicrafts market, and, therefore, the production of new designs and products along with the training of skilled personnel becomes necessary. While a good portion of the total production of handicrafts is exported, it is necessary that the domestic market is also continuously enlarged, so that it may help in generating more employment and also acts as a cushion in case of an adverse situation in the export market.

#### *Targets of Growth, Production and Employment*

49. To achieve overall growth rate of 6 per cent, a growth rate of 10 to 12 per cent per annum is proposed for the Large and Medium Industries Sector during the

Sixth Plan period. Broad categorywise projections are given below :—

*Projected value of Production*

(Rupees in crores)

Category	Anticipated Production (1979-80)	Projected Production-Targets (1984-85)
1	2	3
Agro	637	1000
Textile	245	415
Forest	46	65
Livestock	33	68
Mineral	19	40
Chemical	120	258
Engineering	352	670
Miscellaneous	85	134
<b>Total</b>	<b>1537</b>	<b>2650</b>

50. A target to establish 30,000 new small scale units during the plan period 1980-85 has also been fixed to achieve the anticipated growth rate. Efforts will also be made to step up the production in existing units.

51. A growth rate of 20 per cent per annum is envisaged for Handicrafts during Sixth plan period in view of the tremendous potential of the Industry.

52. Based on the past achievements made so far and keeping in view the potentials for further development, targets for Handloom for the new Five Year plan (1980-85) are proposed as follows :—

*Physical Targets*

Serial no	Item	Unit	Base year 1979-80	Target for 1984-85
1	2	3	4	5
1.	Production of Handloom cloth	Million Metres	450	600
2.	Handloom societies	No.	3,311	2,229
3.	Effective coverage of looms under cooperative fold	No.	2,19,400	1,11,530
4.	R.B.I. Guarantee	Rupees in lakhs	280.75	1000.00
5.	Marketing of Handloom goods	—Do—	2,362.11	5000.00

*Employment*

53. It is estimated that the level of employment by the end of 1979-80 in the Large and Medium Industries sector was 1.93 lakh persons. With implementation

of proposed programmes, additional direct employment of 1.71 lakh persons will be created. Thus by the end of 1984-85, the employment level is expected to be 3.64 lakh persons. The additional investment envisaged in the Plan period is Rs.870 crores.

54. In the village and small industries sector, the level of employment by 1979-80 was estimated to be 25.07 lakh persons. In this sector, an additional employment of 14.29 lakh persons is anticipated which will bring the employment level 39.36 lakh persons by 1984-85. This additional employment of 14.29 lakh persons will be generated in small and tiny sector (2.32 lakhs), handicrafts (3.15 lakhs), khadi and village industries (5.67 lakhs) and handloom (3.15 lakhs).

55. Capacity utilization of selected industries under large and medium sector, on the basis of DGT-D-MIS is given below :—

Industries	% capacity utilization in 1979	
	U. P.	India
1	2	3
1. Aluminium	82.0	69.3
2. Nitrogenous Fertilizer	68.9	69.2
3. Leather Footwear	22.9	55.3
4. Cement	54.2	81.2
5. Pesticides	102.0	90.6
6. Soap	197.1	134.5
7. Baby Food	69.6	91.0
8. Bicycles	59.3	105.3
9. Dry Cells	18.5	66.5
10. Paper and Paper Board	68.3	76.1

56. Broadly, under utilisation of the installed capacity may be attributed to (a) demand constraint, (b) a supply constraint and (c) sickness of units. Remedial measures for better utilisation of existing capacity would therefore be based on these factors so that investment already made gives optimum return. In cases where demand for the products is short of supply, further licensing for such products will have to be restricted. Further, with suitable modifications in the capacity, diversification would be encouraged. Similarly, such policy measures, both on the part of entrepreneurs as well as the government would be necessary so that mismatching of input supplies and production capacity is reduce-

ed to the minimum. In the sick mills, balancing investment would be necessary to replace old and inefficient equipment.

*Estimated requirements of total funds and their sources*

57. The source of finance envisaged or investment in industries sector is summarised below :—

*Source of Finances*

Sector	(Rupees in crores)			
	Total	Institutional Finance	State Govt. Funds	Private Savings
1	2	3	4	5
Central Sector	2000	800	1200	..
State Sector	300	150	150	..
Joint Sector	170	50	100	20
Private Sector :				
(a) Large scale	400	300	..	100
(b) Small Scale	300	220	..	80
Total ..	3170	1520	1450	200

For the State Sector, Corporation-wise programmes are given in a later section.

58. *Power*—In view of the investment of Rs.3170 crores envisaged in the industrial sector during the Sixth Plan and a growth rate of 10 to 12 per cent in large and medium industries and 20 per cent in small scale, it is estimated that additional power requirement by the end of the Plan period will be around 2000 MWs. It is also envisaged that captive power plants in private/co-operative sectors for units in industrial areas will be set up. The subsidy of generating sets and other private captive units have also been planned to meet the power shortages.

59. *Industrial Estates, areas and complexes*—The industrial estates programme is for small scale industries only and is being implemented by the Directorate of Industries. There are 65 industrial estates having 900 sheds and 2133 plots of which 880 sheds and 1950 plots have been allotted. 875 sheds and 1800 plots are occupied. The units in industrial estates are producing goods worth Rs.25 crores annually and providing employment to more than 30,000 persons. Recently, the demand for constructed sheds has been increasing rapidly and, therefore, of the 26 new estates planned, construction/development work in 15 estates was taken up in 1978-79 and will be completed this

year (1980-81). Additional 150 sheds and 836 plots will be available. It is proposed to take up 22 new estates in such a way that all district headquarters have an industrial estate.

60. The industrial area scheme is being implemented by UPSIDC for mainly medium and small units. So far 14,000 acres of land has been acquired and developed. The occupancy in certain areas e.g. Bareilly, Gorakhpur, Sandila, etc. was poor because of inadequate facilities. The strategy during the Sixth Plan is, therefore, to provide additional facilities in these areas which include captive power plants, generator subsidy, water and drainage, police posts, banks and field hostels, etc.

#### (1) LARGE AND MEDIUM INDUSTRIES

61. *State Textile Corporation*—In the overall development of the State the textile industry has special significance both for its employment potential and for the value added for the manufacturing sector. It also has important employment linkages with agriculture, transport and trade. There is a sound base for setting up textile projects in the form of the expertise gained by the U. P. State Textile Corporation over the last few years.

62. The requirement of cloth in the State is estimated to be of the order of 2500 million metres by 1985. The present installed capacity is estimated to produce about 300 million metres. It has also been estimated that the demand of cotton yarn in the State is approximately 13.50 lakhs kgs. and that of viscose staple yarn is approximately 120 lakh kgs. The demand is expected to rise rapidly because of the development envisaged in the handloom and powerloom sectors. It is anticipated that the demand of yarn would be about 2500 lakh kgs. by 1985 and will further increase during the Seventh Five-Year Plan period.

63. This projected demand would require an additional spindlage of 6 lakhs by 1985 and another 4 lakhs by the middle of Seventh Plan period. It is proposed to set up 6 lakh spindles during the Sixth Plan and make preparations for further 4 lakhs so that they may be com-



missioned by the middle of Seventh Plan period.

64. The 1980-85 Plan programmes,\* therefore, envisage installation of an additional capacity of 6 lakhs either in the existing spinning mills or by setting up new mills. As mentioned above, some outlay will also be required for taking initial action for setting up 4 lakh additional spindles in the Seventh Plan period as spillover schemes.

65. Considering the multifibre policy of the Government and the increasing use of artificial fibre in the production of cloth, it is proposed to set up a Rayon Grade Pulp unit and a viscose staple fibre unit of 100 tonnes per day and 75 tonnes per day respectively. The feasibility of these projects has already been prepared through PICUP. The availability of raw material is being determined by the State Government.

66. It is also proposed to instal 1500 automatic looms and a Central Processing House in the State Sector. The automatic looms and Process House Projects had been approved by the Government in the past, but could not be implemented. It is now proposed to revive these projects.

67. The diversification and modernization of the 8 public sector mills being run by the U. P. State Textile Corporation is also proposed to be taken up during the Sixth Plan period. Some of the schemes of diversification are manufacturing of sewing thread, spinning of blended yarn and industrial yarn.

68. *Hill component*—The hill component of the State sector schemes are :

1. Two hosiery complexes are being proposed for the Hill areas. The total capital cost would be Rs.2.00 crores.

2. It has been decided by the State Government to set up one spinning mill of 50,000 spindles (out of the new mills proposed above) in the district Naini Tal. The total capital cost is estimated to be Rs.18.00 crores.

3. The expansion of Kashipur spinning mill situated in Hill area

will also form part of Hill component.

The total capital cost of expansion would be about Rs.8.5 crores.

69. The requirement of funds in the form of share capital for various projects is Rs.116.00 crores in terms of outlay.

70. *U. P. State Cement Corporation*—The Corporation is already running two cement factories, one at Churk and the other in Dalla, having capacity of 4.8 lakh tonnes and 4 lakh tonnes per annum respectively. The Kairahat Cement Project having the capacity of 16.80 lakh tonnes per annum is in the final stage of implementation and is likely to start production by the end of 1980-81.

71. A conservative estimate of cement shortage in India in 1979-80 is 7 million tonnes, with a demand of 26 million tonnes and a production of 18 million tonnes and import of 1 million tonne. Annual growth rate of cement demand is estimated to be 8 per cent. Thus by the end of Sixth Plan capacity required @ 85 per cent capacity utilisation would be 44.80 million tonnes.

72. In view of the wide gap between demand and supply of cement and availability of raw material in the State, it is proposed to set up 3 large projects and 9 mini projects as given below :—

*Cement Projects*

(Rupees in crores)

Name of project	Total Project cost	Requirement of Govt. fund
1	2	3
<i>Large Plants</i>		
1. Gangolihat ..	39.20	13.06
2. Mandarsu ..	40.00	13.34
3. North Kairahat ..	112.50	37.50
<i>Mini Plants</i>		
1. Lambidhar (A.R.C. Plant)	4.24	0.15
2. Lambidhar (Irrigation Department).	5.01	..
3. Matela ..	5.25	0.46
4. Salkhan ..	5.25	0.46
5. Khairana ..	5.25	0.46
6. Krol deposits ..	5.25	0.46
7. Jhiria ..	5.25	0.46
8. Basuhari ..	5.25	0.46
9. Kairahat ..	5.25	0.46
10. R. and D Organisation for cement.	..	2.00
<b>Total</b> ..	<b>237.70</b>	<b>69.27</b>
		(say Rs. 70 Crores)

73. These projects will generate additional capacity of 28 lakh tonnes and a direct employment to about 4,000 persons and indirect employment to 20,000 persons. An outlay of Rs.50 crores is proposed for these projects.

74. PICUP is providing multi-dimensional services for the development of large and medium industries in the State. These include subsidy on techno-economic feasibility reports, financial assistance in the form of term loans, underwriting and equity participation. PICUP is also acting as an agent of the State Government for implementation of the interest-free Sales Tax Loan Scheme and the Central Capital Subsidy Scheme. The Corporation has sanctioned over Rs.3,500 lakhs as financial assistance to 117 large and medium industries in the State having a total investment of about Rs.25,000 lakhs with a direct employment potential of about 25,000 and indirect employment of over one lakh.

75. PICUP has participated in two Joint Sector projects, (i) U. P. Drugs and Pharmaceuticals Ltd. (UPDPL) and (ii) U. P. Twiga Fibre-glass Ltd. and hold a letter of intent for XLPE/PVC Cables. For the expansion of UPDPL and other projects, the requirement of funds are :—

(Rupees in lakhs)

Serial no.	Projects	Requirement of PICUP in Equity
1	2	3
1	XLPE/PVC power cables ..	127.00
2	UPDPL expansion and Multi-purpose plant.	34.00
3	Salicylic Acid .. ..	29.00
4	Polyester Staple Fibre ..	650.00
5	Other Projects .. ..	810.00
	<b>Total</b> ..	<b>1650.00</b>

76. The requirement of funds for PICUP during the period 1980-85 is indicated below :—

(Rupees in lakhs)

1. Additional Share Capital ..	500.00
2. Government Guaranteed Bonds ..	1300.00
3. Subsidy for feasibility studies ..	50.00
4. Sales Tax Loan Scheme ..	1000.00
5. Joint Sector projects ..	1650.00
<b>Total</b> ..	<b>4500.00</b>

77. *The U. P. State Industrial Development Corporation*—This corporation was set up in 1961, has been functioning as a catalyst for the development of industries in the State. The authorised capital of the Corporation is Rs.20.00 crores of which Rs.14.32 crores has been paid up by the State Government.

78. The Corporation has already made an investment of Rs.20 crores on the development of basic infrastructural facilities. In the Industrial Areas promoted by the Corporation, additional investment by way of creation of certain facilities and amenities such as Common Facility Centre Building, Field Hostels, Workers Housing, Telephone, Telex, Bank, Police Outpost and Kiosks will be made in the Sixth Plan period.

79. One of the major activities of the Corporation is to participate financially, in the industrial units proposed to be set up in the State. The Corporation has 31 projects in hand of which 5 have already been commissioned and 5 more are expected to commence production by the end of 1980-81. The total investment cost of all these projects is of the order of Rs.117 crores. The Corporation has contributed Rs.2.65 crores in the Equity capital of the Joint Sector Projects. Besides contributing to its Equity share in the on-going projects, the Corporation would be required to contribute its share of Equity in other projects, e.g. Phosphorus, Carbon Black, Malaic Anhydride, Fatty acids and Glycerine, Graphite Electrodes, S. T. P. P. etc. during the next five years. It is estimated that the

Corporation would require Rs.8.5 crores towards Equity contribution in the Joint Sector Projects.

80. The Corporation provides financial assistance to the entrepreneurs up to the extent of 50 per cent of Promotor's capital in the backward districts and 40 per cent in the non-backward districts. During the last five years, the Corporation has sanctioned funds to the extent of Rs.115 lakhs. The scheme is likely to gather momentum during the Sixth Plan. Anticipated requirement of funds under this programme would be of the order of Rs.1.5 crores.

81. Thus the Corporation would require Rs.10.00 crores during the Sixth Plan for equity participation.

82. As it is well known, the promoters can at best hold 40 per cent equity and the remaining 60 per cent equity capital has necessarily to be offered to the public for subscription. An exception is, however, available in case of Joint Sector Projects where the public subscription is of the order of 49 per cent. The Central Financing Institutions expect that the finances for the projects up to Rs.200 lakhs would be provided to the entrepreneurs by the State agencies.

83. The Corporation has vast experience of functioning as Underwriter and till 1976 it had provided Underwriting Assistance of the order of Rs.5 crores to 52 Companies. With the improved availability of the power in the Sixth Plan, it is anticipated that there would be increased pressure for providing Underwriting Assistance. An Outlay of Rs.5 crores, is, therefore, proposed for the Sixth Plan period.

84. With a view to ensuring regular supply of power to the industrial units in the Industrial Areas, it is proposed to set up a 60 MW Thermal Power Station at Sikandrabad, at a cost of Rs.50 crores. Other industrial areas will be taken up in next phase.

85. The feasibility report of the proposed Power Plant has already been got prepared from Bharat Heavy Electricals Ltd. (BHEL). Out of the total project cost of Rs.50 crores, it is proposed to raise Rs.30 crores from the Financial Institutions and Rs.20 crores by way of Equity Capital would have to be provided. The

U. P. State Electricity Board (UPSEB) has no objection to UPSIDC setting up the proposed Thermal Power House. The approval of the Central Electricity Authority has also been sought and is expected shortly.

86. An outlay of Rs.20 crores is proposed for the Sixth Plan period for this programme.

87. Land Subsidy Scheme is already operating in seven districts of the State, i.e. Basti, Faizabad, Mohan (Almora), Jhansi, Banda, Khurja (Bulandshahr) and Mathura, and has shown encouraging response. Keeping in view the importance and utility of the scheme, mainly from the point of view of backward areas development, it is proposed to continue to benefit the existing areas, which may be brought under expansion programme. Besides, it is proposed to continue to cover 6-8 new districts during the next five years. It is estimated that this would require funds to the tune of Rs.250 lakhs. An outlay of Rs.2.5 crores is, therefore, proposed under this programme.

88. The successful operation of industrial enterprise is also closely linked up with easy availability of facilities like telephone, telex, banks, hostels, shopping centre, and efficient drainage and effluent disposal systems, link roads, etc. Apart from these essential requirements, an industrial enterprise has to be sure of its security and hence the need for provision for housing Police Outposts, etc. The Corporation has already initiated this programme in certain areas and provision of such facilities exists at Unnao, Sahibabad (Ghaziabad), Sikandrabad (Bulandshahr), Sandila (Hardoi), Mathura, Lucknow, Ram Nagar (Varanasi), Rae Bareilly, Agra and Naini (Allahabad). The investment on this activity is about Rs.1 crore. It is estimated that these facilities would require about Rs.7.8 crores. The proposed outlay is Rs.0.50 crore.

89. The Corporation has successfully implemented two projects : viz., Messrs Almora Magnesite Limited and Messrs U. P. Digital Ltd., Bhowali (Naini Tal). There is sufficient scope for promoting projects based on forest natural resources, available skills and environment based on the

experience gained by the Corporation in the implementation of the projects, the following programmes are proposed to be taken up for Hill areas during the Sixth Plan (1980-85):

(a) Assistance by way of Grant-in-aid to the Corporation for the manufacture of Electronic Watches, Parts and Components required is Rs.100 lakhs.

(b) Assistance for Equity Contribution in Medium and Large Units in the Hill areas, required is Rs.100 lakhs.

90. It is estimated that for implementing various programmes during the Sixth Five Year Plan period, the total requirement of funds would be of the order of Rs.183 crores, of which the requirement to the extent of Rs.143 crores is proposed to be met from Institutional agencies.

*Proposed Outlays for 1980-85 (UPSIDC)*

Schemes/Programmes	Proposed Outlays
	(Rupees in lakhs)
<i>A—Plains—</i>	
1. Assistance by way of grant-in-aid for contributing towards promoter's equity for establishing industrial estate.	1000.00
2. Assistance by way of grant-in-aid for providing underwriting facilities for establishment of projects in the State.	500.00
3. Equity contribution in the New Company proposed to be incorporated for getting up of a Captive Power Plant at Sikandra-bad.	2000.00
4. Subsidy on cost of land in backward districts.	250.00
5. Additional facilities in Industrial areas.	50.00
	Total A .. 3800.00
B. Hill area Schemes	200.00
	Total A+B .. 4000.00
C. Institutional Finance	14300.00

91. *U. P. Electronics Corporation—* The Corporation is developing electronic industry in the State. Its activities include launching of nucleus projects

(to manufacture wide range of electronic components and equipment, around which small units will 'cluster' into estates), joint sector projects, marketing facilities to the small scale entrepreneurs and setting up of testing/development centre for electronic entrepreneurs of the State. The programmes are given below :

1. Uptron Electronics Complex, NOIDA.
2. Uptron Estate, Sahibabad.
3. Joint Sector Projects :
  - (a) Hindustan Computers Ltd.,
  - (b) Uptron Powertronics Ltd.,
  - (c) Uptron Anand Ltd.,
  - (d) Uptron Shretronics Ltd.,
  - (e) Uptron Electronic Devices Ltd.,
  - (f) Uptron Sampack Ltd.,
  - (g) Uptron Components Ltd.

4. Wholly owned subsidiaries of U. P. Electronics Corporation Ltd. :

- (a) Uptron Video Ltd., (UVL),
- (b) Uptron Capacitors Ltd., (UCL),
- (c) Uptron Digital Systems Ltd., (UDSL),
- (d) Uptron Instruments Ltd., (UIL).

92. Besides the above, UPLC would provide consultancy services to entrepreneurs in preparation of techno-economic feasibility reports, market surveys etc. The Corporation has its own Central Marketing Division to market products manufactured in their own subsidiaries through its own sales-cum-service centres situated at Lucknow, Kanpur, Delhi, Meerut and Jullundur.

93. UPLC has proposed to provide centralised marketing facilities, design and development facilities and strengthen their testing/development facilities for encouraging the electronics industries in the State.

94. *Sixth Plan Programme of UPLC—* Apart from completion of on going programmes, new projects in State/Joint Sectors are proposed to be undertaken. The Corporation also proposes to set up Electronics Testing and Development, R and D. facilities and undertaking strengthening of

marketing set up. The details of programmes are :—

	1980—85 Outlays
(Rupees in lakhs)	
1. State Sector Projects .. ..	900.00
2. Joint Sector Projects .. ..	1000.00
3. Electronics Testing and R/D Centres	300.00
4. Marketing Scheme .. ..	100.00
5. Functional Electronic Complexes and promotional assistance to UPLC.	200.00
Total .. ..	2500.00

95. *Uttar Pradesh Financial Corporation*—The main function of this Corporation, established under the provisions of the State Financial Corporation

*Utilisation of Resources in 1980—85*

(Rupees in lakhs)

Utilisation of Resources	Resources
1. Disbursement of loan ..	19,000.00
2. Repayment of loan to State Government	118.00
3. Repayment to IDBI (Refinance) ..	2,753.00
4. Repayment to Reserve Bank of India	1,275.00
5. Repayment of Bonds ..	439.88
6. Investment in Government Securities	21.00
7. Investment in building and other capital payment.	245.00
8. Others:	
(i) Payment of interest on borrowings	3,911.10
(ii) Administrative and other Revenue expenditure	1,250.00
(iii) Tax ..	507.00
(iv) Dividend ..	183.24
9. Closing Cash ..	216.70
Total ..	29,919.92
	1. Opening Cash .. 165.61
	2. Increase in Capital :
	(i) State Government .. 577.32
	(ii) I.D.B.I. .. 677.68
	3. Borrowing from :
	(i) State Government .. 1400.00
	(ii) Reserve Bank of India .. 1275.00
	(iii) Bonds and Debentures .. 3890.00
	(iv) Refinance from I.D.B.I. .. 12487.11
	4. Repayment of loan from borrowers 3375.00
	5. Sale/Redemption of securities .. 10.20
	6. Other Capital Receipts .. 187.00
	7. Others :
	(i) Investment (Actual Receipts) .. 5625.00
	(ii) Others .. 250.00
	Total .. 29,919.92

Act, 1951, is to provide financial assistance by way of medium and long-term loans to industrial concerns in the small and medium scale sectors for acquisition of block assets such as land, building, plant and machinery and also for renovation, expansion and modernisation of existing plant and machinery. It has also been engaged in the task of developing entrepreneurship in the State and promoting balanced industrial development of different regions of the State.

96. The Corporation has made good progress during the last few years. Up to the end of the year 1979-80, the Corporation has sanctioned loans amounting to Rs.168 crores. The outstandings as at the end of the year 1979-80 are of the order of Rs.66 crores. During the year 1979-80, the Corporation received 4268 applications for Rs.62 crores and sanctioned loans to 2745 units amounting to Rs.33 crores.

97. At present, the authorised capital of the Corporation is Rs.10.00 crores. The paid-up capital base of the Corporation stood at Rs.7.45 crores. During recent discussions with the General Manager, Industrial Development Bank of India, Bombay about the business-plan of the Corporation for the year 1980-81, it has been decided to increase the capital base of the Corporation during the year 1980-81, by Rs.2.55 crores which is to be contributed by the State Government and the I. D. B. I. In the remaining four years of the Sixth Plan i.e. 1981-85, the Corporation proposes to raise its paid-up capital by Rs.10 crores. The Corporation requires Rs.14 crores as loan from State Government during 1980-85.

98. A total of Rs.20 crores is required for strengthening the capital base.

99. *Tool room project*—A Tool Room Project is being set up at Lucknow to provide facilities for manufacture of tools, jigs, dies and fixtures to meet the requirement of industries in the State. The State Government has approved the outlay of Rs.360.00 lakhs for this project and Rs.160.00 lakhs were made available during the year 1979-80. Land for the project has been acquired in UPSIDC Industrial Area at Lucknow. Foreign assistance from Federal Republic of Germany of about Rs.500.00 lakhs is also likely to be available for production and training facilities to be provided by the Tool Room. Out of the State Government's contribution of Rs.360.00 lakhs, outlay of Rs.200.00 lakhs for the project is proposed during the period 1980-85.

100. *Auto Tractors Limited*—The State Government has taken up a project for manufacture of tractors in Pratapgarh. The estimated cost of the project is Rs.17 crores. The production programme envisages manufacture of 500 tractors during 1981-82 and it is expected to be increased to 6000 numbers by 1986. The project also envisages manufacture of engine for the tractors from 1982-83. The initial capacity of engines will be 200 numbers which will be increased to 2000 numbers by 1986. The Collaboration agreement with Messrs. Leyland Ltd., U.K. for the manufacture of 28 H.P.

Tractors has been signed in July, 1979. Messrs. H. M. T. Bangalore have been appointed as Engineering Consultant. The construction of factory and residential buildings has been taken up in Pratapgarh for which necessary land has also been arranged. Orders for the purchase of machinery and import of components have been placed.

101. As has been indicated above, the cost of the project is Rs.1700 lakhs, out of which Rs.850 lakhs is by way of equity from the State Government and the balance Rs.850 lakhs is by way of term loan. The funds released till 31st March, 1980 amount to Rs.406 lakhs and, therefore, the balance requirement of Rs.500 lakhs has to be made by 1981, so that the project goes into production by 1981-82. Arrangements for obtaining term loan will be made after the share capital of the State Government is fully subscribed.

102. *Land Acquisition*—A number of Central and State Sector Projects such as Gas based Fertilizers, Petro-Chemical Complex and other projects are envisaged to be implemented during the Sixth Plan period.

103. The State Government has to acquire land for Central and State Sector projects for which an outlay of Rs.2 crores has been proposed in the Sixth Plan period.

104. *Infra-structural Development Facilities*—The State Government is providing developed infra-structure for Central and State Sector Projects and also in the identified industrial areas. The infra-structure development includes construction of linked roads, provision of drainage, construction of common facility centres, buildings for housing, Banks, Post Offices, Workers' Canteens and also Field Hostels facilities. In a number of industrial areas construction of sub-stations for power supply has to be taken up by the Industries Department and therefore, this facility is provided from infra-structure development funds. An outlay of Rs.5 crores is proposed for providing infra-structural facilities like drainage, water supply, sub-stations, common facility blocks, etc. for industrial areas/estates/complexes.

105. *Testing and Development Facilities and R and D Encouragement*—For increasing the growth of large and medium industries test house facilities, research and development assistance to the recognised associations is also being provided. The State Government has also encouraged All India Forging Association to set up a forging and testing laboratory, for which 50 per cent cost will be met by the State Government and the balance will be contributed by the entrepreneurs. The State Government has also encouraged textile industry in the State to take up research and development facilities on the pattern of Ahmedabad Textile Industries Research Association. Similar testing, development and research facilities are proposed to be encouraged during Sixth Plan period for which an outlay of Rs.6 crores is envisaged. Testing and Development facilities envisaged are :—

(a) Test House for Chemical, Metallurgical and Agro-based industries.

(b) Food-based Industries Testing Laboratory.

(c) Electrical Equipment Testing Laboratory.

(d) Rubber and Plastic Testing Laboratory.

(e) Forging Testing Laboratory, etc.

#### FEASIBILITY STUDIES

106. This is a continuing scheme under which the State Government initiates a number of industrial potentiality and project feasibility studies for identification of possible industries and facilities which could be set up in the State. Also feasibility studies are taken up to enable the State Corporations to set up projects in the State Sector. A number of projects have already been identified by the Working Group whose feasibility studies will be taken up during the Sixth Plan period. For such studies an outlay of Rs.85 lakhs is proposed during Sixth Plan period.

107. Through a skeleton staff for the administration of licensed projects and to monitor the implementation of Letters of

Intent/Licences the annual expenditure on the staff is Rs.2.5 lakhs and, therefore, an outlay of Rs.15 lakhs has been kept for the staff of Heavy Industries Section.

108. *NOIDA*—Under the complex more than 400 units have already started production and 600 sheds are under construction. It is envisaged that by the end of the Sixth Plan the development of all the targeted 4,000 units will be completed. For meeting the cost of industrial sheds and development of infra-structure facilities an outlay of Rs.428 lakhs is proposed for NOIDA.

109. The State Government is providing share capital assistance to the State Sector undertakings set up in the Hill Areas such as Hill Development Corporation, Agro Industries Corporation, Kumaon and Garhwal Vikas Nigam for setting up of State/Joint Sector Projects. In order to accelerate the industrial growth in the Hill Areas, it is proposed to set up a number of new projects for which the State Government will provide share capital. These projects will be set up by various State Corporations including UPSIDC and PICUP for which an outlay of Rs.5.00 crores has been proposed.

110. *Subsidy on Generating Sets*—The State Government has re-introduced a scheme for providing 25 per cent subsidy for the installation of generating sets by the large and medium units. It is envisaged that the power position will not improve in the next 4/5 years and, therefore, for the projects which have been set up it would be necessary to install their own generating sets for which an outlay of Rs.4.00 crores has been kept for the Plan period.

#### NEW PROJECTS

111. The State Government had constituted a number of sub-working groups for identification of projects in which investments are possible during the Sixth Plan period. These sub-working groups have identified a number of projects which have to be set up in the State, Central and Joint Sectors. The Working Group on industry and minerals has approved some of these

projects for implementation during the Sixth Plan. An outlay of Rs.20 crores has been proposed for equity, for implementation of such new projects. The formation of new companies will be decided at the appropriate time.

#### PROPOSED INVESTMENTS FOR 1980-85

112. In view of the infra-structure facilities created by the State Government and the facilities being given by the Corporations, it is anticipated that the investment during the Sixth Plan period will be of the order of Rs. 3,170 crores as under :-

<i>Investments</i>		(Rupees in crores)	
Sector	Level of Anticipated Investment 1978-79	Additional investment 1980-85	
1	2	3	
1. Central Sector Projects..	500	2000	
2. Investment in State/ Joint Sector Projects.	300	470	
3. Investment in Private Sector.	900	400	
Total ..	1700	2870	
4. Investment in SSI Sector	350	300	
Grand Total ..	2050	3170	

#### (2) SUGAR INDUSTRY

113. Sugarcane is one of the important cash crops of the State and Sugar Industry occupies an important place in the State's economy. While programmes have been formulated to increase the yield and to improve the quality of sugarcane, it is equally essential to ensure full, efficient and remunerative utilisation of the sugarcane so produced. This would warrant that the commissioning of new units should be completed within schedule, but even more important is the need to diagnose and cure the chronic sickness of the existing units in the industry. Several of the old units in the corporate and co-operative

sectors are weighed down by sub-optimal capacity, dilapidated and unbalanced machinery. It is, therefore, necessary to expand, rehabilitate and modernise the old units in a planned manner so as to provide a stable and sound means of livelihood to a large number of cane growers and labourers dependent on this agro-based industry.

114. During the year 1978-79, there were 299 sugar mills in India, out of which 88 were in the State of Uttar Pradesh. Out of these 88 sugar factories, 15 were in the Co-operative Sector. In the year 1979-80, one sugar factory at Nanauta (Saharanpur) was commissioned in Co-operative Sector and the number rose to 89. Taking into account the present installed capacity of sugar factories and growing demands for sugar, the Government of India have liberalised the licencing policy for setting up new sugar units and for modernisation and expansion of existing units.

115. The Sixth Five Year Plan (1980-85) for the sugar industry has been formulated so as to provide for modernisation, rehabilitation and expansion of the existing units, to establish new units wherever required and to utilise by-products as far as possible.

116. *Co-operative Sugar Factories*—The Plan for Co-operative Sugar Factories of the State has been drawn up keeping the above facts in mind. This may be sub-divided into four categories :

- (1) Modernisation and Expansion of existing units :
- (2) Establishment of new units :
- (3) By-products utilisation schemes ; and
- (4) Other Schemes.

117. *Modernisation and Expansion of existing Units*—There are at present 16 co-operative sugar factories in the State. Five of them were set up in the span period 1959-72 ; whereas the rest eleven have been set up in the last few years. Five more factories are in various stages of construction, for which licences were obtained from the Government of India.



118. Till some time back, a 1250 TCD capacity unit was considered economically viable, keeping in view the cost of the project and return to the sugar industry on the basis of the then prevailing sugar and sugar cane prices. The plight of industry has, however, undergone virulent change. Not only has the initial cost of a new project gone up very high, but also the sugar prices in the market have undergone wide fluctuations from time to time. The Government of India has also increased the statutory cane price to the growers as linked with recovery. In this State the factories have been required to pay even higher cane price both as a traditional State policy decision as also for preventing fall in cane production for the very survival of the industry and to check abnormal diversion to Gur and Khandsari units. All these factors have forced the units to bring about a decrease in cost of production (conversion charges) so that the units may remain economically viable. To achieve this objective, it is necessary that modernisation and expansion of existing units should be taken up on priority, wherever the same can be justified on the basis of availability of cane and techno-economic consideration.

119. The modernisation and expansion of two existing units has already been taken up—of Sarsawa from 900 TCD to 1500 TCD (proposed completion by December 1980) and that of Bazpur—from 1750 TCD to 3000 TCD (completion by October, 1981).

120. It is proposed to undertake modernisation and expansion of 10 other units during the Sixth Five-Year Plan (1980–85). Out of these 10 units, one unit (Nadehi) has been proposed under the Hill Development Plan and the remaining 9 units have been proposed in the General Plan.

121. The total outlay for 10 units proposed under this category for 1980–85 is Rs.1305 lakhs.

122. *Establishment of New Factories—*Till recently, the Government of India had put a temporary ban on licencing of additional capacity through establishment of new units, on account of higher sugar production in the year 1977-78 which had led to the problem of disposal of surplus sugar

stocks as also a steep fall in sugar prices leading to an acute financial crisis for the industry. Subsequently, however, the demand has picked up and the country is facing sugar shortage on the basis of low production in the season 1979-80. The latest policy of the Government of India, therefore, appears to be that new licences shall be granted on selective basis. The working group of the Planning Commission has also recommended the creation of additional capacity in the following manner :—

(Lakh Tonnes)

Year	Total requirement of sugar (internal use and exports)	Additional Capacity to be licensed
1	2	3
1980-81	61.50	2.5
1981-82	65.00	3.5
1982-83	68.50	3.5

123. The scarcity of sugar in the country as well as the world over, at the present junction, is well known. To cater for increased internal consumption of sugar as well as for export commitments, the case for licensing more new factories is clearly established. It takes about two to three years to establish a new sugar unit after the grant of licence.

124. Keeping in view the State's contribution to the country's sugar production in the past and also the present problem being faced by the country, it is proposed to establish 7 new units during the Sixth Five-Year Plan 1980–85 in addition to the three continuing schemes. As Sitarganj (Naini Tal), comes under the Hill Region, the proposal for setting up a new sugar factory at Sitarganj has been proposed under the Hill Plan and remaining six units are proposed for the Plains. The total outlay during Sixth Plan will be Rs.2139 lakhs.

125. *By-Products Utilization Schemes—*The sugar factories in the Co-operative Sector and also in the public sector of this State have not paid much attention to the utilization of by-products of sugar industry in the past, which would have otherwise contributed towards improvement in their economic viability. The solitary example

is the Distillery Unit attached to Co-operative Sugar Factory at Bazpur, set up in 1975-76. This Distillery of 25,000 litres capacity is now earning sizeable profits. It is also starting manufacture of foreign liquor during the year 1980-81.

126. In keeping with the tremendous potential for utilisation of by-products of sugar industry as also the financial return of such projects, a number of projects have been proposed for its inclusion in the Sixth Plan. These projects are mainly :

- (1) Establishment of distillery units.
- (2) Mini Paper Plant.

Techno-feasibility studies have already been started by engaging consultants.

127. The total outlay proposed under this category in Plain for the five years period is Rs.262 lakhs.

128. *Other Schemes*—It is also proposed to strengthen the financial base of U. P. Co-operative Sugar Factories Federation Ltd., increasing the State Government's Share Capital from mere Rs.3 lakhs to Rs.1 crore during the Sixth Plan ; so that the Federation may be able to undertake various activities on behalf of its member factories and also extend financial assistance to the units in times of dire need to cover the time gap between the availability of finances from other conventional sources. At present there are 16 sugar mills at work and it is expected that two more units shall also start crushing in 1980-81. It has been observed that the factories do not get the sufficient quantity of sugarcane due to several reasons with the result that they have to incur huge losses. This is also one of the reasons that the factories are unable to pay the cane price in time and it becomes absolutely essential for the State Government to provide assistance. The State Government have to make an arrangement either from State Contingency Fund or from some other sources. Therefore, in order to remove the bottlenecks, it has been proposed in the Sixth Plan to make a provision of Rs.416 lakhs for the consolidation of past investments out of which a sum of Rs.248 lakhs has been provided as share capital for financial rehabilitation of Aurai Co-operative Sugar Factory during the year 1980-81.

129. The total provision under this Scheme is Rs.513 lakhs.

130. With the modernisation and expansion of 10 units (9 in Plains and 1 in the Hill Region), and establishment of 10 units (one unit in the Hills and 9 in the Plains Region), the sugar production is expected to increase by 30 lakh quintals per annum. The by-products utilisation schemes will further improve the economic viability of the sugar factories.

131. Thus the scheme-wise requirement from State Government for Co-operative Sugar Factories during Sixth Plan is as under :

(Rupees in lakhs)		
Serial no.	Scheme	Amount
1	2	3
1.	Modernisation and Expansion of 10 units.	1305
2.	Establishment of 10 new units (including 3 continuing Schemes).	2139
3.	By-Products Utilisation Schemes	262
4.	Bridging Loan to Sarsawa Factory	250
5.	Other Schemes	513
Total ..		4469

132. *U. P. State Sugar Corporation*—This Corporation was incorporated on 26th March, 1971 as a limited company under the Companies Act, 1956, to manage the sick sugar mills and increase the sugar production by establishing new units in the Public sector. The Government of Uttar Pradesh acquired 12 sick sugar mills on 3rd July, 1971 in the State under the provisions of U. P. Sugar Undertakings (Acquisition) Act, 1971. These are — Sakhoti-Tanda, Mohiuddinpur, Bara Banki, Khadda, Bhatni, Burwal, Jarwal Road, Amroha, Ramkola, Bijnor, Rampur and Laxmiganj. Now all these mills are under the control of State Sugar Corporation. The Sugar Corporation also purchased a factory situated at Pipraich in an auction held on June 19, 1974. Doiwala sugar mill, the management of which was taken over by

the Government of India under the provisions of Industrial (Development and Regulation) Act, is being run by U. P. State Sugar Corporation as Authorised Controller since January 15, 1973.

133. The new mills at Kiccha (Naini Tal), Chandpur (Bijnor), Chhata (Mathura), Nandganj (Ghazipur) and Dariyapur (Rae Bareli) were set up during the Fifth Plan by the State Sugar Corporation. Thus there are at present 19 sugar mills under the control of State Corporation. All the acquired mills are sick units. The burning need of these sick units is to formulate programmes aimed at expanding their capacities and totally rehabilitating and modernising their plant and equipment so that they may become viable units. The Sixth Plan (1980-85) for the Public-Sector of the State has been drawn up keeping the above facts in mind.

134. The programme for modernisation and rehabilitation of these sick units in the Public-Sector could not be implemented so far due to legal complications arising out of the writs of erstwhile owners. The financial institutions were not agreeable to consider the proposal of financing these mills for want of title of Government over acquired mills. These writs have since been decided in favour of the State Government and the financial institutions are now considering the applications for financial assistance to the mills.

135. During the Sixth Plan period a scheme has been formulated to expand, modernise and rehabilitate Pipraich and 12 acquired sugar factories for increasing additional capacity of 5,690 TCD of these units. This programme will cost Rs.66.73 crores out of which Rs.17.53 crores will be provided by the State Government as margin money.

136. Also there is a proposal to expand the crushing capacity of 3 subsidiary companies of the State Sugar Corporation namely — Kichcha, Chhata and Chandpur. This will add to their present daily crushing capacity by 2,500 tonnes additional capacity of crushing. Total cost is estimated to Rs.9.44 crores, out of which Rs.3.78 crores will be provided by State Government as margin money. The

rest will be obtained from the financial institutions during the Plan period.

137. Thus a total provision of Rs.21.31 crores (Rs.17.53 crores+Rs.3.78 crores) has been proposed for Sugar Corporation.

### (3) VILLAGE AND SMALL INDUSTRIES

138. (1) *Industrial Estates*—The Industrial Estates programme has been very “effective” tool in planning and developing industries in potential growth areas. The present position of utilization is given below :

		<i>Total no. of Industrial Estates</i>	
		<i>Sheds</i>	<i>Plots</i>
1. Developed ..	..	900	2133
2. Allotted ..	..	880	1950
3. Occupied ..	..	875	1783
4. Working ..	..	760	1107

During 1978-79, a programme for development of 25 new industrial estates was taken up. Of these, work on 15 industrial estates has been started and expected to be completed by December, 1980. Land acquisition in the remaining places has been completed and the development work will be completed in 1980-81. With the construction of 15 estates, 150 additional sheds and 836 plots would be available for new entrepreneurs.

139. Measures proposed to ensure better utilization—

(a) Sheds should be constructed on receiving the demand of entrepreneurs.

(b) This programme should be taken up as a developmental and not as commercial proposition specially for backward and rural areas.

(c) Common facility and administrative services should be provided in each industrial estate.

(d) Complete infra-structure should be provided in the estate including water supply, power lines and services roads and transport facilities etc.

140. For better management and maintenance a separate fund is being created which will be used through D. I. C.s who will be the competent local authority for the purpose.

141. The proposed 45 new estates are proposed to be put up within 5 kms. of district headquarters in such a way that all the districts have at least one estate at the district headquarters.

142. It is proposed to complete the development of 25 industrial estates taken up

in 1978-79 and develop 45 new industrial estates at suitable places after necessary techno-economic surveys and feasibility studies. These estates will provide additional 1500 sheds and 3000 plots. The cost break up and physical targets by the end of 1985 are given below :

*Industrial Estates*

Item	No. of Industrial Estates	Development Cost (Rs. in lakhs)	No. of Plots	Development cost of sheds (Rs. in lakhs)	No. of Sheds
1	2	3	4	5	6
(1) Completion of 25 Industrial Estates in hand ..	25	250	1100	290	540
(2) Setting up of new Industrial Estates ..	45	400	1,900	630	960
Total ..	70	650	3,000	920	1,500

Total cost (1)+(2)=650+920=1570 lakhs.

(3) Management of Industrial Estate staff on the pattern approved by Government Rs.30 lakhs.

(4) Maintenance Fund Contribution of State Government for existing Industrial Estates Rs.400 lakhs.

Total (1) to (4)=1570+30+400=2000 lakhs

However, an outlay of Rs.1000 lakhs is being proposed

(2) S. S. I. SCHEMES

143. Programme through U. P. Small Industries Corporation—U. P. S. I. C. with a share capital of Rs.100 lakhs is providing following types of assistance to small industries :

(i) Distribution of raw-materials through its 12 depots.

(ii) Supply of machines on hire-purchase in collaboration with banks.

(iii) Implementation of marketing assistance programme for small industries.

(iv) Sponsoring of industrial complexes and ancillary complexes.

(v) Development of common facility and Research and Development Services to small industries.

(vi) Capital participation for promotion of joint sector projects.

144. During the Sixth Five-Year Plan, the Corporation will expand its existing activities. It also proposes to take up some new activities. The total requirement of funds during the Sixth Five-Year Plan period for the various continuing/new schemes will be of the order of Rs.1,100.50 lakhs, against which an outlay of Rs.500.00 lakhs has been proposed with the following break up :

Name of the Scheme	(Rupees in lakhs)	
	Funds required	Proposed outlay
1	2	3
A—CONTINUING SCHEMES		
1. Interest subsidy on loan for supply of machines on Hire Purchase.	20.00	20.00
2. Continuance of the Trade Centre at Kanpur.	20.00	10.00
3. Share Capital/loan to U.P.S.I.C. for expansion of activities.	300.00	150.00
4. Share Capital/loan to U.P. Potteries for new projects.	275.00	150.00
Total	615.00	330.00

1	2	3			
<b>B—NEW SCHEMES</b>					
1. Establishment of Marketing Organisation/Sub-Centres.	30.50	20.00		2. Assistance to existing Leather Co-operatives for modernisation of Tanning units in rural areas.	105.00 50.00
2. Supply of machines on hire purchase.	245.00	70.00		3. Share capital for new units	130.00 37.00
3. Scheme for intensive development of selected industries.	15.00	13.00		4. Setting up of a Raw hides market (State Margin only).	100.00 30.00
4. Joint Ventures and Capital participation.	165.00	65.00		<b>Total—A</b>	<b>400.00 147.00</b>
5. Setting up of new industrial complexes Management/maintenance of old complexes.	30.00	0.01		<b>B—CONTINUING SCHEMES</b>	
6. C.G.R.I. Extension laboratory		2.00		5. Design Development Facilities.	20.00 10.00
	485.50	170.01		6. C.F.C. Unnao.	30.00 13.00
<b>Total A+B</b>	<b>1100.50</b>	<b>500.01</b>		(a) Supply of raw materials.	
				(b) Opening of marketing centres.	
				7. Footwear cum-Marketing Complex	50.00 20.00
				<b>Total—B</b>	<b>200.00 53.00</b>
				<b>Total A+B</b>	<b>600.00 200.00</b>

145. An outlay of Rs.500 lakhs is, therefore, proposed for UPSIC programmes.

146. *Programmes through Leather Development Corporation*—The State Leather Development Corporation with a share capital of Rs.100 lakhs is engaged in assisting small artisans by supplying them raw-materials, improved designs and in marketing of their products. The entire programme of leather development is for scheduled caste/tribes and therefore, forms a major part of special component plan. The State Leather Corporation (UPLDMC) proposes to implement 4 new and 3 continuing schemes during the Sixth Plan period with the total cost of Rs.600.00 lakhs and proposed outlay of Rs.200.00 lakhs as given below :

(Rupees in lakhs)

Schemes	Total cost	Outlays 1980-85
1	2	3
<b>A—NEW SCHEMES</b>		
1. Setting up of an animal bye product utilisation centre.	65.00	30.00

147. An outlay of Rs.200 lakhs is proposed for Sixth Plan.

#### *Direction and Administration*

148. Under the 'Direction and Administration', following Schemes have been reorganised :

1. Technical Assistance Programme (TAP).
2. Statistical and Documentation Cell.
3. Monitoring and MIS Cell for the Directorate (New).
4. Ancillary Development Cell.
5. Expansion of the Stores Purchase Section (New).

During 1979-80, the expenditure on these schemes was Rs.10.37 lakhs.

149. With the formation of DICs and increasing emphasis on providing marketing assistances to the small units, it has become necessary to provide additional staff for the SPS, specially for inspection and audit purposes on the pattern of DG&D. New Delhi. The Government had got

done a study of the monitoring and M. I. system on which setting up of a specialized cell for MIS has been suggested. Accordingly, these schemes are being included and an outlay of Rs.60 lakhs has been proposed.

150. *Industrial co-operatives / special co-operatives for harijan/weaker sections*—The existing programmes of providing share capital loans, assistance for construction of workshop/godowns, managerial assistance, is proposed to be continued. It is also proposed to introduce a scheme for providing managerial staff to each of the co-operatives specially those of the weaker sections to enable the revival programme to be implemented properly. During 1977-78, a new scheme of organising harijan/land-less workers assistance, was taken up. Under this scheme 5 industrial co-operatives each having membership of 30 persons in each were organised in Almora, Deoria, Ghaziour, Ballia, Fatehpur and Jhansi. The State Government had agreed for share capital participation to the extent of 75 per cent in these co-operatives.

151. It is proposed to organise 20 such co-operatives for Harijan/Weaker Sections during Sixth Plan (1980-85). An outlay of Rs.50 lakhs is proposed.

152. *Testing and development and quality control facilities*—The State Government has introduced a scheme of setting up of testing and development laboratories providing quality control and testing facilities to small scale industries. Under this programme a leather testing laboratory in Kanpur, a glass and ceramics testing laboratory in Khurja and Central Glass Testing Laboratory are functioning. A Heat Treatment Plant for cutlery industry has been set up in Meerut and diesel engine testing laboratory has been set up in Ghaziabad. These Plan schemes are proposed to continue for providing testing and quality control facilities to the industry. It is proposed to take up setting up of such testing facilities for the concentration of industries in different areas specially for leather, electrical goods, chemicals, etc.

153. Apart from the above, a number of small quality marking centres under the

Quality Marking Schemes were set up in the State. The scheme was reviewed during 1978-79 and was evaluated by the State Planning Institute, Lucknow. Based on the recommendations of the study, the Government has directed that the Quality Marking Scheme should be strengthened by setting up of integrated testing laboratories and also by providing senior technical personnel.

154. It is, therefore, proposed to set up "regional quality control centres" with adequate equipments and technical staff in following industries :

1. Leather Testing Laboratory at Agra.
2. Glass Testing Laboratory at Firozabad.
3. Sports Goods Testing and Development Laboratory, Meerut.
4. Locks and building fittings testing and development centre, Aligarh.
5. Brassware testing and development centre.
6. Electronic testing and development laboratory, Lucknow, Allahabad and Ghaziabad.
7. Rubber and Plastic testing laboratory, Kanpur.
8. Essential oil testing and development centre, Kannauj (Farrukhabad).
9. Metallurgical testing laboratory in collaboration with National Metallurgical Laboratory, Jamshedpur.

155. An outlay of Rs.50 lakhs is proposed.

156. *Glass and pottery development schemes*—There is concentration of pottery and ceramic units in Khurja and Chunar where the State Government had set up a number of common facility and design development services for the benefit of small pottery artisans. The growth of this industry in Khurja has been quite speculative and most of the small units have now expanded their production. The commercial service of such industries have, therefore, been transferred to UPSIC which have set up a subsidiary, namely U. P. Potteries Ltd. They have also taken over the activities of pottery factory in Basti and

Chinhat, Lucknow. In view of the above the training and testing facilities are proposed to be continued.

157. During 1979-80 the State Government has set up a pottery development centre in Jhansi. A similar centre is being set up in Nizamabad (Azamgarh) where there is concentration of potters. It is proposed to complete these schemes by 1981-82.

158. Apart from the above, a glass and ceramics complex is proposed to be set up in Makhanpur growth centre, on the basis of a study conducted by the consultants. Land has been arranged and the scheme is to be completed by 1984-85 through U. P. Potteries (UPSIC). An outlay of Rs.55 lakhs is proposed.

159. *District industries centres*—The scheme of DICs has been taken up in all 56 districts of the State with a view to creating a suitable climate for industrial development in rural and semi-Urban areas. By providing all possible facilities/guidance at the local level to new entrepreneurs. The details of outlays proposed are :—

	1980—85	Outlay
	(Rupees in lakhs)	
1. Staff expenditure of DICs, at Rs. 2 lakhs per DIC per year.	700.00	
2. Campaigns and the EDP Programmes at Rs.1 lakh per year per DIC.	150.00	
3. Assistance to Artisans at Rs.2 lakhs per DIC.	350.00	
4. Margin Money loans	..	200.00
5. Assistance to Harijan/Scheduled Caste Workers (Improved tools, machines)	} 600.00	
6. Loans for Growth Centres units for Tiny Sector artisans, Handicapped Women artisans etc.		
Total		2000.00

160. *Marketing development funds and exhibitions*—For promoting and encouraging the units to take up marketing of their products, the State Government has been organising district regional and State level exhibitions. It is proposed to strengthen this programme and also to pro-

vide soft term loan through DIC, UPSIC and UPFC and assistance to the units to enable it to undertake marketing operation on the pattern of T. D. A. The implementation of this scheme will be done through U. P. Small Industries Corporation/marketing managers of District Industries Centres. An outlay of Rs.50 lakhs is proposed.

It is proposed to organize 11 regional exhibitions and two State or International level exhibitions each year.

161. *Industrial complexes*—During 1976-77 a scheme of setting up of industrial complexes was taken up by the State Government. Under this scheme various State Corporations/Directorate of Industries were assigned the specific role of sponsoring of group of such industrial units in a compact area where local resources, markets/artisans are available. In addition to this some ancillary complexes were also sponsored. In all 30 industrial complexes were sponsored. On an average, 15 units were to be set up in each complex. So far, following complexes have been set-up :—

- (1) Ready made garments, Loni, Ghaziabad.
- (2) Plastic products, Basti.
- (3) Electronic items, Panki, Kanpur
- (4) Hosiery items, Faizabad.
- (5) Chaminal industries, Barabanki.
- (6) Aircraft ancillary, Lucknow.
- (7) Automatic components, Unnao.
- (8) Leather products, Unnao.
- (9) Textile Machinery Parts, Sandila, Hardoi.
- (10) Electronic components, Rae Bareli.
- (11) Hosiery items, Kashipur (Naini Tal).
- (12) Woollen Hosiery items, Dehra Dun.
- (13) Building Material complex, Mathura.

162. The complexes which are under implementation stage are proposed to be completed during Sixth Plan :

- (1) Sports goods complex, Meerut.
- (2) Drawing and Surveying Instruments, Roorkee.
- (3) Electronic items, Sahibabad.
- (4) Electrical items, Agra.
- (5) Cycle Parts, Sikandrabad.
- (6) Hand Tools, Aligarh.
- (7) Forest-based complex, Mohan (Almora).
- (8) Agro-based complex, Rudrapur (Naini Tal).
- (9) Hand Tools, Jhansi.
- (10) Paddy-based complex.

163. Apart from above, new complexes are proposed to be taken up after feasibility studies. An outlay of Rs.50 lakhs is proposed.

164. *Assistance and concessions to small scale units*—All the assistances and concessions that are provided to the small industries have been grouped under the following heads and are proposed to be continued with an outlay of Rs.755.00 lakhs :

- (a) Power Subsidy.
- (b) Interest Subsidy.
- (c) Consultancy Subsidy.
- (d) State Capital Subsidy (proposed to be expanded for all backward districts).
- (e) Stamp duty subsidy for artisans.

165. *Entrepreneurial development programme (EDP)*—Under this programme industrial campaigns and seminars are organised at the regional level. The entrepreneurs are identified in these seminars/campaigns and motivated and encouraged to set up their units. The State Government has also introduced a scheme of providing entrepreneurial development training to such selected entrepreneurs who intend to set up small units. This programme is being implemented with the assistance of Indian Investment Centre, U. P. Industrial Consultants, S. I. S. I. and State Bank

of India. Other nationalised banks have also been asked to take up EDP training programme. An outlay of Rs.40 lakhs is proposed for the promotional schemes.

166. *Industrial Potentialities, Market and R & D Programme for SSI*—A scheme of undertaking industrial potentiality and feasibility studies has been introduced by the Government in which the State Government provides grants for taking up such studies as are sponsored by the Directorate of Industries. Subsidy is also given to the entrepreneurs who intend to take up feasibility study through the recognised consultants.

167. In addition to the feasibility study, it is proposed to take up a comprehensive scheme of introducing research and development in small scale sector. The State level R and D Committee has already recommended following programmes to be introduced for the small industries :

(a) Assistance in the purchase of equipments and machinery should be given to the small units intending to take up R and D/productivity development.

(b) The small units intending to obtain improved technology/R and D from recognised institutions/CSIR Laboratory should be provided subsidy on the expenditure incurred.

(c) The small entrepreneurs intending to buy foreign know-how/technology or the technology indigenously developed by NRDC/CSIR Laboratories should also be given assistance to enable them to bear the cost of buying such technologies.

168. An outlay of Rs.20 lakhs is proposed.

169. *Productivity and modernisation programme*—The State Government has already introduced a scheme of assisting the units to the extent of 5 per cent prior to undertaking productivity studies through the National Productivity Council. The State Government also provides assistance to the local productivity councils for implementing the programmes for increasing



productivity of the workers in industries. Apart from this, it is proposed to introduce a modernisation assistance programme during Sixth Plan period. The Government of India has already introduced a scheme of modernisation in 20 industries by providing 100 per cent cost of consultancy for taking up modernisation programme. A number of units have obtained consultancy assistances, but are unable to implement the recommendations for introducing modernisation in their industries due to financial constraints. It is, therefore, proposed to provide soft term loans for taking up modernisation programme in selected industries. The implementation of this scheme and sanction of modernisation programme will be looked after by the State Level Modernisation Committee.

170. An outlay of Rs.20 lakhs is proposed.

171. *Assistance to sick units*—It is proposed to take up a comprehensive programme of identification and studies of sick units for finding out the reasons of sickness of the small industries. It is proposed to introduce assistance programme for the revival of such units which can become viable for this purpose. It is proposed to create a sick units assistance fund for the following purposes :

(a) More giving margin money assistance to enable the sick unit to obtain financial assistance from banks/UPFC.

(b) Consultancy/management study assistance is given to the sick units for identification of reasons of sickness and for encouraging professional consultants for management of the sick units and revival.

(c) Soft term loan for sick units to enable to take up operation by liquidating such liabilities which are hinderance to the unit in obtaining financial assistance.

(d) Quick study of all sick units to be financed by Government/Director of Industries.

172. The programme will be implemented through DICs which will be responsible for identification of sick units and the regional committee will sanction assis-

tances in collaboration with SISI, Banks, UPFC, UPSIC upto Rs.50,000. The cases of financial assistance exceeding Rs.50,000 would be dealt by the State Level Committee. The units financed by UPFC, will be taken care of by UPFC which will sanction according to their normal procedures.

An outlay of Rs.300 lakhs is proposed.

173. Some special schemes have been taken up for the industrialisation of Hill Area. Some existing schemes like entrepreneurial training centres to be converted into production centres, raw material supply, Hill Wool Development, Spinning and Weaving Plants will be reorganised and improved.

174. The details of these schemes are in the separate plan for Hill areas. It is proposed to provide investment subsidy in all the hill districts on the pattern of Himanchal Pradesh. An outlay of Rs.300 lakhs is proposed.

175. *Environmental/Pollution Control Scheme*—It is proposed to introduce a scheme for encouraging small industries to take up pollution control measures. This project envisages following assistance :

(a) A survey of slum areas of larger towns will be undertaken in collaboration with local authorities concerned and expenditure on providing improved sanitation/living conditions of artisans is proposed to be shared.

(b) Small units intending to install pollution control equipment will be provided 50 per cent subsidy on the pattern of Gujarat Government.

(c) Where there is concentration of such industries which discharge effluents, a common effluent treatment plant will be set up by providing 75 per cent assistance. The remaining 25 per cent will be charged from the units alongwith a regular cess for maintenance and running of plant.

(d) For complexes and industrial areas such plants will be set up as common facility services.

176. *Schemes of Export Incentives*—There has been very little growth in the export of non-traditional items. The share of small scale sector in total export of the country is around 17 per cent, while the contribution of units from the state is negligible. The Government of India have given very high priority for assisting the export oriented industries so that exports of engineering goods, clinical drugs and textiles, may increase rapidly.

177. It is, therefore, proposed that following incentives will be provided :

(a) The cost of overseas market surveys will be met entirely by the Government out of the trade development fund to be created at the State level. The cost of survey per unit should not exceed Rs.5,000.

(b) Fifty per cent cost of expenditure on installation of high technology machines exclusively for manufacture of export items and installation of telex, photo copy etc. will be subsidized by Government.

(c) The freight charges from the nearest rail/road transport to the port towns will be subsidized to the extent of 50 per cent for exportable items.

(d) Uttar Pradesh Export Corporation will set up ware-housing facilities and air cargo complexes at the appropriate places for encouraging exports.

(e) On the pattern of Tamil Nadu Government scheme it is proposed to subsidize the cost of registration with export promotion council and expenditure in export quality testing certificate to the extent of 50 per cent.

(f) Incentives for handicapped women, scheduled caste/tribes are proposed to be provided on liberal terms.

An outlay of Rs.50 lakhs is proposed.

### (3) HANDICRAFTS

178. *Development of Carpet Industry*—The carpet industry is highly labour intensive and employs about 1.30 lakh artisans. The State occupies a prestigious place on the carpet map of the country, producing carpets worth nearly Rs.90.00 crores per year, which represents

90 per cent of the total production of the country. However, India meets only 6 per cent of the world requirement of hand-knotted carpets. The industry thus has excellent export potential.

179. Following programmes are thus taken up :

(a) *Carpet Weaving Training Centres*—A major constraint in the development of the carpet industry has been the non-availability of trained weavers in adequate number. In order to increase the production and export of carpets to rupees 200 crores level, at least 2 lakh more weavers will be needed, half of which will need to be trained. This will require 2,000 training centres with 50 trainees each, to be opened at the rate of 400 centres per year and requiring a sum of Rs.0.92 lakh per year per centre. Rs.1,840 lakhs are thus required. Some funds will be available from IRD and thus an outlay of Rs.1130 lakhs is proposed.

(b) *Carpet Yarn Spinning Mills*—For meeting the rapidly expanding demand of carpet yarn, a woollen yarn spinning mill is proposed to be set up in Sultanpur besides reorganization of the existing joint Sector mill at Bhadohi.

(c) *Yarn Dyeing Facility*—There are only a few mechanised dyeing plants in the Bhadohi—Mirzapur area, which meet only a small fraction of the total requirement. It is, therefore, proposed that the dyeing capacity should be substantially increased. It is proposed to encourage entrepreneurs to set up dye-houses and a model dye-house in the State sector is proposed.

(d) *Carpet finishing and Designing Training Centres*—There is great shortage of technically qualified persons for preparation of carpet designs from photographs or from samples sent by foreign buyers. There is shortage also of the qualified workers who can do the finishing of the woven carpets. It is, therefore, proposed to increase the number of skilled craftsmen trained in designing, finishing and clipping by establishing 100 centres

for training 600 persons each in graph designing, clipping and finishing of carpets during the Plan period. This will require an amount of Rs.80 lakhs.

An outlay of Rs.60 lakhs is proposed.

(e) *Carpet Washing Plant*—The present method of chemical washing is not acceptable in the sophisticated foreign markets. It is, therefore, proposed that two mechanical carpet washing plants each with a capacity for washing 2 lakh square metres of carpets, be set up during the Plan period, involving an outlay of Rs.40 lakhs.

(f) *Carpet Complexes*—In order to increase the area under the existing carpet belt, it is necessary that the adjoining areas should be developed by establishing carpet complexes. The idea is to encourage the existing entrepreneurs by providing them assistance for adopting carpet weavers who would be supplied looms etc. It is proposed that 10 complexes, each having 10 units (one unit is equal to 1 manufacturer and 100 weavers) be set up during the Plan period. This will require an outlay of Rs.70.00 lakhs.

The proposed outlay for carpet schemes is, therefore, Rs.1,300 lakhs for carpet sector.

*Development of Metal Art Ware Industry (U. P. State Brassware Corporation)*

180. The Metal Art Ware Industry is mainly concentrated in Moradabad, Jalesar (Etah), Aligarh, Mirzapur and Varanasi. The artisans of brass metal work are also located in Almora, Ihansi, Hathras and Mathura. The total production of this industry is estimated to be around 30 crores of which metal art ware worth Rs.22 crores is exported annually. The industry is employing about one lakh artisans and has excellent development potential because of its labour intensive nature and export potential.

181. The State Government has taken up some programmes for the development of this industry such as (a) training centres, (b) setting up of a State Brassware Corporation, (c) Design and Development

Centre and (d) Setting up of Craft complexes in Moradabad and Jalesar (Etah). The State Brassware Corporation is the lead institution for providing assistance to artisans in the supply of raw materials, arranging, training facilities, providing new designs and supply of improved tools. The State Brassware Corporation is also setting up a rolling mill in Moradabad, where raw material is mainly used by the artisans. It is also setting up an Electroplating Plant in Moradabad for providing silver, nickel and other metal plating on the products manufactured by the local artisans in Moradabad. A Design Development Centre and Craft Complex at Moradabad and Jalesar are being established in the current year.

182. The craft complexes-cum-housing colony in Moradabad and Jalesar will provide improved housing and manufacturing facilities to the artisans engaged in the metal art-ware industry. For various programmes following outlays are proposed :

(Rupees in lakhs)			
Serial no.	Schemes	Require-ments	Outlays Proposed
1	2	3	4
1.	Training Centres for 66000 artisans.	220.00	150.00
2.	Raw Material Bank and Marketing.	65.00	54.00
3.	Design and Development and Testing Centre.	45.00	33.00
4.	Improved Tools Assistance.	80.00	50.00
5.	Craft complex-cum-Housing Colony (State's margin).	300.00	140.00
Total		710.00	427.00

183. *Development of Wood Carving Industry*—Wood carving industry is mainly concentrated in Saharanpur area and the production of wood carvings from this area account for 95 per cent of the State's production and 45 per cent of the Country's exports. The industry employs about 33,000 workers. It is also estimated that the annual production of wood carving industry is around Rs.5 crores. The main

problems of the industry are non-availability of seasoned wood of the required quality and low wages of the workers. In this background following programmes have been undertaken :

(a) *Wood Seasoning Facility*—A programme for increasing wood seasoning capacity has been taken up. The assessed annual requirement of seasoned wood in Saharanpur area is a round 4 lakh cubic feet. The installed capacity of the wood seasoning plant is 24,000 cubic feet. The expansion of one wood seasoning plant has already been completed by the U. P. Export Corporation. During the Plan period the capacity is to be expanded so as to meet the requirement of 4 lakh cubic feet per year by establishing new plants at Saharanpur/Dehra Dun, where cheap timber is available. Another plant is to be set up at Meerut to cover the needs of the sports goods industry.

(b) *Training Centre*—The craftsman training centres in Saharanpur under a Master Craftsman each having 5 trainees have been set up to open 25 centres i.e. 5 centres in a year with 50 trainees each and 10 with 5 trainees under the Master Craftsman Scheme at Saharanpur and Nagina (Bijnor). In order to meet the requirements of trained craftsmen 25 training centres, each requiring a sum of Rs.1.6 lakhs are proposed to be set up.

#### 184. *Development of Chikan Industry*—

The Chikan work is a delicate and artistic embroidery craftsmanship done on different varieties of cloth. This industry is mainly concentrated around Lucknow, Unnao, Barabanki and Rae Bareilly. It is a household industry mainly done by the women artisans. About 45,000 workers are estimated to be engaged in this industry.

185. The State Government had set up a Chikan Development Centre in Lucknow which has one production unit employing 600 ladies and is providing services such as supply of raw materials, purchase of goods from the individual artisan for marketing through the sale depots of the Centre.

186. It is proposed to reorganize the Chikan handicraft by setting up a chain of

training-cum-production centres with four Base Centres, providing work to 6,400 workers and ensuring adequate wages. It is also proposed to train 800 workers in high quality work. With the introduction of development programme enumerated above it is anticipated that the present value of annual production of chikan goods amounting to Rs.12 crores will increase to Rs.24 crores by 1984-85.

187. Arrangement has also been made for linking the production of chikan centres with the marketing arrangements of U. P. Export Corporation. An outlay of Rs.80 lakhs is proposed for these programmes.

188. *Other Handicrafts Item*—Besides hand-knitted carpets art metal ware, wood ware, industries in the Handicrafts sector, there are a number of other industries such as, horn, zari and zardozi, marble and stone carving, Ebony carving, Ivory, Pottery Ceramics, cane and moonj, tarkashi, wooden toys etc., where practically no development efforts have been made in this sector so far. More than 2,18,000 artisans are engaged in these crafts but the number has remained more or less static. It is, therefore, necessary that steps be taken for the orderly development of these crafts.

189. The following schemes are proposed to be undertaken during Plan period :—

(i) *Export Incentives*—The Export potential survey of U. P. conducted by the Indian Institute of Foreign Trade highlighted the need for elimination/reduction of locational disadvantages which the units in U. P. face in the shape of high cost of transportation of the raw material as well as the finished products on account of the distance from the raw material centres and the port towns. High power tariff and local taxes, etc. provide the last straw to break the exporter's back. It is thus felt that a scheme for providing incentives to such of the industries as suffer most from these handicaps and also providing necessary assistance in other forms may be introduced. An outlay of Rs.80 lakhs is proposed.

(ii) *Specialized Programme*—For helping the production units of the State in finding foreign markets for their products and for increasing the overall exports, the following programmes are proposed to be undertaken during the Plan period :

- |   |               |
|---|---------------|
| 1. Sponsoring of delegations abroad.  | one each year |
| 2. Organization of buyer-seller Meets.  | —do—          |
| 3. Undertaking of market surveys and researches.  | —do—          |
| 4. Participation of various exhibitions.  | —do—          |
| 5. Feasibility study for establishment of monitoring facilities at port towns for the benefit of exporters. | —do—          |

To encourage exporting units located in the State, it is proposed to introduce a system of export awards for good performance.

190. As has been mentioned above, the corporation proposes to increase its direct exports to a level of Rs.25 crores by the end of this Plan period by diversifying and adding new product lines. To achieve this target, there will be a need for a broader financial base and, therefore, it is proposed to increase the subscribed share capital to Rs.200 lakhs. A sum of Rs.60 lakhs will, therefore, be required during the plan period.

#### *Hill Area Handicraft Schemes*

191. Following programmes are for Hill area :

	(Rupees in lakhs)
	Outlay 1980-81
<i>(a) Continuing Schemes</i>	
1. All India Handicraft week ..	0.02
2. Organisation of Handicrafts Industrial Cooperative Societies.	0.20
3. Papri Wood Scheme ..	2.19
4. Shwal Weaving Scheme ..	0.50
5. Artistic wooden Goods Scheme ..	0.25
6. Ringal utilisation Scheme ..	0.51
7. Carpet Weaving Scheme ..	8.41
8. Economic uplift of Scheduled Caste and Scheduled Tribes.	2.50
9. Raw Material and Wages Scheme..	15.00
Total ..	29.58

An outlay of Rs.150 lakhs is proposed for continuing schemes @ Rs.30 lakhs per year.

#### (b) New Schemes

It is proposed to take up new schemes for Hill Areas :—

1. Souvenir Craft Complex.
2. Training through Master craftsman.
3. Training through entrepreneurs shawl weaving, papri wood etc.
4. Establishment of design centre for Hill Area crafts.

An outlay of Rs.50 lakhs is proposed for these schemes. Thus a total outlay of Rs.200 lakhs is proposed.

#### (4) KHADI AND VILLAGE INDUSTRIES

192. In the Khadi and Village Industries programmes only such Schemes have been proposed which are not being financed by Khadi and Village Industries Commission.

193. *Wool Schemes*—Setting up of combing and finishing capacity in Hills. The total production of spinners and hand weavers is estimated to be of the order of Rs.2 crores, for which no finishing and dyeing facilities are available in the Hill area. The wool needed by artisans has to be carded and combed. At present the capacity available is not sufficient to meet the demand. It is, therefore, proposed to instal one finishing and processing plant, one carding and combing plant in the Hill region. The capital cost of the plant is estimated to be Rs.58.00 lakhs.

194. *Blanket Production Scheme*—Four Blanket Factories situated in Muzaffarnagar, Najibabad, Mirzapur and Gopiganj (Varanasi) were transferred to the Board. Later on two more production centres were added one at Jaunpur and the other at Rae Bareli. A new factory is being set up in district Ghazipur. In view of the growing demand of blankets for defence, hospitals and police it is proposed to establish four more Blanket Factories in the eastern districts of Uttar Pradesh where traditional spinners and weavers are available. The cost in establishing four Blanket Factories is estimated at Rs.52 lakhs.

195. There are more than 5,000 traditional Blanket Weavers in the district Muzaffarnagar, who produce blankets with traditional methods with low productivity and income. A ware-housing-cum-marketing scheme wherein 2,000 weavers will be covered in first phase is proposed to be launched. It is proposed to invest Rs.90 lakhs in this scheme, out of which Rs.45.00 lakhs loan will be arranged from State Plan and the rest Rs.45 lakhs will be obtained from Khadi and Village Industries Commission.

196. The present four blanket factories of the Board are very old and most of the machines are more than 25 years old. The milling machines, combing machines, carding and other plants require immediate replacement. It is, therefore, proposed to invest Rs.20.00 lakhs for this purpose.

197. *Rebate on Khadi cloth*—The State Government sanctions 5 per cent special rebate on retail sales of all types of Khadi every year at the time of Gandhi Jayanti celebrations. Based on production an outlay of Rs.600 lakhs is proposed.

198. *Assistance to Apex Federation*—During the last five years about 20,000 individual artisans have been provided financial and technical assistance by the Board, which has helped them in improving the quality and quantum of their production. These poor artisans have no marketing outlets and as such they have to sell goods at the cheaper rates. In order to extend marketing facilities to the individual artisans assisted by the Board, it is proposed to organise district/divisional level co-operative marketing federations. These federations will be provided share capital loan by the Board, which will enable them to raise working capital from the Bank and other financial institutions. An amount of Rs.125 lakhs has been provided under the Sixth Plan as share capital loan to co-operative federations.

199. *Technical assistance programme for the development of village industries*—Khadi and Village Industries Board has provided assistance to following industries :

(i) Processing of cereals and pulses industry.

(ii) Village oil industry.

(iii) Non-edible oil and soap industry.

(iv) Gur, Khandsari industry.

(v) Cottage match scheme.

(vi) Handmade paper industry.

(vii) Palm Gur industry.

(viii) Carpentry and blacksmithy industry.

(ix) Village pottery industry.

(x) Leather industry.

(xi) Fruit processing and preservation industry.

(xii) Fibre industry.

(xiii) Lime industry.

(xiv) *Forest-based industries*—The following village industries have been put in this category :

(1) Bee keeping.

(2) Collection of medicinal herbs and plants.

(3) Katha manufacturing.

(4) Gum and rosin industry.

(5) Production of Shallack.

(6) Cane and bamboo industry.

(xv) In all the above mentioned Khadi and Village Industries there is no technical and field staff available with the Board, and hence they have not been able to make progress during the last one decade. Therefore, for proper technical guidance to units and for supervision, staff and assistance for tools, equipment has to be provided for which an outlay of Rs.300 lakhs has been proposed.

(xvi) *Exhibitions, training and publicity programmes*—Publicity, exhibitions and extension training are the main means of mass communications and education.

#### (5) HANDLOOM

200. Following programmes will be taken up during Sixth Plan period.

201. *Share capital assistance*—The quantum of assistance under the scheme of share capital loan should be raised so that a larger number of societies are able to utilize their production capacity upto a maximum level. Accord-

ingly, outlay of Rs.200.00 lakhs has been proposed.

202. *Assistance to weavers working outside co-operative fold*—In the year 1979-80, proposals worth Rs.123.00 lakhs aiming to help 32,400 weavers to start their own production ventures were processed and submitted to banks. Out of this, only Rs.13.50 lakhs were sanctioned by Banks in favour of 517 weavers. It is, therefore, proposed to assist 25,000 loomless weavers by providing loan up to Rs.3,000 per weaver, through Handloom Corporation. An outlay of Rs.200 lakhs is proposed for this scheme.

203. *Working Capital Assistance under R. B. I. Scheme*—Outlay proposed for guarantee is Rs.20 lakhs.

204. *R. B. I. Interest*—The co-operative societies are provided working capital finance at the rate of  $6\frac{1}{4}$  per cent by the Co-operative Banks and the State Government provides interest subsidy to the Banks at the rate of 3 per cent. The outlay proposed for the scheme is Rs.25 lakhs.

205. *Assistance for organization of Scheduled Caste societies*—There is need to take up special programmes for S. C. weavers. The financial arrangements be made by State and Central Government on matching basis. Accordingly a proposal for organisation of 125 industrial type of societies for Scheduled Caste has been included. A shed of 25 looms will be constructed with facilities for winding, warping, dyeing, etc. This production wing will be tagged with the Apex Organisation (UPICA) which will establish a mini service-cum-marketing centre, covering 3 such societies for providing inputs to the weavers and lifting the finished products for sale. The outlay proposed for the scheme is Rs.350 lakhs.

206. *Establishment of Co-operative Spinning Mills*—For co-operative mills, weavers have to raise 5 per cent share and State has to provide  $22\frac{1}{2}$  per cent of total cost. It is proposed to set up 10 Co-operative Spinning Mills of 50,000 spindles each. Total cost of the project is Rs.1800 lakhs.

207. *Establishment of spinning unit for captive use by U. P. State Handloom Corporation*—The U. P. State HL Corporation

has expanded its production activity. For controlled cloth it is proposed to set up a captive spinning mill for which an outlay of Rs.650 lakhs is proposed.

208. *Assistance to Handloom Corporation/UPICA for opening of raw material sales depots in rural, semi-urban areas*—For providing raw material to weavers at their places of work, it is proposed to establish 100 raw material sale depots at a cost of Rs.0.20 lakhs each. The outlay proposed for the scheme is Rs.10 lakhs.

209. *Establishment of District Weavers Co-operative Federation*—For having regular arrangement for supply of yarn it has been proposed that in handloom districts, (15) District, Weavers Co-operative Federation be established. The federation would also arrange common facilities like establishment of dye house, etc. The cost of each unit will be Rs.96.50 lakhs. The distributions of participation will be as under :

(1) Weavers Societies and Weavers	Rs. 1.50 lakhs
(2) Working Capital under RBI	Rs. 80.00 lakhs
(3) State Government	Rs. 15.00 lakhs

210. The annual turnover of each federation will be about Rs.2 crores. All these federations will be affiliated with the Apex Organisation (UPICA). The outlay proposed for the scheme is Rs.150 lakhs.

211. *Handloom Intensive Development Projects*—Intensive Development Projects for handloom adoption are proposed to be set up as under :

Year	Outlay (Rupees in lakhs)	Projects to be established
1980—85	1294.00	(10 new+2 contd.)

212. *Establishment of Janta Cloth Production by Apex Organisation (UPICA)*—The organisation will be provided assistance for setting up of 10 sub-production centres at Rs.5.00 lakhs per centre. The outlay proposed is Rs.50 lakhs.

213. *Establishment of Silk Project for manufacture of silk items*—For manufacture of quality silk goods, intensive development project for silk goods is proposed to be started at Varanasi having a total outlay of Rs.100 lakhs.

214. *Production of Blended Fabrics*—Handloom Corporation has taken up assistance for the production of blended fabrics as it is much more paying for the HL weavers by giving technical know-how-training and marketing. The outlay proposed for the scheme is Rs.85 lakhs.

215. *Establishment of Handloom Complexes*—Entrepreneurs will be provided for package assistance for establishing production units having 10 to 20 looms. It is proposed to establish 20 complexes during Sixth Plan period. The outlay proposed for these complexes is Rs.55 lakhs.

216. *Assistance to educated unemployed for establishment of Mini Handloom Production Unit*—The entrepreneurs will be provided assistance of Rs.25,350 per unit from A/C funds for establishing 5 looms unit for which proposed outlay is Rs.253.50 lakhs for 1,000 units.

217. *Training programme for weavers belonging to S. C./S. T.*—In order to train Scheduled Caste and Scheduled Tribe artisans and weavers a training-cum-production centre has been started in Gorakhpur having concentration of such artisans and weavers. Trainees are taught improved method of production and better looms so they can earn better wages. The trained persons are also encouraged to start production on their own looms if they are working on looms of master weavers. The proposed outlay is Rs.15 lakhs.

218. *Training of officials of Co-operative Societies by Apex Organisation (UPICA)*—At present UPICA is running a training centre at Kanpur for training staff of co-operative societies (both textile and non-textiles). The intake capacity of textiles societies is limited to 60 trainees. The proposed outlay is Rs.5 lakhs for 300 trainees.

219. *Modernisation of looms*—It is proposed to provide assistance to the weavers in the form of grant for modernisation of looms. This includes replacement of pitlooms by frame looms, addition of Jacquard for better designs and take up/let off motion. The proposed outlay is Rs.50 lakhs for 10,000 looms.

220. *Establishment of Dye Houses*—For adequate dyeing facilities, the following pattern for establishment of Dye Houses has been indicated :

(a) *Establishment of Medium Size Dye Houses*—10 medium size dye houses will be established by U. P. State Handloom Corporation/UPICA/District Weavers Co-operative Federation @ Rs.1 lakh per house.

The outlay kept is Rs.10 lakhs for 10 dye houses.

(b) *Small Dye Houses by Co-operative Societies*—Small dye houses having a total cost of Rs.50,000 be established by the Co-operative Societies. The society will be provided assistance to the tune of Rs.35,000 per dye house. For 50 such dye houses, the proposed outlay is Rs.17.50 lakhs.

(c) *Establishment of Cottage Dye Houses*—To meet the needs of small clusters of weavers it is proposed to establish cottage dye houses at a cost of Rs.10,000 per dye house by U. P. State Handloom Corporation on no profit no loss basis. Such dye houses will cover 100–150 looms. The outlay for 100 units will be Rs.5 lakhs.

221. *Establishment of Design Centres*—Market ability of handloom cloth depends mainly on its quality and design. At present five design centres at Bara Banki, Etawah, Kanpur, Bareilly and Mau (Azamgarh) are working but are not fully equipped. It is proposed to re-organise them, an outlay of Rs.25 lakhs is proposed.

222. *Establishment of Standardisation and Marketing Cell*—With a view to help the weavers in taking up the production of precribed standard and to guide the weavers in production of goods as per demand a technical cell is proposed to be established for which an outlay of Rs.5 lakh is proposed.

223. *Quality Marking Scheme*—The object of the scheme is to evolve standard for products for which ISI standards do not exist. The testing laboratory is proposed to be expanded for which an outlay of Rs.25 lakhs is proposed.

224. *Assistance for construction of work sheds*—With a view to provide proper



space and environment to the weavers it has been proposed to provide assistance to the weavers societies for construction of their own work sheds. The assistance is provided @ Rs.25,000 per work shed per society against societies contribution of Rs.15,000 per society. The outlay proposed for 30 sheds is Rs.18 lakhs.

225. *Establishment of process house*—A large process house is proposed to be established at a total cost of Rs.150.00 lakhs in Central/Western region of the State. The outlay proposed is Rs.100 lakhs.

226. *Managerial assistance*—S i n c e weavers are normally illiterate and unfamiliar with the rules and regulations regarding the functioning of the co-operatives, it is necessary to provide managerial assistance to co-operative societies of weavers in order to ensure their smooth functioning. A grant of the rate of Rs.3,600 for one year is given to each society towards salary. The outlay proposed for 700 supervisors is Rs.25 lakhs.

227. *Establishment of Printing/Training-cum-Production centre at Mau*—A printing/training-cum-production centre at Maunath Bhanjan is being established during the year 1980-81. Under this scheme, 25 trainees per quarter will be trained for regular production of printed fabrics. For training 200 artisans an outlay of 20 lakhs is proposed.

228. *Steaming and Washing Plant (for Farrukhabad Prints)*—This scheme envisages provision for full-fledged steaming and washing plants for Farrukhabad and Meerut. The annual processing capacity of each plant would be six lakh metres. The proposed outlay is Rs.25 lakhs.

229. *Organisation of Weavers Seminars*—Under this programme, weavers are trained in co-operative rules and improved methods of production. The duration of seminars is one week. Fifty weavers are trained in each seminar. For 200 seminars an outlay of Rs.6 lakhs is proposed.

230. *Assistance for establishment of weavers colonies*—The scheme proposes to give weavers a loan of Rs.7,500 by the bank and a grant of Rs.1,500 per house by the State Government. Land is proposed

to be provided free of cost. For 15 colonies an outlay of Rs.11.25 lakhs is proposed.

231. *Pilot Project Centres for Development of Printers of Kashipur and Jaspur (Naini Tal)*—This is a continuing scheme. For training 300 printers an outlay of Rs.21 lakhs is proposed.

232. *Training and Tours of Weavers*—The programme envisages tours of weavers to developed handloom centres in other States. For 50 tours an outlay of Rs.2.50 lakhs is proposed.

233. *Establishment of Warehouse*—For providing warehousing facilities during off season an outlay of Rs.15 lakhs is proposed.

234. *Establishment of U. P. State Handloom Technology Institute, Kanpur*—In order to meet the increasing requirement of technical persons, a Handloom Technological Institute of State Government at Kanpur is being proposed with an outlay of Rs.30 lakhs for training 60 weavers per year, i.e. 300 during 1980-85.

235. *Construction of Sheds for Warping*—In order to provide continuous work to the weaver even in rainy season, it has been proposed to construct 10 sheds for warping purposes in the weavers concentration areas. The cost of each such shed will be Rs.1.00 lakh. An outlay of Rs.10 lakhs has been proposed.

236. *Assistance to Apex Organisation/State Handloom Corporation for opening of Show Rooms*—Handloom Corporation and UPICA are proposed to be provided with assistance @ Rs.5.00 lakhs per show room. These show rooms will provide outlet for the handloom goods produced by weavers in the State. For 25 show rooms an outlay of Rs.125 lakhs is proposed.

237. *Rebate on sale of handloom cloth*—Under the scheme, rebate is offered at the rate of 5 per cent on retail sales through organised exhibitions. An outlay of Rs.250 lakhs is proposed.

238. *Organisation of Fairs and Exhibitions*—With a view to popularise Handloom goods both within and outside the country, it is proposed to organise exhibitions and establish stalls in National and International exhibitions. The outlay proposed is Rs.25 lakhs.

239. *Information and publicity*—Assistance is given for organisation of exhibitions and publicity campaign to help marketing of handloom products. An outlay of Rs.25 lakhs is proposed.

240. *Celebration of All-India Handloom Week*—For all-India handloom week celebration an outlay of Rs.5 lakhs is proposed.

241. *Construction of Bunkar huts*—The market for handloom goods mainly exists in rural areas. The weavers have to sell their products through Huts by putting their goods at pavements or other unsuitable place of the area and are effected by monsoon and weather. It is proposed to construct 20 huts for which an outlay of Rs.25 lakhs is proposed.

242. *Assistance to Primary Co-operative Societies for opening sale Depots*—For opening of 50 Sale Depots an outlay of Rs.25 lakhs is proposed @ Rs.0.50 lakh per show room.

243. *Organisation of Regional Marketing Societies*—It is proposed to organise marketing societies, which will be federal in nature, and market products of their member societies. They will be given share participation loan up to Rs.75,000. For 10 societies an outlay of Rs.7.50 lakhs is proposed.

244. *Export Incentives to Weavers*—The Handloom Sector is entering into export field. An outlay of Rs.25 lakhs is proposed for incentives.

245. *Supervisory Staff*—A small skeleton staff (35 officers/officials) has been sanctioned for the Directorate of Handloom and Textiles. This includes the post of Director Handloom and Textiles and other staff. For this continuing scheme an outlay of Rs.20 lakhs is proposed.

246. *Training of Officers and Staff*—The scheme provides for training of officers working under the Directorate for training courses in various managements and technical institutes for which an outlay of Rs.3.25 lakhs is proposed.

247. *Reorganisation of Co-operative Societies*—For the assistance of Co-operatives which are dormant/defunct an assistance programme has been taken up. It is proposed to place one officer of Handloom

with supporting staff in each intensive handloom district having more than 2,000 looms in 32 areas for which an outlay of Rs.25 lakhs is kept.

248. *Planning and Monitoring Cell*—In the Directorate of Handloom and Textiles a monitoring and planning cell has been approved by the Government for which an outlay of Rs.5 lakhs is proposed.

249. *Survey of Handlooms*—As per directives of the Government of India survey of the existing Handlooms and Powerlooms is being conducted and the looms are to be registered for allotment of scarce raw material and other facilities for which an outlay of Rs.4 lakhs is proposed.

250. *Strengthening of the field staff for smooth functioning of societies as per R. B. I. norms*—In order to implement the co-operative covering programme effectively, it is proposed to strengthen the field staff as per norms of R. B. I. (One Supervisor) for over 10 societies and a Textile Inspector to supervise the work of 3 Supervisors for which an outlay of Rs.50 lakhs is proposed.

251. *Assistance to Handloom Corporation/UPICA*.—(a) *Assistance to Handloom Corporation*—Corporation will be setting up Show-rooms, new production centres and new purchase points etc. and will be increasing its business. The turn over in 1979-80 was Rs.24.14 crores. Additional share capital required is Rs.250 lakhs for raising the sales from Rs.24.14 crores to Rs.50 crores by the end of Sixth Plan.

(b) *Apex Organisation (UPICA)*—The Apex (UPICA) Organisation is expanding its business gradually. It will take up the marketing of Rs.10.00 crores by the end of 1984-85. Proposed outlay for share capital is Rs.100.00 lakhs.

#### (6) SERICULTURE

252. Sericulture provides employment both part-time and regular to the weakest section of the society. It is, therefore, proposed to expand and strengthen the activities of Sericulture including Tasar culture throughout the State. Since the climatic conditions play an important role only such areas, as have been found

climatically most suitable for Sericulture and Tasar culture are being included in the Sixth Five-Year Plan. An

outlay of Rs.1700 lakhs has been proposed under this head with the following details :

(Rupees in lakhs)

Serial no.	Name of the Scheme	1980-85
1	2	3
1	Strengthening of Sericulture staff .. .. .	46.29
2	Intensive Tasar development project, Mirzapur .. .. .	77.27
3	Tasar Development project for Bundelkhand .. .. .	393.73
4	Assistance to Resham Sangh and Cocoon Marketing .. .. .	125.40
5	Intensive Sericulture project for Tarai Region .. .. .	339.19
6	Establishment of Chawki Rearing and Demonstration farms .. .. .	486.40
7	Oak-Tassar Development scheme for silk .. .. .	117.72
8	Training Centres for staff and farmers .. .. .	38.00
9	Establishment of grainage .. .. .	76.00
Total ..		1700.00

#### (4) GEOLOGY AND MINNING

253. The State Directorate of Geology and Mining with the commencement of its scientific exploration programmes since 1955, can today place an inventory of several industrial mineral deposits, as well as some potential metallic minerals finds which are progressively to be exploited for the industry. Uttar Pradesh which has an area of about 2.90 lakh square kms. offers only the Himalayas in the north comprising about 46,000 sq. kms. and the rocky-hilly tracts of south-eastern U. P. and the Bundelkhand (4300 sq. kms.) as potential ground for prospecting for minerals. The central plains comprise agricultural land, where minor minerals such as sand, murrum, brick earth, reh, salt, petre, etc. are available. However, there are oil and gas prospects which are under investigation with the Oil and Natural Gas Commission in this region. During the II and III Five-Year Plans sums of Rs.6.5 lakhs and Rs.25.9 lakhs respectively were spent for the mineral exploration in the State. The investigation programmes were slightly intensified in the three annual plans and the Fourth Five-Year Plan in which Rs.34.6 lakhs (includes Rs.9.9 lakhs for hills) and Rs.156.90 lakhs (includes Rs.43.4 lakhs for hills) respectively were spent. Within the limited resources made available during these periods, the surveys undertaken included only such mineral depo-

sits that were already reported and on which industries could be planned. Investigations were accordingly carried out on limestone, silicasand, pyrophyllite, diaspore, dolomite, marble, bauxite deposits in the plain areas for use in cement, steel, refractories and aluminium industries. Investigations on reconnaissance, preliminary and detailed levels were also taken up in the hill areas on limestone, soapstone, gypsum, asbestos, magnesite, marble and base metal.

254. Outlining of sizeable deposits of cement grade limestone in district Mirzapur resulted in the setting-up of new cement factory at Dalla and expansion of Churk factory under a newly created State Cement Corporation. A dead burnt magnesite plant of 80 tonnes per day capacity was also set up at Jhitori, district Almora, under Joint Sector.

255. Another State undertaking namely U. P. State Mineral Development Corporation was created in March, 1974 with a view to exploiting the remaining mineral reserves outlined by the State Directorate, for use in existing industries as also for setting up new industries. A sum of Rs.5.00 lakhs was given as share capital in the year 1973-74 for work in hill areas.

256. Surveys were also initiated in the field of minor minerals for regulating their

mining under the rules, and this resulted into substantial increase in the State revenues from Rs.1 lakh in the year 1955 to Rs.74 lakhs in the year 1973-74, for all minerals.

#### PROGRESS DURING FIFTH PLAN

257. A total sum of Rs.416.3 lakhs (includes Rs.120.5 lakhs for hills) was spent upto 1977-78 in the mining sector which includes Rs.272.3 lakhs (includes Rs.78.5 lakhs for hills) for survey and investigation work by the Directorate and Rs.144.0 lakhs (includes Rs.42.0 lakhs for hills) for development of mines by the U. P. State Mineral Development Corporation.

258. Under the survey and investigation work in the plain areas the Directorate carried out 14 investigations for outlining mineable reserves of silicasand in Banda and Allahabad districts, pyrophyllite deposits in Lalitpur and Jhansi districts, bauxite in Banda district, cement grade limestone in Mirzapur district, low grade iron ore deposits in Lalitpur district and clay deposits in Banda district. Besides these, emphasis was also given to the search of metallic mineral deposits under which work was undertaken for geo-chemical surveys in Jhansi and Lalitpur districts, outlining of the mineralized zone of copper-uranium in Lalitpur district, geo-chemical surveys in Mirzapur district, and geophysical surveys for searching graphite mineralisation in Hamirpur district. Five of the fourteen programmes have been completed by the year 1978-79 and new programmes have been commenced under the existing schemes. In the hill areas, 15 investigation programmes were carried out. These included 5 detailed level surveys on limestone, marble, magnesite and base metals, while the remaining were either preliminary investigations or regional geo-chemical surveys.

259. The State Mineral Development Corporation took up the project of mining of SMS grade dolomite and blast furnace grade limestone in Mirzapur district in the year 1976 for meeting the requirements of public sector steel plants. The Corporation has also taken up mining of bauxite in Banda district and is planning

to set up a pilot plant for processing of silicasand. Another project of alumina refractories in Lalitpur district, based on diaspore-pyrophyllite deposits, is also receiving active consideration. The Corporation based on its Lambidhar mines under development in the hill region of Dehra Dun district is also on its way to execute a calcium carbide project, the site of which has been selected. This project will have a large number of ancillary units and would thus create a considerable impact on the industrial development of the region.

260. It has been amply proved by the investments made in the mining sector that there is a plenty of scope for development of minerals and mineral based industries in the State. There are also signs of finding metalliferous deposits, provided sufficient funds are made available for their investigation. Continued efforts in the field of regulation of mining of minor minerals (mainly construction materials) under the rules have resulted into further increase in the State revenues from Rs.74.00 lakhs at the end of Fourth Plan to Rs.1.50 crores at the end of Fifth Plan. This has presently increased to about Rs.3.00 crores.

#### ASSESSMENT OF SCHEMES AND THEIR IMPACT

261. The Directorate conducted 28 mineral investigations (16 in hill areas) for both industrial and metallic mineral deposits. Regional investigation including geo-chemical surveys and studies of heavy minerals in the stream sediments have also been carried out. The survey work conducted under both Plan and non-Plan schemes have resulted in the outlining of mineral reserves in a number of areas and also delineating new mineralisations of tungsten and gold in Almora and Pauri-Garhwal districts respectively. The work has also indicated the possibilities of base metal mineralisation in the anomolous areas identified in the regional geochemical surveys. The following mineral reserves have been proved up to date :

1. Dolomite in Bari-Baghmana areas, Mirzapur district.
2. Limestone in Block VI of Kajrahat belt, Mirzapur district.

3. Silicasand in Allahabad and Banda districts.
4. Pyrophyllite-Diaspore in Lalitpur district.
5. Rock-phosphate in Lalitpur district.

Regional field checking in Petsal area of Almora district done earlier had indicated the presence of tungsten (scheelite) mineralisation and detailed survey in the area has resulted in locating the mineralised rock in some localities. The grades of mineralisation found appear to be encouraging. The plan also included the construction of a functional building for the Directorate. Considerable progress has been made and the building is likely to be completed in the year 1980-81.

262. A preliminary geological traversing and studies of the stream sediment in Kalagarh Forest Division in Pauri-Garhwal district has indicated the presence of gold mineralisation in the area. The work completed so far has resulted in the location of the mineralised rock. The work is being extended for assessment of deposits.

263. It would be apparent from the results achieved so far that the plan and non-plan schemes under which various mineral investigations are being carried out have given useful results and prospects

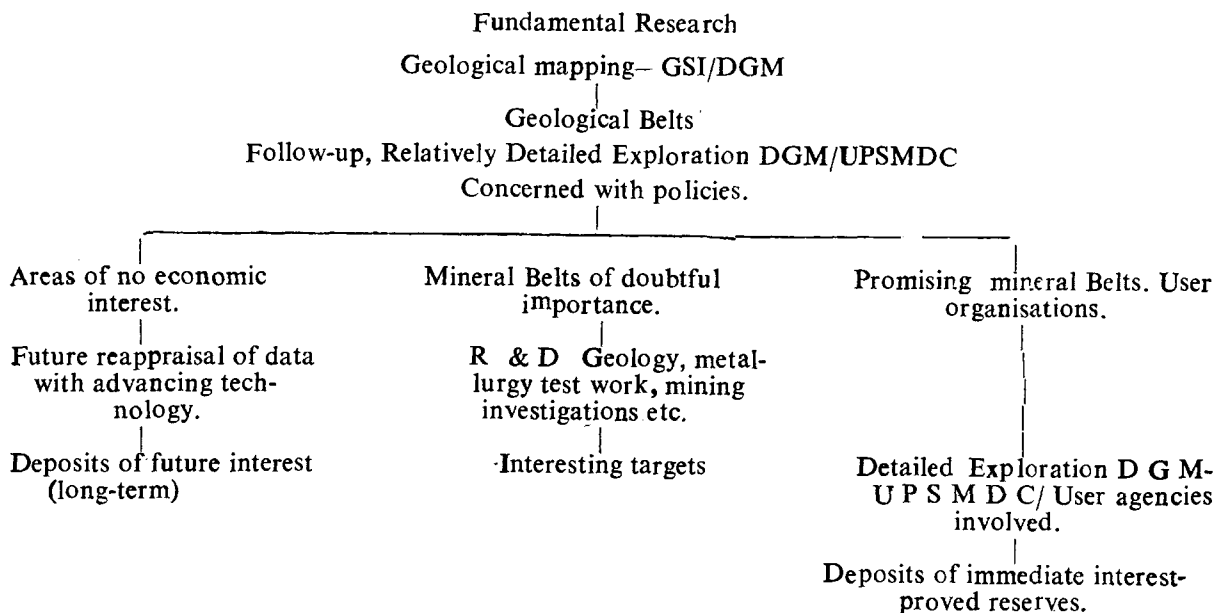
of mineral based industries have been established on them.

264. Exploitation of some of the above noted mineral resources is being made by the U. P. State Cement Corporation. The U. P. State Mineral Development Corporation and M/s. Almora Magnesite Limited (Joint sector). Their present production against the potential available and level of utilisation are given.\*

#### *Objectives of the Sixth Plan*

265. *State Geology and Mining*—The State's own survey organisation is equipped with a professional cadre of about 75 men and women, devoted to fields of specialisation. This group is supported by services for administration, mining regulation, accounts etc. Since in this country, the responsibility for exploration lies mainly with Government, the organisation has been gradually expanded to meet specific needs of mineral exploration.

266. The broad strategy adopted by the Directorate for mineral discoveries in the first instance is through a systematic compilation of geological data, leading finally to outlining proven reserves of mineral commodities for the industry. This is shown in a flow diagramme given here. The diagramme also indicates areas and stages when the user agencies become interested and involved.



\*Annexure-VI

267. Mineral exploration, of hidden wealth, invariably involves high financial risks. In USA, Canada, Australia and other developed countries, such risks are taken only by the industry dominantly in private sector enterprise ; in the USSR and India, as well as in many African countries, however, the risk is borne by Government. Therefore, the need is to make the survey organisation self-sufficient with all necessary technological inputs so that the exploration results are more and more productive.

268. With the above background, the State Directorate of Geology and Mining have framed their Sixth Plan keeping the following main issues into consideration :

(1) It would continue to expand its organisation with specialist groups for undertaking basic research and evaluation of geological data for "prospective mineral inventory". This will involve expansion at the headquarters.

(2) It would strengthen the Directorate into specialist sections for dealing with all aspects of mineral exploration. It would give equal stress on the investigation of "Mineral belts" potential for industrial as well as, metallic minerals. This will require adequate laboratory facilities at the headquarters.

(3) It would equip itself for mining regulation with a view to scientific controls and advising industry with new mining technology ; and rehabilitation of mining areas in collaboration with the Government of India.

(4) It should develop a cell for mineral statistics, mineral economics, environment and ecology as related to mining. This can be a start for policy formation in future.

(5) It would also consider the setting up of a cell for compiling geohydrological data, and for engineering geology in relation to land use planning.

(6) Dissemination of technical data for user organisation in the public and private sector.

(7) Collaborate with State Universities/ Technological Institutes on research problems of mutual interest.

(8) Since finance for exploration has been a constraint, it may formulate propo-

sals for government's consideration for assistance through agencies, such as the United Nations Development Programme, U. N. Revolving fund, and bilateral assistance from European and other countries. The recent contribution made by the United Nations Mineral Surveys in U. P. is an example that such schemes not only provide finance but that the training and technological inputs provide a rich experience enabling a scientific organisation to keep pace with technology growth abroad.

These objectives are spelt out in more details in the relevant chapter concerning the State Directorate of Geology and Mining with financial aspects of schemes proposed for the Sixth Plan.

269. *The U. P. State Mineral Development Corporation*—As a national policy, with a view to stepping up the pace of mineral development in the country, corporations with this objective have been created and are in existence in most States of the country. The principal motivation has been, the reluctance of the private sector to enter this field where a bulk of the projects ensure only marginal returns. At the same time, those projects that develop industrial mineral resources of low value—high—bulk, are so vital for many priority industries, such as chemicals, steel, glass and ceramic etc. In view of the location of these resources further, the projects invariably have to be established in the backward, often rocky parts of the State where other industries, including agriculture, do not have the same priorities.

270. The State Corporation, charged with the role of stepping up the growth of mineral industry, is necessarily dependent on the State Directorate of Geology and Mining, for on one hand to obtain data on resources that can be developed, and at the same time lay priorities for exploration programmes that would be necessary in national and State's interest. With this objective and the Government desire for public sector participation in mineral development, the following aims are generalised :

(1) To acquire greater control of the State Mineral Resources and to participate in their development.

(2) To promote and sustain mineral industry in accordance with Government policies and priorities.

(3) To develop a capability and expertise in fields of mining and mineral based industry.

(4) To carry out R & D activities in the fields of geology, metallurgy, mining and engineering with a view to developing resources and creating a 'pipe-line' of projects with techno-economic feasibility studies.

(5) To develop monitoring systems with a view to increasing efficiencies, productivity and capacities on projects in hand. To reduce gestation with continuous experience.

(6) To give special emphasis in the Sixth Plan for mineral Development relating to chemicals, steel, glass sand, ceramic, phosphate based and fertilizers, refractory industries. At the same time R & D inputs are necessary for developing base metal deposits of known potential, tungsten graphite, gold, and semi-precious stones that are in advanced stages of exploration through the State Directorate of Geology and Mining.

(7) The development of the Himalayan region through mineral industry will call for special skills involving geology, technology, for developing small and large mining ventures and for mineral transformation, taking into account all aspects of environment and ecology. Small scale development of the mineral industry, widely dispersed over this mountaneous belt is an aspect that needs to be given all consideration, when technology today has grown in application from small to large for maximisation of profits. R & D in this sphere is proposed in collaboration or with assistance from the UN or European countries offering bi-lateral assistance and where such problems are known to have been talked successfully.

271. In the case of Directorate of Geology and Mining the financial outlay would need to be made available from the State Plan. However, for the projects of the U. P. State Mineral Corpora-

tion, the equity would also have to come from the institutional finance.

272. A total sum of Rs.2100 lakhs would be required for the Plan Schemes of the Directorate and the Corporation. Out of this amount Rs.860 lakhs would be required for the Plan Schemes for the Directorate i.e. Rs.300 lakhs would be earmarked for the plan in hill areas and Rs.560 lakhs would be needed for schemes in plain areas.

273. The Corporation would require Rs.1240 lakhs as equity for their Plan Schemes (including Rs.509.50 lakhs for hills).

#### INFRA-STRUCTURE FACILITIES :

274. The basic infrastructural facilities for mineral development is in the survey and investigation work under the Directorate of Geology and Mining. These facilities include technical staff and equipment with a small support of ministerial staff, stenographers and some class IV employees who are mainly related to the survey work of the field or for laboratories. The structure consists of staff carrying out field work related to geological, geophysical, geochemical, drilling and surveying disciplines and laboratory work at the headquarters with respect to chemical analysis, petrological and drawing work. Out of a total strength of 510 (including that for hill areas), the number of technical staff is 359 and others are 151 including 36 drivers. Considering the mineral potential of the State as presently estimated it would be necessary to expand both the staff and equipment component to meet the requirements of work proposed during the next plan. The organisational set up is also inadequate for supervising the work in the field and would therefore need to be strengthened.

#### PRESENT ORGANISATION MEASURES FOR IMPROVING EFFECTIVENESS, CO-ORDINATION CONTROL AND MONITORING

275. The present organisation in the Directorate is comprising 338 technical personnel in the field of Geology, Chemistry, Geophysics, Geo-chemistry, Mining and Drilling. This staff is supported by Non-Technical ministerial and class IV field and office staff. As mentioned earlier, Directorate operates 28 mineral investi-

gations programmes both in plain and hill areas at present. Besides mineral investigations, Directorate also carried out mining and administration work with the help of 4 circle offices located in Allahabad, Jhansi, Dehra Dun and Naini Tal.

276. In order to improve the level of work, in mineral investigation and mining administration certain measures have been initiated as under :

(1) Mineral economic and planning cell is being established in the Directorate to carry out studies for mineral conservation, exploration and feasibility of mineral based industry.

(2) The administrative wing in the Directorate is being strengthen-

ed to ensure a better planning, monitoring and education of the mineral investigation schemes.

(3) It is proposed to re-organise mining administration in the State to ensure the effective enforcement of mining law, control and assessment of exploration and royalty from the minerals.

(4) Efforts are also being made to ensure better co-ordination with sister organisation i.e. G.S.I. and Universities to give broad base to the exploration activities.

(5) Research oriented exploration programmes are being envisaged in collaboration with the universities.



## ANNEXURE-- I

*Growth of production and employment in Large and Medium Industries under Indian Factories Act (Private sector only)*

Large and Medium Industries					No. of Units	Production (Rs. in crores)	Invest- ment (Rs. in crores)	Employ- ment (No.)
1					2	3	4	5
1970								
Agro based Industries	..	..	..	..	83	257	153	63,410
Textile Industries	..	..	..	..	33	89	77	65,005
Forest based Industries	..	..	..	..	8	10	12	3,892
Live-stock (Leather)	..	..	..	..	9	14	9	1,953
Mineral based	..	..	..	..	8	5	6	3,244
Chemical Industries	..	..	..	..	30	57	94	10,031
Engineering Industries	..	..	..	..	52	46	37	15,305
Misc. Industries	..	..	..	..	19	23	38	5,034
Total					242	501	426	1,67,874
1978								
Agro based Industries	..	..	..	..	98	619	278	62,966
Textile Industries	..	..	..	..	33	234	162	51,444
Forest Based Industries	..	..	..	..	20	34	48	8,773
Live-stock (Leather)	..	..	..	..	8	31	10	2,052
Mineral based	..	..	..	..	12	17	16	3,321
Chemical Industries	..	..	..	..	40	116	152	10,360
Engineering Industries	..	..	..	..	111	331	333	33,424
Misc. Industries	..	..	..	..	18	80	86	6,031
Total					340	1,462	1,085	1,78,371

## ANNEXURE-II

*Growth of Small Scale Units, Production and Employment Registered under Indian Factories Act 1948 in the years 1965 and 1978*

Small scale Industries						No. of units	Employ- ment (Nos.)	Produc- tion (Rs. in crores)
1965								
1.	Agro based	..	..	..	..	800	25,403	51
2.	Textiles based	..	..	..	..	173	8,332	8
3.	Forest based	..	..	..	..	76	2,234	2
4.	Livestock based	..	..	..	..	120	5,750	8
5.	Mineral based	..	..	..	..	228	2,924	5
6.	Chemical based	..	..	..	..	105	4,485	8
7.	Engineering based	..	..	..	..	968	36,595	31
8.	Miscellaneous	..	..	..	..	382	10,219	6
					Total	2,852	95,942	119
1978								
1.	Agro based	..	..	..	..	155	62,700	206
2.	Textile based	..	..	..	..	259	10,396	38
3.	Forest based	..	..	..	..	127	4,155	15
4.	Livestock based	..	..	..	..	115	6,593	36
5.	Mineral based	..	..	..	..	407	27,952	31
6.	Chemical based	..	..	..	..	100	10,884	62
7.	Engineering based	..	..	..	..	1,574	45,990	203
8.	Miscellaneous	..	..	..	..	143	8,876	27
					Total	4,284	1,77,546	618

## ANNEXURE—III

*Growth of Organised and un-organised sector units, their production and employment*

Year	No. of units		Employment		Production (Rs. in Crores)		
	*Organised	*Un-organised	Organised	Un-organised	Organised	Un-organised	
1974-75	..	4,015	21,691	1,33,136	1,88,569	363.00	169.53
1975-76	..	4,138	25,350	1,43,093	2,11,877	381.42	183.56
1976-77	..	4,392	29,195	1,49,734	2,32,239	461.46	105.74
1977-78	..	4,603	32,866	1,72,116	2,59,965	558.34	223.46
1978-79	..	4,284	37,351	1,77,546	2,97,617	618.00	260.44
1979-80	..	+4784	43,159	+1,82,563	3,55,697	+681.22	301.78

NOTE :—\*Figures relate to Calendar year  
+Provisional.

## ANNEXURE—IV

*Some of the important handloom schemes and their achievements*

Name of the Scheme	Unit	Fifth Plan 1974-78	Years	
			1978-79	1979-80
1	2	3	4	5
1. Janta Cloth Production .. .. .	(lakh sq. mtrs.)	153.28	380.00	666.79
2. Supply of inputs .. .. .	(Rs. in lakhs)	253.15	195.66	229.01
3. Marketing of HL goods through institutional arrangements	do	600.00	1304.38	2184.96
4. Organisation of Weavers Societies .. .. .	(Nos.)	858	304	86
5. Looms brought under cooperative fold .. .. .	do	45,607	16,117	4,432
6. Working Capital Assistance				
<i>Under R. B. I. Guarantee</i>				
(a) Societies .. .. .	(Nos.)	1,694	885	1,085
(b) Amount .. .. .	(Rs. in lakhs)	354.52	217.56	280.75
7. Share capital Assistance				
(a) Societies .. .. .	(Nos.)	800	610	722
(b) Amount .. .. .	(Rs. in lakhs)	73.79	63.35	30.00
8. Modernisation of <i>Handlooms</i>				
(a) Looms .. .. .	(Nos.)	1,311	2,000	1,040
(b) Amount .. .. .	(Rs. in lakhs)	6.55	10.00	5.20
9. Working result under <i>HL Corporation/UPICA</i>				
<i>(a) HL Corporation</i>				
1. Sale of HL Cloth .. .. .	(Rs. in lakhs)	600.00	1304.38	2184.96
2. Production of HL Cloth .. .. .	„	577.22	951.38	1615.63
<i>(b) UPICA</i>				
1. Sale of HL Cloth .. .. .	„	182.48	176.16	177.15
2. Production of HL Cloth .. .. .	„	18.73	67.30	106.82

ANNEXURE—V  
U. P. State Textile Corporation

Project	Outlay (Rs. in crores) (1980-85)	Institu- tional finance (Rs. in crores)	Total cost (Rs. in crores)	Direct employ- ment Potential (Nos.)
1. Expansion of spindlage in UPSTC/UPSSM by 1 lakh spin- dles (continuing scheme)	13.56	20.34	33.90	4,088
2. Additional expansion of spindlage by 1 lakh .. ..	13.56	20.34	33.90	4,088
3. 20 new spinning mills of 50,000 spindles each@ Rs. 18 crores in State and Cooperative sectors (some of these mills will spill over to the VII Plan period).	65.75	216.00	360.00	40,880
4. Rayon Grade pulp plant 100 TPD (Project will spillover to the VII Plan).	3.90	23.40	39.00	591
5. Viscose staple fibre 75 TPD (Project will spillover to the VII Plan).	5.10	30.61	51.01	694
6. Automatic looms 1500 nos. (Project will spillover to the VII Plan).	9.63	18.97	31.62	2,410
7. Process House .. .. .	1.70	2.54	4.24	80
8. Diversification and modernization of 8 public sector mills	2.00	3.00	5.00	590
9. Hosiery Plants/complexes .. .. .	0.80	1.20	2.00	3.00
Total ..	116.00	336.40	560.67	53,721

## ANNEXURE—VI

*Mineral production, potential and present level of utilisation*

Mineral	Present Annual Production (M. T.)	Expansion under Execution (M.T.)	Mineral Potential available (M. T.)	Level of utilisation of Mineral Resources in %
Cement grade Limestone (Dalla and Gurma in District Mirzapur)	1.2	2.5	30	Taking 40 years as the production planned, the utilisation level works out to 41 %
SMS grade dolomite (Bari, district Mirzapur)	75,000	75,000	5	Taking 20 years as the period of production planned, the utilisation level works out to 60 %
BF grade limestone (Bhalua, district Mirzapur).	15,000	5,00,000	30	Taking 20 years as the period of production planned, the utilisation level works out to 43 %
Metal grade bauxite (Rajahuan, district Banda).	20,000	1,00,000	6	Taking 20 years as the period of production planned, the utilisation level is 40 %
Steel grade Magnesite (Jhiroli, district Almora).	40,000	40,000	4	Taking 20 years as the period of production planned, the present utilisation level is 40 %
Chemical grade marble and limestone (district Dehradun.)	40,000	40,000	48	Taking 40 years as the period of production planned, the present utilisation level is 40 %.

## CHAPTER 11 TRANSPORT AND COMMUNICATION

### (1) ROADS AND BRIDGES

Roads constitute an integral part of the nation's economy and present an index of its prosperity. They are forerunners of any developmental activity and integrate the production, marketing and consumption functions of the community.

2. Road construction programme is by nature employment-intensive. Benefits of employment created during the construction phase reach the poor masses of the rural areas. As such, the investment in road and bridge works, selected on the basis of objective criteria and proper delineation of spatial priorities, yields a host of benefits, direct and indirect, to the community. Apart from the economic benefits through the spurt in commercial activities which follows opening up of areas with improved communication, the social benefits in terms of accessibility to various facilities such as markets, schools hospitals, banks etc., which enrich the quality of life, are undeniable. In the long run, roads and bridges pay for themselves by earning revenues from road-tax, passenger-tax, goods-tax, etc.

3. In 1950-51, the all-India yield from road and transport revenues was Rs.47.37 crores, which increased to Rs.1238.25 crores in 1974-75. This increase can be attributed partly to increase in road length from 97,500 kms. to 4,22,006 kms. during this period.

4. *Historical background*—Systematic efforts for road development at the national level were initiated in 1929 when the Jayakar Committee considered the improvement of road systems in a comprehensive manner. Later in 1943, Chief Engineers in charge of roads in the country convened a conference at Nagpur and submitted a Plan, commonly known as Nagpur Plan, for a period of 20 years beginning from December, 1943. The formula envisaged in the Plan was aimed to have 25.715 kms. of roads in U. P. in

the next 20 years, to achieve a road density of 26 miles of roads for 100 sq. miles of area (16 kms. of roads per 100 sq. km.). In 1957, Chief Engineers in charge of road and bridge development of Central and State Governments met to formulate a road Plan for another 20 years, starting from 1961. Popularly known as the Bombay Plan, the target set in it was that no village should be more than four miles (6.4 kms) away from a metalled road or more than one and a half miles (2.4 kms) from any type of road in developed agricultural areas. To achieve this target, the road density should reach the level of 32 kms. per 100 sq. km. of area by the end of 1981.

5. *Road density of U. P.*—Viewed in the above context, the road density in U. P. as expected on April 1, 1980 is only 19.83 kms. per 100 sq. km. of area, which is far behind the target set in the Bombay Plan. The area of this State, being 2,94,414 sq. km., the total road length, to be available in U. P. by 1981 as per Bombay Plan at the rate of 32 kms per 100 sq. km., should be about 94,200 kms. The length of metalled roads in U. P. in 1947 was 15,113 kms (including metalled roads of local bodies and other departments) which increased to 58,406 kms by the end of March, 1980. With the completion of sanctioned projects, this would become 63,540 kms. Still there will be a shortage of about 31,000 kms. of road as compared to the target fixed by the Bombay Plan. The road density of 19.83 kms. anticipated on April 1, 1980 would also be far short of the all-India average of 22 kms. per 100 sq. km. of area proposed in the Draft Fifth Five-Year Plan (1978-83).

6. The backwardness of this State in the matter of road net work is also established when compared with the progress of other States. A comparative assessment at the end of 1979 revealed that in U. P., road length per 100 sq. km. and per lakh of population was much less than

in other States, as indicated in the following table :

*Road length available in kms. in different States*

Serial no.	State	Length of roads in 1979	
		per 100 sq. Km.	Per lakh population
1	2	3	4
1	Kerala .. ..	53	87
2	Tamil Nadu .. ..	64	189
3	Punjab .. ..	66	223
4	Haryana .. ..	40	155
5	Karnataka .. ..	32	191
6	Maharashtra.. ..	20	111
7	Uttar Pradesh .. ..	19	56
A. India .. ..		19	102

#### 7. Criteria for selection of new roads—

Decisions on selection of roads on an *ad hoc* basis lead to poor results from investment in the shape of acceleration of the pace of development. Since we have to live with constraint of resources, it is of paramount importance that investment Plan for roads and bridges should be drawn up very judiciously. Therefore, it has been decided as a measure of policy that choice of road and bridge projects should be made keeping in view the guiding principles indicated hereunder :

(a) removal, of regional disparity ;

(b) determination of inter-district priority on the basis of road-kilometerage per lakh of population in the hills and per hundred square kilometers in the plains;

(c) the linkage of communication facility with the implementation of an identified and sanctioned scheme for the development of agriculture, dairying, service/growth centres or industrial development ;

(d) the area of industrial and mineral development, and areas where irrigation, power, fertilizer or sugar plants, etc., are being installed ;

(e) determining alignments of roads by adopting the alternative which maximises the benefits in terms of villages connected and population served per unit of cost.

8. It has also been realised that successful implementation of road programme would be possible if :—

(a) master plan for road network of each region and district is prepared on the basis of acceptable criteria of accessibility, keeping in view the resource endowment, topography and other characteristics of the district. In these master plans, alignment of roads would have to be planned so as to optimise social benefits ;

(b) scientific techniques for the formulation and appraisal of road and bridge projects are adopted specially with the idea of reducing costs and preventing overruns in time schedules ;

(c) assistance of computer technology should be pressed into service to assist the decision makers in planning the rural road network ;

(d) execution of the road projects is effectively monitored to cut down delays and keep costs under control ;

(e) standard working norms for man, material and equipments are established and also designs and project estimates are standardised.

9. It is a matter of gratification that State Public Works Department has got master plans prepared of two districts viz., Bulandshahr and Gorakhpur by sepcialists and consultants, and it is hoped that preparation of master plans of other districts will be taken in hand gradually. The National Transport Policy Committee has also recommended with greater emphasis, the preparation of districtwise master plans for rural roads must be urgently undertaken in all States.

10. *Spillover works for 1980—85*—The position of spill-over works of pre-fifth and fifth plan and of the works sanctioned in\* 1978-79 and 1979-80, as on Ist April, 1980



clearly indicates that the balance cost of incomplete sanctioned works which has spilled over to the 1980-85 Plan is estimated to be Rs.239.20 crores which includes completion of 6639 kms. of new roads, reconstruction of 3576 kms. of roads and construction of 200 bridges.

11. *Requirement of reconstruction, strengthening, modernisation and widening of roads*—On the basis of the information collected by the Railway administration regarding the volume of traffic, in 1950-51 roads shared 24 per cent passenger traffic and 12 per cent of goods traffic, while in 1973-74, the figures rose to 45 per cent and 30 per cent respectively, indicating a rate of growth of over 1 per cent per year for both types of traffic.

12. Apart from increase in the volume of traffic, there has also been a steady rise in the axle loads of vehicles. It is anticipated to rise further with the use of truck-trailers and semi-trailer combinations on the roads. The existing road pavement is generally inadequate to bear even 10 tonnes of single axle load. The situation, however, is further aggravated by over-loading, with the result that the life of the road pavement is considerably reduced. The heavier load causes two to three times more damage to road pavement than by a standard 8-tonnes able load vehicle for which roads are designed. In view of this, the draft Sixth Plan envisages an estimated requirement of Rs.136.00 crores for the modernisation, strengthening and widening of existing roads to cope with the movement of heavy vehicular traffic.

13. For the purpose of balance and co-ordinated development of the road network, roads are divided in three groups viz. :

- (1) Primary road system consisting of National Highways.
- (2) Secondary road system consisting of State Highways and MDRs.
- (3) Tertiary road system, namely rural roads consisting of ODR and village roads.

14. *National highways*—The Central Government is directly responsible for development and maintenance of national highways under the National Highways Act, 1956. But the actual work is executed by the State Governments on agency basis. In 1947, the total length of national highways in India was 21,440 kms. which has now increased to 28,970 kms. indicating a rise of about 33 per cent. In Uttar Pradesh, the road length of national highways was 2431 kms. in the year 1947 which has increased to 2472 kms. now, indicating a rise of only 1.6 per cent. This clearly indicates that U. P. has been given a very low priority from the Centre in respect of allocation of national highways.

15. The declared kilometrage of national highways in this State is 2472 kms. at present as against the target of 6789 kms. as per Bombay Plan, to be achieved by the end of 1981. Thus, there is a shortfall of 4317 kms. for which about 14\* State highways have been proposed for declaration as National Highways. The National Transport Policy Committee, in its report had also recommended some new additions\*\* in the national highways,

16. *State highways*—The declared kilometrage of State highways is 9153 kms. while as per Bombay Plan, this should be 15,587 kms. Thus there is a shortage of 6434 kms. The development of State highways has lagged behind both in-route length and load carrying capacity. According to the prescribed norms, national and State highways (the main arterial routes of the road system) have to be open for all-weather use, with modern surfacing. Major district roads too should be suitable for all-weather use. The present policy of provision of carriage-way width as well as pavement crust is based on traffic forecast for five years following completion of road works. The National Transport Policy Committee, in its report on 'Rural Development' has suggested that since the normal life of State highways and major district roads is more than 25 years, it would be more appropriate if traffic requirements for 10 to 15 years are kept in view. This would, in the long run,

\*Annexure II

\*\*Annexure III

lead to reduction in the cost of road-construction and maintenance. They have also suggested for a double laning of these roads for coping with the intensity of traffic. The extract of the Committee's recommendations is reproduced below :

"We have noticed that at present the bulk of the State highways and major district roads has a single lane carriage-way width. We would suggest that appropriate plan for double laning of these roads should be formulated in advance in the context of traffic requirements for a longer time horizon, say 10 years". In view of the financial constraints, it is proposed to implement this recommendation in a phased manner in the Sixth Five-Year Plan.

17. *Minimum Needs Programme (M. N. P.)*—Rural roads, comprising classified

*Financial requirements of the construction of rural roads (MNP)*

Village with population	Total nos.	Connected upto March 80	To be connected	Target 1980-85	Length required to be constructed (Kms.)	Estimated cost (Rs. in crores)
1	2	3	4	5	6	7
Above 1500	.. 10,899	5,615	5,284	5,284	13,920	242.32
1000—1500	.. 11,396	2,868	8,528	4,264 (50%)	9,680	167.68
Below 1000	90,266	..	..	..	..	..
Total	.. 1,12,561	8,483	13,812	9,548	23,600	410.00

18. Keeping in view the magnitude of the task of providing an all-weather road communication to villages, the NTPC constituted a Working Group on Rural Roads to study it in depth. The Working Group has estimated that for more than 4 lakh villages which still remain to be connected with an all-weather road, an outlay of Rs.11,000 crores (at 1978 prices) will be required. The programme could be phased over a 20 year period, thus requiring an annual provision of Rs.550 crores. This amount too can not be easy to find.

19. *Low-cost alternative*—Keeping in view the colossal requirement of funds, the

village roads and some of the other district roads, serve as feeders linking villages with each other as well as with the nearest district roads, State or national highways, railway station and market centres. Development of rural roads received attention of the Planners during the Fifth Plan period as a part of the Minimum Needs Programmes. In the Five-Year Plan the Minimum Needs Programmes. In (1978—83), rural roads were attributed a high priority under the Minimum Needs Programme with the object of linking all the villages having a population of 1500 and above and 50 per cent villages having a population between 1000 and 1500. According to detailed calculation of the financial requirements derived from the data available with Public Works Department of U.P., the following outlays are required as indicate in the table below :

NTPC have thought of low-cost alternative and have recommended the following approach for rural roads programme :

(a) Integration of rural road programme with Integrated Rural Development Programme (IRDP).

(b) Tapping supplementary source of finance in addition to the State Plan resources.

(c) Network approach and provision of drainages, culverts, and improvement of low-grade sections of *kuchcha* roads aimed at providing all weather communication to smaller villages rather than linking them with pucca roads

20. *Construction of missing links*—The missing links are to be constructed to make the roads possible from one end to the other. The total length of missing links would be about 850 kms. in plains and 150 kms. in hills. These will have to be constructed to derive full benefit of the existing road system. The total cost of construction of the missing links is estimated to be Rs.28.82 crores.

21. *Construction of missing bridges*—There are several P. W. D. roads which are not through for traffic because of the missing bridges on the rivers and streams cutting across the existing network. The number of such bridges is estimated to be 202 in plains and 88 in hills and their cost is estimated to be Rs.163.00 crores.

22. *Weak and narrow bridges*—With the increase in traffic and load carrying capacity of vehicles, it has become inevitable to reconstruct and improve the weak and narrow bridges to avoid accidents and congestion. There are 101 such bridges in plains and 19 in Hills whose cost of improvement may be about Rs.24.00 crores.

23. *Construction of bye-passes*—There are number of major and trunk roads which pass through congested cities or towns where construction of bye-passes is absolutely necessary. It has been estimated that a sum of about Rs.30.00 crores would be required for construction of 1040 kms. of roads for bye-passes.

24. *Construction of roads for development of backward areas*—One of the important objectives of the Road Plan is to remove inter-regional and inter-district imbalances. There are areas which are still in a backward state and deserve preferential treatment. The fact that the tribal population of the State has remained isolated has to be recognised and measures have to be taken for ending their state of isolation. It is estimated that about 3500 kms. of new roads will be required in these areas the cost of which is estimated to be about Rs.71.50 crores.

25. *Construction of roads in Scheduled Caste areas*—For providing communication facilities in the areas predominantly

inhabited by the Scheduled Castes, it is essential to link these areas by construction of new roads. An amount of Rs.15.97 crores has been estimated for constructing 850 kms. of roads.

26. *Construction of roads for Other Departments*—There are various departments such as Irrigation, Forest, Power, Sugarcane, Mandi Parishad, Rural Development etc., which construct roads for providing communication linkages with their projects. It is essential that there must be proper coordination amongst the various agencies at the State and district level to ensure that new roads and bridges are taken up as per approved network for the district. The requirement of funds on this account is estimated at Rs. 59.00 crores.

27. *Construction of pontoon bridges*—On account of paucity of funds, it is not possible to provide permanent bridges on all the rivers and streams. Therefore, as a temporary measure for providing traffic facility to cross the rivers, construction of pontoon or pile bridges is very essential. A sum of Rs.20.00 crores has been estimated for the purpose.

28. *Centrally sponsored programmes*—There are two schemes under the centrally sponsored programme (1) roads of economic importance and (2) inland water transport, which are financed on a sharing basis of 50 : 50 between the Centre and the State. The roads of inter-State importance have been classified as 100 per cent centrally sponsored programme. The works costing Rs.7.00 crores have been included for roads of economic importance and only the State share of Rs.3.50 crores has been reflected in the State Plan. Similarly for 'Inland Water Transport', an outlay of Rs.2.00 crores representing the State share has been proposed in the Plan. It is intended that with the help of Irrigation Department, navigation can be taken up in big canals having a discharge of over 3,000 cusecs. Navigation can be take up in big rivers also.

29. For the implementation of the above road construction programme, infrastructure of tools and plants, research and development, survey and investigation,

work-shops, godowns and inspection houses are needed. The requirements for all these have been worked out as follows :

(Rupees in crores)	
(1) Purchase of T and P ..	17.00
(2) Research and development ..	8.50
(3) Survey and investigation ..	4.50
(4) Construction of stores, godowns, workshops and inspection houses.	8.50
Total ..	38.50

30. In the light of above estimates, the total requirement for spill-over works, rural roads, including roads under MNP and other essential works is estimated to be of the order of Rs.1209.13 crores.\*

1. *Provisions during Sixth Plan*—Against very large requirements for the road programme, it has been possible to provide an outlay of only 948.76 crores\*\* in the Sixth Plan, due to constraint of resources. Out of this outlay, a sum of Rs.273.53 crores is allocated for hill areas.

A brief description of a few important categories of work included in the road programme of Rs.948.76 crores is given below under the two broad categories (i) MNP and (ii) other MNP.

(A) UNDER MINIMUM NEEDS PROGRAMME (MNP)

(i) *Spill over work*—The incomplete works of Fifth and Pre-fifth Plan periods which have spilled over into the Sixth Plan have to be completed during the current Plan. It is only by completing these works that the rural roads proposed to current target village of MNP will be effective. Hence, these feeder roads have been included in the MNP. The estimated cost of these spillover works is Rs.185.67 crores. It is expected that 6376 kms. of roads will be constructed with this outlay and about 1029 villages with a population of 1500 and above will be connected by pucca roads.

(ii) *Missing links*—The cost of these works is Rs.16.80 crores in plains and Rs.5.02 crores in hills. Total works

costing Rs.21.82 crores have been included in MNP.

(iii) *Missing Bridges*—An outlay of Rs.112.25 crores is provided to construct missing bridges which are needed to link villages with roads.

(iv) *Rural roads*—Though the total cost of construction of new village link-roads to connect all villages of 1500 and above population and 50 per cent of villages of 1000 to 1500 population is Rs.410.00 crores, due to constraint of resources an outlay of Rs.148.75 crores could be provided for the plains. As a result only 3500 villages will be connected during 1980–85. An amount of Rs.27.50 crores has been provided for hills to connect cluster of villages numbering 118. Besides 586 villages of population between 100–1500 will be automatically connected with the metalled roads during the course of connecting village of 1500 and above population.

(B) PROPOSALS UNDER NORMAL PROGRAMME (OUTSIDE MNP)

(i) *Spill over works*—The remaining spill over works of Rs.53.53 crores has been taken under normal programme outside the RMNP to complete all the spill over works during the 1980–85 plan period.

(ii) *Strengthening, modernisation and widening of roads*—As indicated earlier, the programme of strengthening, modernisation and widening of existing road-network, has been given adequate priority in the Sixth Plan. An outlay of Rs.172.95 crores has been provided in this Plan.

(iii) *Pontoon and temporary bridges, bye-passes and roads of Other Departments*—In order to make roads passable all the year round and to improve the weak and narrow bridges, necessary provision has been made for these items of work in the Plan.

Besides the above, provision has been for various items of infra-structure including T and P, stores, godowns and inspection houses etc.

An outlay of Rs.618.51 crores has been proposed for roads under the category of

\*Annexure IV.

\*\*Annexure V

MNP\* and Rs.330.25 crores for roads under the category other than MNP.\*\*

## (2) ROAD TRANSPORT

32. In the economic development road transport plays a very important role. In this State passenger transport services are managed partly by nationalised or public transport through the U. P. State Road-Transport Corporation and partly by individual operators in the private sector, while goods transport services are being operated mostly in the private sector.

### (i) U.P.S.R.T.C.

33. The operation of the State Road Transport Passenger bus services, i.e., nationalised passenger bus services was started in Uttar Pradesh in May, 1947, to promote rail-road co-ordination and balanced development of various modes of transportation to provide and reinforce infrastructural facilities so as to achieve an all round development of the State. The services grew popular and had to be extended on all important routes of State, mostly running parallel to railways, even without adequate workshop and other facilities. This scheme was included in the First Five-Year Plan (1951-56) of the

State and remained as a Plan item up to 1957-58, the second year of the Second Five-Year Plan of the State whereafter the scheme was carried on as a non-Plan item the next eleven years.

34. The scheme of nationalised road transport services was again included in the State's Fourth Five-Year Plan (1969-74). Due to financial limitation an outlay of only Rs.725 lakhs was allotted to the Plan. The Plan envisaged expansion of passenger bus services on new routes covering an additional road length of 1000 kms. and the augmentation of buses by an additional fleet of 773 buses. The financial and the physical targets for the purchase of buses were achieved without any shortfall, and expansion of nationalised passenger bus services was carried out to cover 1242 kms. of additional road length in the State against the target of 1,000 road kms.

35. The Fifth Five-Year Plan (1974-79) of the State Road Transport Services was of the order of Rs.30.15 crores. It was proposed to be financed by the internal resources of the organisation. The achievements are given below :

### *Financial and physical progress*

Particulars	1974-75	1975-76	1976-77	1977-78	1978-79	Total	1979-80
	1	2	3	4	5	7	8
1. Outlay (Rs in lakhs) ..	376	525	676	760	957	3287	732
2. Expenditure (Rs. in lakhs)	259	525	676	760	950	3170	732
3. Buses purchased for							
(a) replacement of old buses.	278	420	778	200	734	2,410	502
(b) augmentation and expansion.	..	290	83	..	..	373	..
4. Total ..	278	710	861	200	734	2,783	502

Actual expenditure on buses purchased from 1975-76 onwards exceeds the expenditure shown against item 2. The additional funds were mobilized from borrowings etc.

36. The Fifth Five-Year Plan outlay too was not adequate to meet the requirements of the replacement of worn out buses and to promote expansion over sizeable road length available in the State. The UPSRTC is now operating on 21,381 kms. of 'surfaced' road in U. P. which comes to 24.56 per cent of the total road length in the State. Compared to this Maharashtra and Gujarat States have already achieved the objective of complete nationalisation. The progress of the Fifth Plan was

adversely affected by (a) financial limitations, (b) legal difficulties caused by individual road transport, operators resisting expansion of nationalised road transport services on new routes, and (c) by the unauthorised operation of private sector stage carriages, mini buses, taxis and three wheeler tempos on nationalised routes growing in magnitude despite checking, affecting the magnitude of earnings and the generation of internal resources.

\*Annexure VI

\*\*Annexure VII

37. In this perspective, it has become all the more imperative to formulate the Sixth Plan in a way which may accelerate the growth of nationalised transport services and lead to realisation of the objective of complete nationalisation of passenger services within a stipulated period. The

idea is also gaining ground that accelerated development of the State road transportation system would help in discouraging the malpractices like illegal operation.

The year-wise break-up of UPSRTC's progress including qualitative indices is given below :

*Year wise progress of U. P. S.R.T.C.*

Serial no.	Item	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80
1	2	3	4	5	6	7	8
1	Number of routes under operation	1,256	1,310	1,417	1,455	1,652	1,782
2	Route kms ..	1,62,826	1,66,462	1,83,240	1,84,263	2,17,806	2,63,178
3	Average distance per route (in kms)	130	127	129	127	132	148
4	Average No. of buses held ..	4,840	4,919	5,406	5,631	5,524	5,713
5	Percentage of onroad buses ..	75	75	80	77	77	79
6	Vehicle utilisation (kms.per bus per day).	215	216	217	220	229	217
7	Total effective kms. operated (in crores)	26.27	27.69	30.88	32.00	34.45	39.62
8	Number of passengers carried (in crores).	30.55	31.99	35.05	35.76	39.48	45.10
9	Revenue earned (Rs. in crores) ..	41.29	52.05	57.55	61.94	70.33	82.66
10	Income per km. (in paisa) ..	157	188	186	194	204	209
11	Net profit earned (Rs. in crores)	(—)2.52	0.80	1.15	0.22	1.13	1.00
12	Fuel average (kms per litre of HSD consumption).	4.5	4.5	4.5	4.5	4.5	4.5
13	Engine oil average in (Topping up kms per litre).	180	216	226	276	266	283
14	Persons employed ..	34,335	34,478	38,432	39,335	41,712	42,263
15	Bus staff ratio ..	10.07	8.52	8.13	9.30	9.31	9.33

38. *Sixth Plan (1980—85)*—The long-term objective of the public sector operation of road transport passenger services is complete nationalisation of passenger bus services in the State. Other States are moving towards their ultimate objective at a pace faster than Uttar Pradesh. The State of Uttar Pradesh has to cover a leeway to achieve the goal of complete nationalisation of the services.

39. The Sixth Plan of UPSRTC is proposed to be a consolidation-cum-expansion

oriented Plan. It is proposed to cater to the increasing requirements of traffic on existing routes and to extend the operation of nationalised road transport services on new routes covering additional 1,800 kms. of metalled roads in the State. It is proposed to extend the services in the backward areas of Bundelkhand, Hill districts and Eastern districts to provide an improved transport infrastructure of the developmental works carried on to eradicate poverty. It is also

proposed to reinforce the automobile workshop net-work of UPSRTC and to undertake extension of existing bus stations and construction of new ones and undertake other civil works designed to add to amenities to passengers, staff welfare and management facilities. The urban transportation system of UPSRTC in KAVAL and other towns being run as a socially obligatory services has fallen short of the increasing requirements of urban dwellers and the colonies and habitats are emerging at a rapid space in peripheral areas adjacent to the towns. These services are by and large unremunerative and their augmentation needs heavy capital expenditure. Substantial resources are proposed to be had from the Financial Institutions.

40. The traffic on the existing routes of UPSRTC is growing annually @ 10 per annum. The UPSRTC would\* thus have to cater to the needs of 22.50 crores of passengers over and above the magnitude of the present day traffic. The UPSRTC would need an additional fleet of 2,285 buses at an annual passengers carried rate of 98,468 per bus. It is proposed to increase the carriage rate of existing buses by increasing frequency and occupation ratio annually adding a fleet of 500 buses by reducing number of existing off road buses. This would reduce the need of additional buses to 640. To this would be added the requirements of 410 buses to extend operation on new routes to cover an additional buses road length of 1,800 kms. Thus UPSRTC would need  $640 + 410 = 1,050$  additional buses for augmentation and expansion. Besides the Corporation would need 400 buses to replace the old and worn out vehicles in the fleet during Sixth Plan period. The total requirement of buses would be of the order of 5,050 buses during the Plan period.

41. Further to provide adequate engineering support to the fleet of UPSRTC the existing workshop infrastructure would have to be reorganised to ensure appropriate capacity to undertake repairs and scheduled maintenance of vehicles attached to each unit. It has been estimated that the Corporation would have to provide 50 new automobile units of depot level to be set up at the rate of 10 per year.

Besides, UPSRTC proposes to provide A—Class stations at district headquarters, B—Class at important urban cities, C—Class stations at tahsil headquarters and other important places and to provide A-Class pick up sheds at places where 500 and over passengers are available daily for UPSRTC busses, B—Class where 250—499 passengers are available and C—Class pick up sheds where less than 250 passengers are available. It is also proposed to undertake construction of residential accommodation for the corporation personnel.

42. The capital expenditure involved in the Plan would be of the order of Rs. 209.50 crores which it is proposed to be financed by capital contribution from the Government of India, loans from IDBI issue of debentures, loans from institutional finance, fixed deposits from public and the employees and soft loans from Government of India for strengthening the urban transport system and the internal resources of the Corporation. The Plan is anticipated to generate regular employment for 8,400 persons during the Sixth Plan period. It is proposed to increase the revenue receipts by increasing vehicular utilisation, vehicle utilisation and occupation ratio by services to the needs of traffic requirements. The UPSRTC Plan, besides, yielding a reasonable net profit after meeting all charges including depreciation charges, would create substantial employment opportunities in rural sector and contribute otherwise in accelerating the development of rural areas. During the Sixth Plan period it is proposed to accelerate the process of scientific management of stores and inventory control, introduce management by objectives, performance — budgeting, management information system at all levels aided by mechanisation of data collection and processing computer technology, modern methodologies in vogue in traffic management maintenance and financial management. The UPSRTC proposes to add to the skill of its personnel by sending officers and men for training in various programmes organised by specialised institutions in the country having consultancy benefits from experts. The Corporation would also set up a training institute at the State headquarters to impart training

to in-service personnel of UPSRTC deployed at lower management levels.

43. The size of UPSRTC plan of capital expenditure under the State's Sixth Five-Year Plan would be of the order of Rs. 7,800 lakhs. A Plan of this order to be financed by internal resources (Depreciation Reserve Funds) would obviously not be adequate to meet the requirements of the UPSRTC as already indicated. These pressing requirements are hard to be postponed. They have to be met by funds to be mobilized from other sources.

However, within the 1980-85 Plan outlay for UPSRTC, it is proposed to provide funds for the purchase of 3,499 buses for the replacement of outdated and worn out buses in the existing fleet of vehicles. The remaining items of development including purchase of vehicles, as such would have to be financed outside the State Plan like previous Plans.

44. *Financial and physical targets*—The year-wise break-up of the Plan outlay financial and physical targets are given below :

*Financial Outlays and Physical Targets*

Serial no.	Item	Total	1980-81	1981-82	1982-83	1983-84	1984-85
1	2	3	4	5	6	7	8
1	Financial (Rs. in lakhs) :						
	(a) Cost of buses for replacement	7,698	1,098	1,425	1,540	1,875	1,760
	(b) Civil works, tools and plants	102	102	..	..	..	..
	Total ..	7,800	1,200	1,425	1,540	1,875	1,760
2	Physical Targets:						
	No. of buses for replacement ..	3,499	499	648	700	852	800
3	Road Kms. proposed to be taken over.*	1,800	200	400	400	400	400

\*To be financed outside State Plan.

45. *Nationalisation of routes*—During the Sixth Plan period, it is proposed to extend nationalised road transport services to 1,800 kilometres of surfaced roads. It is proposed to extend the nationalised services in the rural sector and the backward areas of Bundelkhand and hill districts, and to the eastern districts of the State to reinforce the basic infrastructural facilities to accelerate developmental activities. There are difficulties in assigning priorities in taking over of routes and circumstances and vicissitudes often vitiate the priorities. Despite this, expansion is proposed to be carried on as per priorities enumerated below :

(1) Route-sections of inter-State routes coming under inter-statal reciprocal agreements.

(2) Routes notified under Chapter IV-A of the Indian Motor Vehicles Act, 1939.

(3) Extension beyond existing terminal due to constructions or modernisations of roads or construction of bridges.

(4) Routes contiguous to the existing routes or covering the missing gaps.

(5) Routes connecting places of tourist importance and pilgrim centres, routes connecting centres of industrial complexes, and

(6) Routes lying in the backward areas of Bundelkhand, hills and eastern districts.



The above order of priorities is subject to the availability of traffic potential adequate to ensure an economic operation of UPSRTC services. The planned expansion of UPSRTC services is anticipated to accelerate human mobility in the rural areas.

46. *Employment potential*—Under the State Plan of UPSRTC, the Corporation would be deploying an additional fleet of 1,050 buses only. The remaining 4,000 buses would be replacing the old and worn out fleet. The additional employment during the Plan period would thus be generated by the additional fleet of 1,050 buses only and the Corporation would be

creating additional opportunities of regular employment for 8,400 persons during the Sixth Plan period. Out of this 525 persons would be employed in administrative branch, 5,250 in operational branch and 2,625 in the engineering branch of the Corporation. Out of the total employment opportunities created during the Sixth Plan, 2,100 persons would find employment under unskilled category of workers, and 1,575 persons under skilled technical category, and 4,725 persons under skilled-non-technical category of workers. The year-wise break-up of employment of persons in the above mentioned branches and categories of workers would be as below :

*Yearwise break-up of employment opportunities*

Year	Total no. of persons to be employed	A—No. of persons to be employed in			B—No. of persons to be employed under categories				
		Adminis- tration branch	Opera- tional branch	Engin- eering branch	Un ski- lled	Skilled			
						Technical	Non- technical		
1	2	3	4	5	6	7	8		
1980-81	..	..	..	..	..	..	..	..	
1981-82	..	..	800	50	500	250	200	150	450
1982-83	..	..	800	50	500	250	200	150	450
1983-84	..	..	3,200	200	2,000	1,000	800	600	1,800
1984-85	..	..	3,600	225	2,250	1,125	900	675	2,025
Total	..	..	8,400	525	5,250	2,625	2,100	1,575	4,725

47. *Managerial efficiency*—The UPSRTC would continue to introduce institutional changes to improve the level of corporate functioning and would carry on the streamlining of stores organisation and inventory control, improvements of MIS duly supported by Computer Assistance and the introduction of modern techniques and methodologies of management indicated above. The additional cost involved in the revenue expenditure would be more than off set by the increasing magnitude of revenue receipts.

48. An outlay of Rs.1,200 lakhs was allocated for the annual Plan 1980-81, out of which a sum of Rs.1,098 lakhs is anticipated to be spent on the purchase of 499 buses and an amount of Rs.102 lakhs is proposed to be spent on tools and plants for automobile workshop.

49. Out of the proposed total capital investment of Rs.20,955 lakhs in the Sixth Five Year Plan, it is proposed to incur an

expenditure of Rs.3,545 lakhs during 1980-81. It is proposed to incur capital expenditure of Rs.1,980 lakhs over the purchase of 900 buses, Rs.600 lakhs on renovation of old buses, Rs.770 lakhs on civil works and Rs.195 lakhs on purchase of tools and plants, etc. Besides, it is proposed to extend the operation of transport services to new routes covering additional 200 kms. of metalled road during the year.

50. *Review of the annual Plan for 1980-81*—The total Plan of UPSRTC envisages purchase of 900 buses and renovation of 1,200 buses to increase the span of vehicle life thereby reducing the number of vehicles required to be replaced. These 900 buses would be needed for the replacement of old and worn out buses. It is also proposed to extend the UPSRTC services on new routes covering 200 additional kilometres of road in the State by buses to be had from Commercial Banks and other sources to strengthen the

fleet to meet the growing requirements of traffic by better optimal utilisation of the mixed fleet of old and new vehicles. The Plan further envisages acquisition of land and construction of buildings for workshops, bus stations, etc. and provision of tools and plants and necessary furnitures and fixtures. The total capital expenditure anticipated to carrying out the Plan would be of the order of Rs. 3,545 lakhs. These resources are proposed to be mobilized from capital contribution from State Government (Rs. 500 lakhs), Internal resources of UPSRTC (Rs. 1,200 lakhs) capital contribution from Central Government (250 lakhs), loans from IDBI (Rs. 100 lakhs), issue of debentures, loans from Institutional Finance, fixed deposits from public and the employees (Rs. 1,495 lakhs).

Under the UPSRTC total Plan of the order of Rs. 20,955 lakhs of capital expenditure included in the State's Sixth Five Year Plan, it is proposed to incur an expenditure of Rs. 3,545 lakhs during the year 1980-81. Out of this it is proposed to incur capital expenditure of Rs. 1,980 lakhs over the purchase of 900 buses for replacement of old and worn out buses; Rs. 600 lakhs on renovation of old buses; Rs. 770 lakhs on civil works to strengthen the automobile workshop system of the Corporation and Rs. 195 lakhs on purchase of tools, plants, furniture and fixtures. It is proposed to extend the operation of nationalised passenger transport services to new routes covering additional 200 kms. of metalled road during the year 1980-81. The routes are proposed to be taken over, by and large, by the order of priority

specified in paragraphs 45. During the year 1980-81 there would, however, be no additional generation of employment opportunities as buses proposed to be purchased would be deployed for replacement of worn out vehicles in the fleet of buses.

51. The annual Plan for UPSRTC included in the State's annual Plan for 1980-81 envisages total capital expenditure of the order of Rs. 1,200 lakhs. Out of this a sum of Rs. 1,098 lakhs is proposed to be spent on the purchase of 499 buses for the replacement of old and worn out buses in the fleet of UPSRTC. A sum of Rs. 102 lakhs is proposed to spent on provision of tools and plants in the automobile workshop of the Corporation since no addition to the existing fleet would be effected by the annual Plan, there would, however, be no addition to employment potential. The manpower available is proposed to be better deployed to yield results.

(ii) ROAD TRANSPORT (NON-ROADWAYS)

52. Adequate provision of infra-structural facilities is a pre-requisite for economic development. With the spurt in development activities, movement of men and material and provisions of outlet for rural areas had led to increase the road length and road transport. With the increase in road transport there has been tremendous increase in revenue also, but the increase in strength of the transport commissioner organisation engaged in revenue collection has been only marginal. The increase in on-road vehicles, revenue and staff strength with their percentage increase from 1968-69 have been given below.

*Number of vehicles, revenue and staff*

Year	Vehicles on road		Revenue earned		Staff strength	
	Total no. (in lakhs)	Percentage increase	Total (Rs. in lakh)	Percentage increase	Employees (no.)	Percentage increase
1	2	3	4	5	6	7
1968-69	1.00	..	12.89	..	1,211	..
1974-75	2.25	125	3,173	146	1,588	31
1975-76	2.61	161	4,370	226	1,588	31
1976-77	2.70	171	4,188	225	1,711	41
1977-78	3.17	317	4,507	260	NA	..
1978-79	3.69	369	5,104	296	NA	..
1979-80	4.26	426	6,135	376	2,135	84

53. The rapid strides in number of on-road vehicles and revenue is also on account of the fact that under the National Permit System and other zonal schemes, the inter-State movement of transport vehicles has also increased. The road transport in private sector is being controlled by the Transport Commissioner's Organisation by enforcing the various motor transport laws. It is mainly concerned with the enforcement of motor vehicle laws and realization of (a) motor vehicle tax, (b) road tax, (c) passenger and goods tax. Antiquated systems, traditional management skills, absence of modern equipment and technology and inadequacy of staff has created difficulties in proper functioning of this organisation.

54. The programme of strengthening the organisation of State Transport Department was included in Fifth Five Year Plan (1974-79) and an outlay of Rs. 58.31 lakhs was provided during the period of 1974-79 against which the actual expenditure was

Rs. 48.11 lakhs. With this expenditure, the programmes to improve the efficiency of transport department were implemented. In 1979-80 against an outlay of Rs.18.00 lakhs, the expenditure was Rs.12.63 lakhs only.

55. Keeping in view the importance of Transport Department, it is proposed that the organization must be strengthened to the extent it may effectively enforce motor vehicle laws strictly and prevent leakage of revenues. It is also proposed to include the task of preparing a master plan for scientific monitoring of motor vehicles registration approval of revenues, keeping track of offences, prosecutions, convictions etc., eventually, resulting in computerization and use of other scientific aids under the programme of buttressing the enforcement machinery. For this, an outlay of Rs. 135.00 lakhs has been proposed for Draft Sixth Plan 1980-85. The scheme-wise proposal with their outlays for 1980-85 plan and for the annual plan 1981-82 are given below :

*Outlay for 1980-85 and Annual Plan 1980-81 and 1981-82*

(In lakh rupees)

Serial no.	Name of scheme	Outlay proposed for 1980-85	Approved Outlay for 1980-81	Outlay Proposed for 1981-82
1	2	3	4	5
A—CONTINUING SCHEMES				
(1)	Creation of 4 sub-regional offices .. .. .	34.01	5.91	6.45
(2)	Strengthening of enforcement machinery (creation of 6 enforcement squads)	40.83	7.49	9.86
(3)	Creation of accounts branch .. .. .	6.55	1.17	1.25
(4)	Creation of 6 posts of A.P.P.s .. .. .	4.01	0.70	0.76
(5)	Expansion of Transport Commissioners office building .. .. .	4.73	4.73	..
B—NEW SCHEMES				
(1)	Creation of 3 office of D. T. C. ( Zone) .. .. .	19.17	..	6.68
(2)	Creation of 13 posts of Assistant Accounts officer in Regional offices .. .. .	1.60	..	..
(3)	Purchase of land/construction of building for one regional office .. .. .	23.00	..	..
(4)	Creation of research organization and method cell at headquarters .. .. .	1.10	..	..
Total .. .. .		135.00	20.00	25.00

A brief description of the proposed schemes is as follows:-

56. *Strengthening of enforcement machinery*—The Department has 53 mobile squads already, whose main function is the implementation of Motor Vehicles Laws. These squads have to keep their eyes on the vehicles, the present number of which exceeds 4.25 lakhs; and also to ensure that the taxes payable by them to the State are duly paid. During 1980-85 with a proposed outlay of Rs.40.83 lakhs, creation of additional 4 enforcement squads has been proposed. It is proposed to create 2 enforcement squads during 1980-81 and the remaining two in 1981-82 each with an outlay of Rs.7.49 lakhs and Rs.9.86 lakhs respectively.

57. *Creation of sub-regional offices*—At present, there are 13 regional and 11 sub-regional offices throughout the State, where motor owners can deposit their taxes or get driving licences issued. Keeping in view the inadequacy of these offices, it is proposed to create 4 more sub-regional offices, two in 1980-81 and the other two in 1981-82 with an outlay of Rs.5.91 lakhs and Rs.6.45 lakhs respectively.

58. *Creation of 3 posts of Deputy Transport Commissioner (zone)*—Four such offices were established during 1976-77. These offices have proved their utility by showing an unexpected increase in the department's revenue, and number of challans. For this programme an outlay of Rs.19.17 lakhs has been proposed for 1980-85 Plan. It is proposed to establish 3 offices of D.T.C. (Zone) during 1981-82 with an outlay of Rs.6.68 lakhs.

59. *Creation of 13 posts of Assistant Accounts officers in Regional offices*—With the increase in the department's revenue and with the introduction of several new taxes, the accounts staff has not increased proportionately. To cope with the increased load in account work, it is proposed to create 13 posts of Assistant Accounts Officers, one each in every region during 1980-85, with an outlay of Rs.1.60 lakhs.

60. *Purchase of land and construction of building for one regional office*—Out of 13 regional and 11 sub-regional offices functioning at present, the department has only 2 buildings of its own. The condition of the rest of the office buildings is most unsatisfactory and even the primary facilities such as waiting room and toilets for the incoming public do not exist. Due to paucity of funds it is proposed to purchase land and construct building for one regional office. According to this proposal land will be purchased in 1982-83 and building over it will be constructed in the phases, i.e. in the year 1983-84 and 1984-85.

61. *Creation of research organisation and method cell at headquarters*—With the tremendous increase in the number of vehicles many more thousand people have become engaged in the transport industry as motor operators, drivers and conductors, etc. The procedures of the departmental working which were laid down 30 years ago have, become obsolete. It is the need of the hour that the old procedures and the working system must be streamlined and a scientific method for the revision of various taxes and fees involved. With these objectives in view, it is proposed to create a research organization and method cell at the headquarters for which an outlay of Rs.1.10 lakhs have been proposed for 1980-85.

### (3) TOURISM

62. Uttar Pradesh is one of the biggest States of India with the projected population of 10.20 crores as on March, 1979. It abounds in places of natural scenes and beauty. Uttar Pradesh, with its cultural heritage, its historical monuments, relics, its shrines and holy places, its snow-capped mountains and the lure of Himalayas has tremendous untapped potential for promotion of tourism. Tourism in U. P. should be approached as an extremely employment-intensive industry and as a source of earning of foreign exchange. Home tourists come to visit places of religious and historical importance while tourists from foreign countries come to India to visit Agra, Varanasi, places of Buddhists' interest such as Kushinagar, Sravasti,

Kausambi and Sinkisa. The following data give details on foreign tourists :

*Number of foreign tourists visited India, U. P. and the foreign exchange earned*

Year	Tourists in lakhs		Foreign exchange earned (in crore of rupees)	
	India	U. P.	India	U. P.
	2	3	4	5
1972	3.43	1.19	57.70	20.00
1973	4.10	1.42	71.10	24.70
1974	4.23	1.47	93.20	32.30
1975	4.65	1.61	104.20	36.20
1976	5.34	1.67	225.00	70.20
1977	6.40	2.00	383.00	88.30

63. Despite the ever-increasing flow of tourists and obvious potential in economic terms, the progress towards the provision of essential infra-structure necessary for the development of commercial tourism has been slow mainly due to constraint of resources and also because of absence of long-term prospective and clearly spelt out operational strategy, definite priorities, time-schedules and linkages with development schemes.

64. The role of private sector in the development of tourism is very significant. Its contribution in the sphere of hotel industry, travel and transport and publicity is basic. The Department of Tourism can play a catalytic role in organising various programmes in collaboration with the private sector.

65. From the First Five Year Plan till the end of Fifth Five Year Plan 1977-78, a total expenditure of Rs. 538.85 lakhs was incurred and a total 1,893 beds in departmental campuses were made available to tourists. Out of 1,893 beds, 479 beds are in the plains and 1,414 are in hills. During the two annual Plans 1978-79 and 1979-80, total expenditure of Rs. 426.32 lakhs was incurred on providing 210 additional beds. The Plan-wise break-up of

expenditure is given below :

*Planwise Expenditure*

(In lakhs rupees)

Serial no.	Plan	Expenditure
1	First Plan .. ..	1.00
2	Second Plan .. ..	19.00
3	Third Plan .. ..	12.00
4	Three Annual Plans .. ..	15.17
5	Fourth Plan .. ..	50.50
6	Special Fund received from Government of India for border districts.	63.00
7	Fifth Plan (1974—78) .. ..	378.16
	Total .. ..	538.85

66. It is a fact that the achievements upto Fifth Plan and the impact of programme on tourism has not been widespread. Accommodation facilities at tourist spots have not been commensurate with the increasing number of tourists visiting these places. The infra-structure facilities also miserably fell short of the requirement. As such U. P. is not in a position to match the progress registered by other States. The backlog has to be overcome by a undertaking multipronged programmes of tourism development in the Sixth Plan.

In the context of what has been stated in the foregoing paragraphs has been proposed as follows :

67. Strategy for 1980-85 Plan :

(1) more emphasis will be laid on the development of international tourist centres to attract more and more foreign exchange. It is estimated that 17 lakhs international tourists would be visiting India by the end of 1985. It is hoped that about 5.30 lakhs of these tourists would be visiting Agra by the end of this plan ;

(2) to encourage domestic tourists for visiting places of religious and cultural importance in the State by providing cheaper accommodation facilities at these places ;

(3) to develop historical and archaeological places to attract tourists and to preserve cultural heritage of the State ;

(4) to develop cultural tourism by organising autumn festivals at various places in the hills and festival melas in the plains ;

(5) to remove regional imbalances by developing tourist places in backward areas ;

(6) to encourage Youth tourism by providing facilities at cheaper rates for trekking etc. ;

(7) to encourage private entrepreneurs to build star category hotels for benefit of high spending variety of tourists.

68. An outlay of Rs.20 crores has been proposed for the Sixth Plan which includes a sum of Rs.6.50 crores for hill areas. The completion of spill over works has been given the first priority for which an amount of Rs.4.75 crores is required. In order to accelerate the pace of development of tourist activities in the State U. P. State Tourism Development Corporation was established in 1974. The corporation chiefly looks after the commercial activities of the tourist organization. Its main objectives are :

(i) to promote, take-over, develop and establish hotels, restaurants, tra-

veller's lodge, recreational places and handicraft centre ;

(ii) to establish transport units ;

(iii) to organize substantial publicity ;

(iv) to provide conducted tours for tourists.

With the creation of U. P. State Tourism Development Corporation, the accommodation and other commercial units were handed over to this corporation. Besides running the tourist Bungalows at Varanasi, Lucknow, Hardwar, Allahabad, Agra, Sarnath, Ayodhya and Mahoba, Corporation also runs two restaurants at Kukrail and Narora. It has also provided three air-conditioned taxis at Agra specially for foreign tourists. For regular and quick reservation of tourist accommodation, taxex services at tourist office at Calcutta, Delhi and Ahmedabad have been provided. The Corporation also organises conducted tours at Lucknow and Varanasi. During the year 1978-79 the Corporation made a profit of Rs.4.70 lakhs.

69. Besides the Tourism Development Corporation, there exist two agencies viz. Kumaon and Garhwal Mandal Vikas Nigam to accelerate the pace of development of tourism in hill region of the State. The Garhwal Mandal Vikas Nigam has been preparing a project for tourist complex at Mussoorie. With the completion of this project, this place will attract a larger number of tourists in near future.

70. In the year 1978-79 an outlay of Rs.260.00 lakhs was provided against which an expenditure of Rs.279.00 lakhs was incurred. For the year 1979-80 an outlay of Rs.250.00 lakhs was provided included Rs.150.00 lakhs for hills. The expenditure against this outlay is however, Rs.146.82 lakhs. In the annual Plan 1980-81 an outlay of Rs.225.00 lakhs, which includes Rs.90.00 lakhs for hills has been allocated for the development of tourism in the State. In this programme, Rs.181.84 lakhs has been provided for tourist accommodation, Rs.12.71 lakhs for tourist centre, Rs.19.87 lakhs for publicity, Rs.6.77 lakhs for Direction and Administration and Rs.3.81 lakhs for other miscellaneous expenditures like fair and

festivals. The outlay proposed for the 1980-81 and 1981-82 has been given below :  
Sixth Plan 1980-85 and the annual plans

*Major Head wise Outlays and Expenditure*

(In lakh rupees)

Sl. no.	Item	1978-79		1979-80		1980-85 Proposed		1980-81		1981-82 Proposed	
		Outlay	Exp.	Outlay	Exp.	Outlay	Of which Hill	Outlay Approved	Anticipated Exp.	Outlay	Of which Hill
1	2	3	4	5	6	7	8	9	10	11	12
1	Direction and Administration	8.00	4.87	8.32	5.10	50.00	..	6.77	6.77	8.86	..
2	Tourist Accommodation.	219.00	241.24	207.00	107.73	1615.62	570.62	181.84	181.58	236.10	85.57
	(i) Continuing Scheme.	..	241.24	..	77.20	474.53	188.66	116.27	116.01	211.30	82.30
	(ii) New Scheme.	..	..	..	30.53	1141.09	381.96	65.57	65.57	24.80	3.27
3	Survey and Statistics.	..	..	..	..	11.37	3.37	..	..	1.62	0.40
4	Tourist Centre.	9.00	14.26	16.11	8.91	91.51	22.51	12.71	12.71	16.57	4.57
5	Information and Publicity.	15.00	13.79	14.67	16.99	152.63	27.63	19.87	19.87	24.00	9.00
6	Others Schemes										
	(i) Fair and Festivals.	..	2.74	3.90	3.59	22.89	14.89	2.65	2.65	2.86	2.46
	(ii) Training	..	..	..	..	..	25.00	..	..	..	..
	(iii) Furnishing of Tourist Bungalow	9.00	..	..	..	..	..	..	0.50	..	..
	(iv) Trekking	..	..	..	4.50	6.00	1.00	..	..	5.00	..
	(v) Miscellaneous expenditure	..	2.60	..	..	21.98	6.98	1.16	11.42	3.49	2.00
	<b>Total</b>	<b>260.00</b>	<b>279.50</b>	<b>250.00</b>	<b>146.82</b>	<b>2000.00</b>	<b>650.00</b>	<b>225.00</b>	<b>235.00</b>	<b>300.00</b>	<b>105.00</b>

71. Important programmes proposed in the Sixth Plan 1980-85 are described in the following paragraphs :

*Tourist bungalows*—Accommodation and transport are the most essential of the destination facilities that need to be provide for generating tourism. Although tourist bungalows have been provided at important places of historical and archaeological importance and places of scenic beauty, yet in view of the increasing volume

of foreign and domestic tourists, there is further need of augmenting the accommodational facilities in more places for the class of tourists. These places have been identified and there are 11 places in plains and 48 places in hills where construction of tourist bungalows, have been proposed in the Sixth Plan.

72. *Yatri niwas*—Uttar Pradesh is fortunate to have important centres of

religious pilgrimage, viz. Varanasi, Allahabad, Ayodhya, Chitrakut, Badri-Kedar Nath, Rishikesh, Harwar, Devasharif, etc. A large number of tourist visit the pilgrimage centre by the cheap and hired conveyance. To provide facilities to such visitors who are normally of middle or low income group, the proposal for Yatri Niwas has been incorporated in the Sixth Plan. In Yatri Niwas, there will be one four-bedded room, one six-bedded room and one eight-bedded room with attached bath. It will be a cheaper accommodation in comparison with the tourist bungalows.

73. *Modern reception centres*—The pace of life has become so fast that a traveller wants to see as many places of interest as he can in the minimum time possible. To cater to the needs of this variety of tourist, these modern reception centres, have been planned. The basic requirement of transport, accommodation, food and reservation for onward journey would be catered. The representative souvenirs of this centre, would be made available to him. The places identified for the modern reception centres under first priority category are as follows :

Region	Name of the place	Beds proposed
1	2	3
Plains	.. Agra	.. 40
	Hardwar	.. 40
	Varanasi	.. 40
Hills	.. Ranikhet	.. 40
	Musoorie	.. 40

74. *Youth tourism*—A new trend in tourism has been set by the young who are interested in wild life, places of scenic beauty, trekking and mountaineering. It has been observed that major proportion of international tourists visiting India was in the age group of 17–14, viz. 62.3 per cent in 1979. In order to promote youth

tourism it is essential to inculcate interest in flora and fauna in the youth. This requires greater co-ordination amongst various departments like Forest, Hill Development and Irrigation with the Department of Tourism. Specially in our National Parks, attractive programmes for Youth should be organised and well stocked libraries, good guides, lectures by experts, educational tours, visuals, etc. should be made available to them. To provide cheap but adequate accommodation construction of Youth Hostels has been proposed in Sixth Plan at the following places :

1. Varanasi .. 20 beds.
2. Agra .. 20 beds.
3. Lucknow .. 20 beds.

75. *Holiday camps*—In order to encourage the tourism among the working men it is proposed to extend the accommodation in the Holiday Home at Almora. Besides, the above programmes for extension of tourist bungalows in hills, wayside amenities, construction for the building of directorate, construction of rest houses, conference complex at Agra, development of lakes and bird sanctuary at Ramgarh forest range, improvement of Parikarma route in Briibhumi and the ghats of Varanasi, Ayodhya, Mathura, Chitrakute, Bithur, etc. have been included in Sixth Plan.

76. Tourism being a service industry the employment potential for semi-skilled and skilled is quite large. Hotel industry is also a big source of direct and indirect employment. As a result of implementation of the schemes of the tourism department, it is estimated that a quantum of 34,98,200 man-days of direct employment would be generated in Sixth Plan 1980–85. Indirect employment would also be generated in ancilliary industries supplying machinery, equipment, furnishing, consumable goods. It is universally known that tourist receiving areas bring prosperity and economic development for the local masses.



Annexure I  
Position of spill over works on 1-4-1980  
(Rupees in lakhs)

Schemes	Plains		Hills		Total	
	Financial	Physical	Financial	Physical	Financial	Physical
1	2	3	4	5	6	7
<b>(A) Pre-Vth and Vth Plan works</b>						
(1) New Construction—						
(i) Pre-Vth. Plan ..	610	746 Km.	151	56 Km.	761	802 Km.
(ii) Vth Plan ..	1400	1374 "	3041	1179 "	4441	2553 "
(2) Re-Construction—						
(i) Pre-Vth Plan ..	119	71 Km.	16	..	135	71 Km.
(ii) Vth Plan ..	81	141 Km.	600	357 Km.	681	498 "
(3) Bridges—						
(i) Pre-Vth—Plan ..	149	24 Nos.	5	1 Nos.	154	25 Nos.
(ii) Vth Plan ..	617	38 "	282	21 "	899	59 "
(4) Other works ..	212		31		243	
(5) Establishment ..	305		453		758	
(6) Increase in cost ..	550	..	150		700	
Total ..	4043		4729		8772	
<b>(B) New Works of 1978-79 and 1979-80</b>						
(1) New construction	8444	2700 Km.	1368	584 Km.	9812	3284 Km.
(2) Reconstruction ..	2759	2877 Km.	217	130 Km.	2976	3007 Km.
(3) Bridges ..	228	34 Nos.	322	82 Nos.	550	116 No.
(4) Other works ..	281		28		309	
(5) Establishment ..	1288		213		1501	
Total	13000		2148		15148	
<b>Total (A and B)</b>						
(1) New construction ..	10454	4820 Km.	4560	1819 Km.	15014	6639 Km.
(2) Reconstruction ..	2959	3089 "	833	487 "	3792	3576 "
(3) Bridges ..	994	96 Nos.	609	104 Nos.	1603	200 Nos.
(4) Other works ..	493		59		552	
(5) Establishment ..	1593		666		2259	
(6) Increase in cost ..	550		150		700	
Total (1—6)	17043		6877		23920	

## Annexure-II

*(Additions proposed by the State P.W.D. in the National Highways)*

1. Nepalganj—Nanpara—Barabanki—Lucknow—Rai-Bareilly—Fatehpur—Mahoba—Sagar—Bhopal Road.
2. Lucknow—Jaunpur—Ghazipur—Baksar—Patna Road.
3. Delhi—Baghpat—Saharanpur—Chakrata—Duni—Arakuti—Simla Road.
4. Delhi—Meerut—Roorkee—Hardwar—Rishikesh—Badrinath—Mana Road.
5. Bareilly—Pilibhit—Lakhimpur Kheri—Bahraich—Basti U.P. Border L R P Road.
6. Gorakhpur—Nautanwa—Sandi—Pokhra((Nepal).
7. Ghaziabad—Aligarh—Kanpur (G. T. Road).
8. Rampur—Nainital—Almora—Kausani Road
9. Lucknow—Sultanpur—Jaunpur—Ahrora—Robertsganj—Dudhi—Bindamganj.
10. Delhi—Meerut—Muzaffarnagar—Saharanpur—Dehradun—Mussoorie Road.
11. Delhi—Ghaziabad—Bulandshahr—Narora.
12. Ghazipur—Ballia—Beria—Ribilganj.
13. Tanakpur—Pilibhit—Shahjahanpur—Etawah—Bhind—Gwalior.
14. Gwalior—Jhansi—Khajuraho.

## Annexure-III

*Additions recommended by N. T. P. C. in National Highways for U. P.*

Region and Route	Route length (Kms.)
<i>Northern Region</i>	
1. Pilibhit-Hardwar-Paonta--Nahan-Ambala .. .. .	475
<i>Central Region</i>	
1. Ghaziabad-Meerut-Hardwar .. .. .	190
2. Gwalior-Jhansi-Khajuraho-Rewa .. .. .	460
3. Gorakhpur-Nautanwa .. .. .	84
4. Raipur-Varanasi .. .. .	620
<i>Eastern Region</i>	
1. Lateral Road (Bareilly-Amingaon) including Darbhanga-Forbesganj link .. .. .	1050
2. Ghazipur-Ballia-Chhapra-Hajipur .. .. .	210

## Annexure-IV

## Requirement of funds for road programmes (Need Based)

Sl. no.	Details of schemes	Plains		Hills		Total	
		Length km.	Cost Rs. lakhs	Length km.	Cost Rs. lakhs	Length km.	Cost Rs. lakhs
1	2	3	4	5	6	7	8
1	Spill over works .. ..	4820	17043	1819	6877	6639	23920
2	Rural Road (MNP) .. ..	13210	22457	710	1775	13920	24232
3	Missing links .. ..	850	2380	150	502	1000	2882
4	Missing Bridges .. ..	202 (nos.)	15000	88 (nos.)	1300	290	16300
5	Weak and Narrow bridges .. ..	101 (nos.)	1900	19 (nos.)	500	120	2400
6	Bye passes .. ..	1000	2800	40	200	1040	3000
7	Roads in Backward Areas .. ..	2000	3400	1500	3750	3500	7150
8	Plan for roads in Schedule caste area.	661	1124	189	473	850	1597
9	Roads of other Departments .. ..	2000	3400	1000	2500	3000	5900
10	Medernisation, strengthening and widening of existing roads and raising low stretches.	5400	12760	2250	4460	7650	17220
11	Pontoon and other Temporary bridges .. ..	..	2000	..	..	..	2000
12	Roads of Economic Importance (50 % of the total cost).	..	350	..	..	..	350
13	Inland water Transport .. ..	..	500	..	..	..	500
14	Tools and Plants .. ..	..	1400	..	300	..	1700
15	Research and Development .. ..	..	700	..	150	..	850
16	Survey and Investigation .. ..	..	350	..	100	..	450
17	Construction of stores,workshop, Inspection Houses, Residential and official buliding etc. (@1% on item 2 to 13) .	..	700	..	150	..	850
	Total (2—17) .. ..	..	88264	..	23037	..	111301
	Establishment@11%(excluding no. 1) .. ..	..	7834	..	1778	..	9612
	Grand Total .. ..	..	96098	..	24815	..	120913

## Annexure-V

Break-up of the outlay of Rs. 948.76 crores as proposed in the Draft Sixth Plan (1980—85)

Serial no.	Details of scheme	Plains		Hills		Total	
		Length Km.	Cost Rs. lakhs	Length Km.	Cost Rs. lakhs	Length Km.	Cost Rs. lakhs
1	2	3	4	5	6	7	8
1	Spill over works .. ..	8420	17043	1810	6877	6639	23920
2	Rural Roads (MNP) ..	8750	14875	1100	2750	9850	17625
3	Missing Links .. ..	600	1680	150	502	750	2182
4	Missing Bridges .. ..	134 (Nos.)	9925	88 (Nos.)	1300	222 (Nos.)	11225
5	Weak and Narrow Bridges ..	70 (nos.)	1300	19 (Nos.)	500	89 (nos.)	1800
6	Bye Passes .. ..	300	840	30	100	330	940
7	Roads in Backward Areas ..	735	1250	1500	3750	2235	5000
8	Plan for road in Schedule caste Areas.	500	850	189	473	689	1323
9	Roads of other departments ..	500	850	717	1792	1217	2642
10	Modernisation, strengthening, widening of existing Roads and raising of low provisions.	6000	12835	2200	4460	8200	17295
11	Pontoon and other Temporary bridges.	..	1000	..	..	..	1000
12	Roads of economic importance (50% of total cost)	..	350	..	..	..	350
13	Inland Water Transport ..	..	200	..	..	..	200
14	Tools and Plants .. ..	850	850	..	300	..	1150
15	Research and Development ..	..	425	..	150	..	575
16	Survey and Investigation ..	..	210	..	100	..	310
17	Construction of Store, Workshop, Inspection Houses.	..	425	..	150	..	575
	Total ..	..	64908	..	23204	..	88112
	Establishment @ 11 % (excluding no. 1).	..	4968	..	1796	..	6764
	Grand Total ..	..	69876	..	25000	..	94876

**Annexure-VI**  
*Details of the scheme proposed under MNP*

Serial no.	Items of work	Plains		Hills		Total	
		Length Km.	Cost Rs. lakhs	Length Km.	Cost Rs. lakhs	Length Km.	Cost Rs. lakhs
1	2	3	4	5	6	7	8
1	Spill-over works .. ..	4557	13083	1819	5484	6376	18567
2	Rural Roads (MNP) ..	8750	14875	1100	2750	9850	17625
3	Missing links .. ..	600	1680	150	502	750	2182
4	Missing bridges	134 (nos.)	9925	88 (nos.)	1300	222 (nos.)	11225
5	Roads in backward areas ..	735	1250	1500	3750	2235	5000
6	Plan for road in Scheduled caste areas	500	850	189	437	689	1323
7	Tools and Plants .. ..	..	600	..	200	..	800
8	Research and Development ..	..	300	..	100	..	400
9	Survey and Investigation ..	..	150	..	70	..	220
10	Construction of stores, Work Shops and Inspector Houses@ 1 % (2 to 7)	..	300	..	100	..	400
	Total (1—10) ..	..	43013	..	14729	..	57742
	Establishment (11 % on items 2 to 6)	..	3144	..	265	..	4109
	Grand Total ..	..	46157	..	15694	..	61851

Annexure VII  
Details of scheme under normal programme (OMNP)

Serial no.	Items of work	Plains		Hills		Total	
		length Km.	Cost Rs. lakhs	Length Km.	Cost Rs. lakhs	Length Km.	Cost Rs. lakhs
1	2	3	4	5	6	7	8
1	Continuing spill over works	263	3960	..	1393	263	5353
2	Weak and narrow bridges ..	70 (nos.)	1300	19 (nos.)	500	89 (nos.)	1800
3	Bye passes .. ..	300	840	30	100	330	940
4	Roads of other Departments	500	850	717	1792	1217	2642
5	Modernisation, Strengthening, widening of existing roads and raising of low stretches.	6000	12835	2200	4460	8200	17295
6	Pontoon and Temporary bridges.	..	1000	..	..	..	1000
7	Roads of Economic importance (50 % of total cost)	..	350	..	..	..	350
8	Inland Water Transport ..	..	200	..	..	..	200
9	Tools and Plants .. ..	..	250	..	100	..	350
10	Research and Development ..	..	125	..	50	..	175
11	Survey and Investigation ..	..	60	..	30	..	90
12	Construction of stores, Work Shops and Inspection Houses	..	125	..	50	..	175
	Total ..	..	21895	..	8475	..	30370
	Establishment ..	..	1824	..	831	..	2655
	Grand Total ..	..	23719	..	9306	..	33025

**CHAPTER 12**  
**EDUCATION**

**(1) GENERAL EDUCATION**

*(a) Education department*

Education has been assigned a pivotal role in the process of development since the beginning of planned development in this country. The Constitution itself lays down that free and compulsory education would be provided to all children up to the age group of 14 years. Consequently, there has been manifold increase in the

enrolment in classes I—V. Correspondingly, secondary schools and institutions have also expanded to absorb the increasing number of boys and girls willing to acquire better qualification for employment.

2. The following presents the relevant data to show how educational facilities expanded in the different plan periods :—

*Educational facilities at the end of the different Plan period*

Item	At the end of		Anticipated Achievement	
	1977-78	1978-79	1979-80	1980-81
1	2	3	4	5
<i>(a) Primary Stage :</i>				
(1) Schools .. .. .	66,296	68,122	70,292	70,931
(2) No. of Students (in lakhs % .. .. .	87.30	89.89	93.17	94.47
(3) Teachers ('000) .. .. .	240	247	250	251
<i>(b) Junior High School Stage :</i>				
(1) Schools .. .. .	11,409	12,049	13,127	13,407
(2) No of Students (in lakhs) .. .. .	25.14	25.93	27.92	28.81
(3) Teachers ('000) .. .. .	80	86	89	90
<i>(c) Secondary education Stage :</i>				
(1) Schools .. .. .	4710	4869	4953	5210
(2) No. of Students (in lakhs) .. .. .	17.04	17.78	18.37	18.84
(3) Teachers ('000) .. .. .	77	78	80	82

3. The expenditure on General Education during different plan periods and their sub-sectoral percentages are given below :

Plan Period	Elementary Education		Secondary Education		Higher Education		Others		Total	
	Exp.	%	Exp.	%	Exp.	%	Exp.	%	Exp.	%
1	2	3	4	5	6	7	8	9	10	11
First Plan ..	12.71	70	1.25	7	0.43	3	3.68	20	18.07	100
Second Plan ..	8.41	59	2.97	21	1.75	12	1.18	8	14.31	100
Third Plan ..	29.49	66	7.41	17	4.94	11	2.87	6	44.71	100
Annual Plans	7.32	60	2.40	20	2.30	18	0.29	2	12.31	100
Fourth Plan ..	37.91	67	9.90	17	6.38	11	2.82	5	57.01	100
Total ..	95.84		23.93		15.80		10.84		146.41	



4. *A review of education during the Fifth Plan*—The Fifth Plan outlays for education during the period 1974–79 was of the order of Rs.86.69 crores and the level of expenditure has gone up to Rs.95.34 crores. Since the Fifth Five Year

Plan the priority of Education Sector has always been less in spite of the fact that manifold increase has taken place in the enrolment and other requirements. The following table shows the expenditure incurred during the Fifth Plan :

*Outlay and expenditure in the Fifth Plan*

(Rupees in crores)

Group	1974-75		1975-76		1976-77		1977-78		1978-79		Total	
	Exp.	%	Exp.	%	Exp.	%	Exp.	%	Exp.	%	Exp.	%
1	2	3	4	5	6	7	8	9	10	11	12	13
Primary Education ..	4.74	55	6.31	55	7.96	48	15.09	57	17.18	53	51.28	54
Secondary Education ..	1.70	20	2.90	25	5.27	32	6.67	25	9.22	28	25.76	27
Teacher Education ..	0.24	3	0.22	2	0.38	2	0.38	1	0.24	1	1.46	1
Higher Education ..	1.49	17	1.61	14	2.62	16	3.17	12	3.83	12	12.72	13
Adult Education ..	0.06	1	0.11	1	0.14	1	0.56	3	0.64	2	1.51	2
Others ..	0.32	4	0.26	3	0.22	1	0.41	2	1.40	4	2.61	3
Total ..	8.55		11.41		16.59		26.28		32.51		95.34	

On the non-plan side the expenditure during 1974–79 was as given below:

(Rupees in crores)

Group	1974-75		1975-76		1976-77		1977-78		1978-79		Total	
	Provision	%	Provision	%	Provision	%	Provision	%	Provision	%	Provision	%
1	2	3	4	5	6	7	8	9	10	11	12	13
Primary Education ..	88.12	54	103.28	53	104.11	52	109.35	49	121.26	52	526.12	52
Secondary Education ..	40.42	25	48.13	24	50.39	25	60.54	27	67.98	29	267.46	26
Higher Education ..	9.10	5	10.85	6	22.30	11	25.54	11	26.62	12	94.41	9
Special Education ..	1.15	1	1.63	1	1.81	1	1.81	1	1.42	1	7.82	1
Others ..	24.74	15	31.96	16	21.92	11	26.21	12	13.08	6	117.91	12
Total ..	163.53		195.85		200.53		223.45		230.36		1013.72	

5. It will be clear from the above that of the total expenditure during Fifth Plan 54 per cent was on Secondary Education ; 1 per cent on Teacher Education ; 13 per cent on Higher Education ;

2 per cent on Adult Education and 3 per cent on other items. The non-Plan expenditure was 52 per cent on Primary Education, 26 per cent on Secondary Education, 9 per cent on Higher Education,

1 per cent on Special Education and 12 per cent on other items. The position of

different groups during the last year and the current year is as follows :

*Comparative Allocation on Plan and Non-Plan side*

(Rupees in Crores)

Group	Plan		Non- Plan	
	1979-80 Outlay	1980-81 Outlay	1979-80 Provision	1980-81 Provision
1	2	3	4	5
1. Primary Education .. .. .	7.14	9.44	143.82	164.65
2. Secondary Education .. .. .	3.76	6.36	81.90	94.44
3. Teacher Education .. .. .	0.26	0.38	..	..
4. Higher Education .. .. .	1.70	2.01	28.28	32.04
5. Adult Education .. .. .	1.26	0.67	6.00	0.14
6. Others .. .. .	0.27	0.52	8.55	30.03
Total .. .. .	14.39	19.38	268.55	321.30

6. *Broad Strategy*—The Sixth Five Year Plan aims at broadening access to education at all stages with greater emphasis on the rural and less developed areas and on the education of girls, extending and improving the teaching of science, toning up of teacher—training programmes, strengthening of specialized institutions, improvement of higher education, providing scholarships to meritorious and poor students and exploiting the existing facilities to the fullest extent by reducing wastage and raising the quality of education.

7. *Elementary Education*—A major task in the field of elementary education is the fulfilment of the Constitutional directive, enjoining the provision of free and compulsory education to all children up to the age of 14. Highest priority is, therefore, being accorded to the universalisation of elementary education and a major portion of the budget is being allocated to it. Universalisation is proposed to be achieved through opening of new primary schools in unserved rural areas within a distance of 1.5 kms. in plains and within 1 km. in hills and in all those habitations where population exceeds 300. Similarly, additional senior basic schools would be opened within a radius of 3 kms. and in

habitations of 800. A conscious effort will be made to reduce regional disparities through greater allocation of schools in unserved areas.

8. In universalisation of elementary education the crucial problem is of wastage and stagnation which has not shown any noticeable decline during all these years. Surveys and studies are in progress to diagnose the present situation, after which appropriate remedial measures would be taken.

9. The condition of large number of school buildings is deplorable. Therefore, appropriate provision has to be made not only for the construction of new buildings but also for the maintenance of the existing ones. Efforts will also be made to reduce the unit cost of construction of school buildings. Essential equipment like *tatpatties*, science apparatus etc. will also be provided to schools to make the conditions attractive.

10. Special emphasis will be laid on the enrolment of the children of the scheduled castes and scheduled tribes especially girls as their percentage of enrolment is extremely low and more schools for girls at the senior basic stage will be opened.

Incentive schemes like free supply of text books, uniforms and scholarships for the students of the weaker sections of the community will be stepped up.

11. Priority will be given to the development of relevant curricula and the preparation of suitable text books and teaching materials apart from improving the physical conditions of the elementary schools and competence of teachers. Further as per recommendations of the Kothari Commission, it is proposed to make a beginning in the development of school complexes, firstly, at the elementary level. A junior high school will be chosen to serve as the nodal point of a complex covering 8 or more primary schools. The member units of the complex will be provided additional teaching materials for effective functioning.

12. The formal system alone will not be enough to cater to the educational needs of all children. For all those who cannot, for various reasons, attend schools on a regular basis, or those who have dropped out of the school system or those who have never been to school at the prescribed age, a massive system of non-formal education will have to be undertaken to fulfil the goal of universalisation of education.

13. *Secondary Education*—There has been an uncontrolled development in the field of Secondary Education which has resulted in establishment of a number of uneconomic and sub-standard institutions. It is, therefore, proposed to restrict opening of new secondary schools in both, private and Government sectors. However, special attention will be given to the needs of the backward areas, underprivileged sections of the population and of girls. Vocationalization of secondary education will be given due place in our secondary school system in the context of new National policy on vocationalisation. The main basis to determine the vocational content in the secondary curriculum will be district surveys of the existing and emerging occupational needs. Emphasis will also be laid on qualitative improvement and secondary curriculum will be up-dated. The standard of text books will be raised and advance experiments in educational technology will be made.

14. *General conditions of the Government institutions in terms of building, furniture, laboratories and equipment are far from satisfactory. These institutions are expected to be pace-setters in the field of secondary education, but in their present state have been unable to achieve the objective. It is proposed to prepare a comprehensive development plan for each of the Government institution and implement it in stages. Improvement in teaching of science and mathematics in secondary schools is a matter of high priority. Grants to educational institutions for purchase of science equipment and construction of laboratories will have to be stepped up. A comprehensive training programme for teachers to bring them up-to-date on new methods will be devised.*

15. *Teacher Education*—To effect qualitative improvement in education, it is imperative to have a suitable programme for the training of teachers — both, pre-service and in-service. For the improvement of pre-service training, the existing syllabi of training schools and colleges will be critically evaluated and efforts will be made for a more in-depth preparation of teachers.

16. *Higher Education*—For the qualitative improvement in the Higher Education norms will be developed for opening of new colleges and Universities. Highest priority will, therefore, be accorded to those Universities which have not so far qualified for assistance from the University Grants Commission. Similar effort will be needed for the development of Government Degree Colleges in order to enable them to lift matching grants from the UGC.

17. *Adult Education*—In pursuance of the national policy, adult education programme will be implemented on more scientific lines, with greater mobilisation of voluntary agencies and institutions to effectively co-ordinate with the programmes to make it a success. There are approximately 1.80 crores illiterates in the age group of 15–35 in U. P. and out of which 1.17 crores (65 per cent) would be covered during the Sixth Five Year Plan, 1980–85.

18. *Direction and Administration*—The administrative machinery, as it is

operating at present, has its main emphasis on normal administration. The important function is of professional supervision and guidance to develop in tune with the specialized character which the educational programmes demand and it has failed. Efforts will, therefore, be made to gear the system to effect qualitative improvement. Adequate provision would be needed for the strengthening and re-organisation of the present educational administration. Appropriate organisation for planning and implementation of educational programmes will also be set up.

19. *Youth Welfare, Sports and Other Programmes*—Physical education is an integral part of the education curriculum. Due stress will, therefore, be laid on the

promotion of physical efficiency and proficiency in sports and games. Sound system of library service will also be developed and the existing policy of giving grants be suitably changed. Besides formulating appropriate guidelines in this regard, an attempt will be made to achieve the maximum utilisation of library facilities. There is one more area of 'use of mass media' in which not such effort has so far been made despite the establishment of educational technology cell. Appropriate step will, therefore, be taken to explore the potentiality of these media for different levels of education.

20. *Outlay for Sixth Five Year Plan*—The outlays proposed for the Sixth Five Year Plan 1980—85 are indicated below :

*Outlay proposed for Sixth Plan, 1980—85*

(Rupees in crores)

Sl. no.	Group	Plains			Hills			Total		
		Total	Capital	%	Total	Capital	%	Total	Capital	%
1	2	3	4	5	6	7	8	9	10	11
1	Elementary Education	111.47	1.43	57	47.54	..	50	59.01	1.43	55
2	Secondary Education	41.36	16.34	21	32.69	11.85	35	74.05	28.19	25
3	Teacher Education	9.40	1.38	5	1.71	0.01	2	11.11	1.39	4
4	Higher Education	19.53	0.92	10	9.50	1.62	10	29.03	2.54	10
5	Adult Education	6.72	0.20	3	1.99	..	2	8.71	0.20	3
6	Games and Sports	1.43	0.21	1	0.20	..	..	1.63	0.21	1
7	Direction and Administration.	3.10	..	2	0.90	..	1	4.00	..	1
8	Others	..	0.89	..	0.29	0.10	..	1.18	0.20	..
9	Public Libraries	..	1.40	1	0.18	..	..	1.58	0.27	1
	Total	..	195.30	100	95.00	13.58	100	290.30	34.43	100

In the successive paragraph, individual programmes listed above in the table have been discussed in detail.

21. *Elementary Education*—According to the findings of the Fourth Education Survey conducted in the year 1978, there were 13,982 rural habitations having a population of 300, but no primary school within a walking distance (1.5 kms. in the plains and 1 km. in the hills). These also include some habitations in the plains having a population of more than 300 with

no schooling facility within a distance of 1 km. Out of these unserved rural areas, 2,647 primary schools have been opened during the last two years, and the rest 11,335 are proposed to be opened during the Sixth Plan. All these schools will be opened with simultaneous provision for construction of their buildings also. A post of head-teacher will be provided in each school. On the basis of Fourth Education Survey 1,500 Junior Basic Schools are needed in urban areas of which 300

schools have already been opened. Owing to the constraint of resources only a target of 250 schools has been proposed. At the middle stage where local effort is forthcoming, no school has been proposed for urban areas.

22. During 1979-80, 93.17 lakhs children were on rolls in primary classes. For full coverage of all children in the age-group 6-11, additional enrolment up to the end of the year 1984-85 will have to be of the following order :

(No. in lakhs)

age_group 6-11	Boys	Girls	Total
1	2	3	4
Population 1984-85	72.94	68.83	141.77
Enrolment in Classes I-V.	63.72	29.45	93.17
Additional enrolment	9.22	39.38	48.60

From the above table it would be evident that additional enrolment of 48.60 lakhs children during the Sixth Plan period will be impossible to achieve even if all the unserved areas get provided with the schooling facilities as proposed because various socio-economic reasons would hinder the utilization of these facilities to the full. On these considerations proposed target of formal and non-formal education in the Sixth Plan are indicated below :

*Proposed level of enrolment*

Item	Boys	Girls	Total
1	2	3	4
<i>Enrolment ('000)</i>			
Total ..	7442	4375	11817
Formal Education	7092	4025	11117
Non-formal Education.	350	350	700
<i>Percentage of school going children</i>			
Total	102	64	83
Formal Education	97	59	78
Non-formal Education.	5	5	5

23. In accordance with the fourth educational survey, 6,725 additional senior basic schools were needed for unserved rural areas. Out of these 1,258 schools have already been opened. During the Sixth Plan it is proposed to open 800 new senior basic schools out of which 80 per cent would be for girls. It is expected that the private agencies would also come forward and open new schools. The present enrolment and that proposed for 1985 are given below :

*Present and proposed level of enrolment*

	1980	1985	
<i>(a) Population in the age-group 11-14 ('000)</i>			
Boys	3973	4142	
Girls	3601	3916	
Total ..	7574	8058	
<i>(b) Enrolment ('000)</i>			
Boys	2120	Total 2565	Formal 2540
Girls	672	1207	1132
Total ..	2792	3772	3672
<i>(c) Percentage of enrolment</i>			
Boys	53.36	61.93	61.32
Girls	18.66	30.82	28.90
Total ..	36.86	46.81	45.57
		1.24	

24. In opening new schools, highest priority will be accorded to those areas and pockets where weaker sections specially scheduled castes and tribes reside in greater number. Besides regional imbalances will also be taken into account to correct existing variations from area to area. To achieve the above targets of enrolment, special efforts will be made through enrolment drives, posters, banners, meetings and personal contacts. Parents will be educated to give up their prejudices against girl's education. The progress of these efforts will be assessed periodically. For those children who fail to avail of these formal facilities or are unable to do so for various reasons, non-formal education centres will be started in adequate number. The timing of these centres will have to

be so fixed as to make it convenient to the non-participating children to attend. Methods of teaching material will also have to be suitably determined. During Sixth Plan it has been proposed to open 4,000 non-formal centres for the age-group 11–14 and 28,000 centres for the age-group 6–11.

25. One very important point that needs adequate consideration is the provision of school buildings. Unfortunately even today there are 15,418 primary and 3,448 middle schools without buildings. These figures include *kachha* and partly *pacca* buildings except in case of primary schools in which partly *pacca* buildings numbering 5,712 have not been included. It may also be stated that even 48,126 *pacca* buildings (enumerated in fourth survey as such) do not give correct picture of their condition and capacity as a number of them are very old and dilapidated. Most of them require heavy repairs. It is obvious that the problem is of such magnitude that it will not be possible in the next few years to provide all the buildings specified above. However, during Sixth plan it is proposed to construct buildings for 3745 primary schools and 450 buildings for the middle schools. In addition to the above, provision has been made to construct 2000 additional rooms in middle schools and 6100 in primary schools to provide accommodation for increased enrolment. There is also a proposal for giving building grants to the non-government middle schools. Provision has also been made for the maintenance and repairs of school buildings.

26. Most of our schools also lack proper furniture and equipment. Provision has, therefore, been made for the supply of *tat-patties*, tables, chairs and black boards and other educational equipment including science-kits. In urban areas the Parishad schools need strengthening in terms of furniture, and equipment in order to enable them to attract children in larger number. Provision has, therefore, been made to furnish 10 per cent of them with suitable low desks and chairs.

27. The problem of health of the school children is also vital not only for the individual's growth but also for the

future of the nation. While mid-day meal and special nutrition programmes will take care of the mal-nutrition aspect, steps are being taken for health check-ups and supply of weighing machines and first-aid boxes.

28. As is generally known, the hard-core of non-attendants mostly consists of the children of the weaker sections like the scheduled castes, scheduled tribes, and urban slum-dwellers. The primary reason is the poverty of their parents. It may be fairly assumed that their children may not be able to attend school for want of clothing, text-books and stationery. Provision of Rs.15 lakhs has, therefore, been made for free supply of text-books besides various schemes of grants for stipends and non-recurring financial assistance. It is also proposed to supply school uniforms to 3 lakh such children (especially for girls).

29. In the field of primary education our greatest problem has been how to reduce wastage and stagnation. Some studies made recently by the State Institute of Education in the field of primary education reveal that out of every 100 children only 20 have been able to get through class V. Some more studies are in progress and their results are keenly awaited. Drop-out incidence has been maximum in class I. To remedy this situation it has been decided not to fail any student in classes I and II. In other words classes I, II and III are being regarded as one unit now.

30. Curricular changes are also underway so as to make education centre round the problems of life and related to the environment in which the child lives. The present methods of teaching will also require a change for lower classes. Play-way techniques will need to be encouraged.

31. In accordance with the recommendations of the Education Commission (1964–66), the programme of school complex will be started in some selected districts. Each Junior High School will be integrally related to the primary schools in the neighbourhood so as to form one 'complex' of educational facilities. The headmaster and the staff of the junior high school would provide an extension service

to the primary schools attached to it. A provision of Rs.12.50 lakhs has been made for this scheme.

32. *Strengthening of administrative set-up at the district level*—The strength of the inspecting staff will be increased to cope with the increasing number of new schools. The posts of education superintendents including those of lady superintendents are proposed to be created where new municipal boards have come into being. Regional offices are also proposed to be strengthened with the addition of an assistant deputy director solely to look after the elementary stage of education of the region, supervision, monitoring and co-ordinating all programmes of universalisation both on administrative and academic sides. Strengthening of Basic Shiksha Parishad and the basic wing of the Directorate of Education is proposed keeping in view the enormous increase in workload because of rapid process of universalisation.

33. *Secondary education*—The secondary stage of education is of great significance for a country's social and economic development. It prepares students who want to pursue higher education and also those who want to discontinue their studies after completing XII and seek employment. For the first category, this stage has to be preparatory and for the second terminal.

34. The expansion of education at the elementary stage is bound to affect enrolment at the secondary level. The situation will have to be mostly met by allowing additional sections and subjects to be opened in the concerned schools to enable them to accommodate the large influx of students. At present, there are 4953 higher secondary schools in the State with an enrolment of about 25.7 lakh boys and 6.84 lakh girls. The number of boys and girls studying in classes IX to XII is 15.35 lakhs and 3.02 lakhs respectively, which is 30 and 7 per cent of the total population of the concerned age-group. The total percentage come to 20 per cent. It is expected that by the end of the Sixth Plan period, this number will increase to 25.50 lakhs (19.90 lakh boys and 5.60 lakh girls).

35. According to the fourth survey the number of unserved areas in the State where a higher secondary school is not available up to 8 kms. is fairly small. However, it is felt that the needs of the backward areas, under-privileged sections and of girls will have to be given special attention and local people will have to be encouraged to come forward to open schools on hundred per cent grant-in-aid basis. Openings of government high schools will be restricted to only such areas, where private enterprise is found to be totally wanting. Likewise, some of the urban areas especially those where new colonies are emerging as a result of fast-growing city population, may also need opening of new government high schools. Provincialization of private higher secondary schools will be generally stopped. To ensure that the minimum essential standards of efficiency are maintained it will be necessary to bring all the recognised institutions under private management on the grant-in-aid list because in its absence the institutions are likely to be run without adequate staff and proper facilities. At present there are about 277 such institutions as are not in receipt of maintenance grant. This number may go up to 600 by the end of the Sixth Plan. But owing to limited financial resources it is proposed to bring such schools on the grant-in-aid list during the Sixth plan.

36. Special emphasis will be laid on the education of girls. Today the ratio between boys and girls in the sphere of secondary education is 5 : 1. This gap has to be bridged with provision of suitable measures. In view of this, it is proposed to give non-recurring grants to girls institutions on 100 per cent basis without any matching contribution from the management. However, to make up for this financial loss, it is also proposed to increase the ratio of management's contribution in respect of the boys' schools to 80 : 20 from 85 : 15.

37. In a number of our institutions there is scarcity of drinking water and proper toilet facilities. It has, therefore, been proposed in the Sixth Plan to sanction up to Rs.15,000 to each institution for construction of overhead tanks, supply of

pumping sets and provision of toilet facilities. Overhead tanks will also ensure constant supply of water to laboratories. Separate toilet facilities for girls have to be provided in institutions which have co-education. A sum of Rs.15,000 is also proposed to be given for this purpose.

38. The number of government institutions is on the increase. While adequate provision is made for the construction of buildings for new schools, the old ones with extensive campuses are getting ignored and are in need of extensive repairs. Provision of a sum of Rs.1 crore has, therefore, been made for the maintenance and repairs of the government buildings. Likewise, provision has also been made for tube-wells and toilet facilities.

39. In view of the crucial role of the secondary education increase emphasis will be laid on improving its quality. Besides, up-dating the curricula, schools on a selective basis will be encouraged to experiment with innovative ideas and practices and perfect them. In course of time these innovative practice could be passed on to other institutions. Suitable provision has been made in the Plan for projects and experimentation in schools. The scheme of giving efficiency grants to the institutions which show appreciable results at the Board's examination will also be continued with suitable upward revision for further encouragement. The teaching of science and mathematics will be specially emphasised and substantial facilities will be given to schools to strengthen their science group in the form of grants for construction of laboratories and purchase of science equipment. Owing to paucity of resources the introduction of science as a compulsory subject has not yet taken final shape. At present out of 4,953 higher secondary schools, only 2,726 institutions are recognised in science. Compulsory introduction of science in rest of the institutions would need large amounts of money.

40. Vocationalisation will be speedily introduced in our secondary schools, help students to prepare themselves for middle level positions in different trades and agriculture. In the Sixth Plan, a few pilot studies are being made to ascertain voca-

tional needs of different areas and to develop requisite facilities accordingly. To implement this programme it is proposed to set up a vocationalisation unit in the Directorate of Education under the guidance of a Joint Director of Education with District Vocational Officers and necessary supporting staff at the State and district levels to assist them in their work.

41. One of the primary responsibility of the State is all-round development of talent. Most of the meritorious students fail to develop their talents properly on account of their poverty and backwardness. It is in this context that the establishment of a special residential schools equipped with requisite resources and facilities needs to develop the potentialities of the students to the full. A school has been proposed in the Sixth Plan on the pattern of, Naterhat, Bihar. Nominal fee will be charged or exempted altogether taking into consideration the income of parents/guardians. Admission will be on merit. A sum of Rs.433.00 lakhs has been proposed in the Plan for this purpose.

42. To cope with the increasing number of students in the government institutions, the double shift system was started in some of the well-equipped schools during the Sixth Plan. Although such schools were provided with Vice-Principals to assist the Principals in looking after each shift, the supervision could not be effective. The principals have found it difficult to pay required attention to studies, teaching work and co-curricular activities in spite of their best efforts. Therefore, it is proposed that such double shift system should be discontinued and in its place two separate institutions housed in one building with separate principals. Staff, and students should be started. To facilitate the running of two separate institutions it is suggested that one shift should have only scientific group of classes and the other literary and rest of the groups. Housing of two separate institutions, in one building may, however, need construction of administrative blocks and a few additional rooms.

43. The work of the Board of High School and Intermediate Education has enormously increased with rapid increase in



the number of candidates, number of institutions and number of subjects. The number of examinees are now around 15 lakhs. In order to reduce the heavy strain, the process of decentralisation was started with opening of a sub-board at Meerut. One more sub-board has been opened at Varanasi now. Two more sub-boards remain to be set up in next few years. Besides setting up sub-boards, regional offices are also proposed to be established in these region where sub-boards would not exist. Apart from these measures the government has also decided to conduct separate examination for private candidates as their number has also shown tremendous increase in the past. This would facilitate the smooth conduct of examinations which has at present become un-wieldy. An 'Institute of Correspondence Courses' is being established to provide education through correspondence to the candidates intending to appear privately at the Board's examination. The office of the Board also needs strengthening not only in terms of adequate increase in the staff but also in the form of establishment of statistical cell, evaluation unit and security staff. In terms of equipment also it needs its own generator and additional apparatus for micro-film unit.

44. *Teacher Education*—There is no gainsaying the fact that a sound teachers' training programme is a pre-requisite for qualitative improvement in education. This will necessitate improvement in the condition of the present training institutions and their training programmes on the one hand and re-orientation of teachers' knowledge through in-service refresher courses on the other. It is, therefore, proposed to strengthen the elementary and secondary institutions of the State during the Sixth plan. There is also a proposal to strengthen the Regional Institutes of Education and some specialized institutes such as Government Central Pedagogical Institute, State Institute of Science Education, Bureau of Psychology, Government College of Home Science, English Language Teaching Institute and Government Nursery Teachers' Training College.

45. In the B. T. C. training institutions the majority of pupil teachers consists of

those who have passed the Intermediate examination. Some graduates also seek admission to these courses. The present staff of these training institutions now comprises the L. T. grade teachers. It has been proposed in the plan to upgrade these posts with a view to raising the standards of teaching. It has also been proposed to abolish all the present B. T. C. Units in the State and to set up full-fledged Normal Schools in their place. This will bring about uniformity in all elementary teacher training institutions in the State. These institutions are proposed to be further strengthened to raise the quality of science education.

46. In-service training of teachers will be an essential part of the teacher education programme. An extensive in-service training programme has, therefore, been proposed both at the primary and secondary levels to acquaint the teachers with latest techniques of teaching principles of pedagogy and curricular reforms. Besides, a scheme of Continuing Centres of Education has also been proposed to upgrade the knowledge of teachers in different subjects.

47. At present there is no institution at the secondary level in the districts which could be assisted the responsibility of taking up extension service work. It is, therefore, proposed to select one or more Government colleges (or private institutions in the absence of government institutions) for this purpose. These institutions would function as clearing houses to disseminate information about the latest educational reforms, innovative practices etc. They would distribute the literature received from the special Institutes and organise seminars and workshops for the teachers of different subjects. These selected institutions will also assist in the implementation of various projects sponsored by the National and State level institutes. For every fifty schools one such extension centre is proposed to be set up.

48. There are several specialized Institutes and specialized training Institutes at work in this State in the field of research, training, extension and publication. For ensuring proper co-ordination of their work and for exercising overall control in

academic matters, a State Council for Educational Research and Training is proposed to be set up on the pattern of N.C.E.R.T. The council will be headed by an Officer of Additional Director's rank and all the special institutes will function as different departments of this Council.

49. *Higher Education*—In the field of higher education emphasis will now shift from expansion to consolidation. There are, at present, 19 State universities and 380 degree colleges besides 2 Central universities providing the facilities for higher education. Out of 380 degree colleges 38 are government institutions and the rest are run by private managements. The academic side is looked after by the universities concerned, while the administrative, financial and regulatory aspects of the functioning of these institutions is the responsibility of the education department. Strict norms for opening new degree colleges will be developed. However, in the backward areas of the State the government would establish degree colleges taking into consideration the regional needs. Economically unsound and administratively weak private institutions may have to be provincialized. Optimal institutional use would also be ensured.

50. For equalisation of educational opportunity, the students coming from educationally backward classes would be provided incentives through scholarships and other assistance. Construction of hostels for boys in the Government degree colleges is also being proposed. For qualitative improvement of higher education, adequate development grants have to be provided to the universities especially to those as have not been able to lift the U.G.C. grant. Existing colleges have also to be provided adequate facilities by way of staff, equipment, laboratories, libraries etc. Suitable provision has been made in the plan in this regard.

51. Strengthening of the Directorate of higher education would be taken up to cope up with the growing load of administrative supervision.

52. For the qualitative improvement of teachers and make them conversant with latest researches and techniques it is pro-

posed to set up an in-service training centre at the Government Degree College, Kanpur. There is also a proposal to create a new post in the Post-graduate Degree Colleges with a view to promote research work.

53. Most of our government degree colleges are established in remote or backward areas where residential facilities are not available for the staff. This creates problems and at times puts the teachers' performance at a discount. It is, therefore, proposed to construct residential quarters in the vicinity of the colleges. This measure would not only provides relief to the staff, but would also attract them to work in such colleges.

54. Govind Ballabh Pant Institute of Social Studies has been established with the help of the Government of India, to further the studies in this field. Adequate financial grant is proposed to be given during the Sixth plan to promote its activities. Similarly, there is a proposal to give sufficient grants by the State Government to the Mehta Research Institute of Mathematics and Physics, Bharwari, Allahabad where high quality of research work in Mathematics and Physics is being done.

55. *Adult Education*—The Census of 1971 indicated 25.44 as literacy percentage in our State. Illiteracy is very widespread among women and people of scheduled castes and scheduled tribes. There is also a wide gap between the literacy figures of rural and urban areas. According to present estimates 1.79 crore people in the age-group 15—35 are still illiterate in our State. Out of these 1.17 crore people are intended to be covered during the Sixth Five Year Plan. This will need setting up of 3,81,000 Adult Education Centres all over the State. Further, such a massive programme cannot be run through government efforts alone. It will require co-operation of voluntary organisations, degree colleges, universities and Nehru Yuvak Kendras.

56. In the year 1980-81 under the Centrally sponsored schemes 32 projects each consisting of 300 centres in 32 districts are being implemented. Each project is to continue for five years, A Proposal to extend this programme to the remaining 24

districts of the State has already been forwarded for the consideration of the Central Government. The State Government has also sanctioned 3 projects in 3 districts with its own resources. It has been further proposed to start a project of 100 centres each in the remaining districts with the aid of the State Government. These projects will also continue for five years.

57. With the view to ensuring successful implementation of the programmes the Directorate is to be equipped with adequate and competent staff for monitoring the projects. There is also a need for supervision and direction of this programme at the regional level for which creation of posts of Regional Deputy Directors of Adult Education with necessary supporting staff has been proposed. Keeping in view the expansion of the programme, the staff sanctioned for the office of District Adult Education Officer is inadequate. Proposal has, therefore, been made to create posts of Senior Stenographers and other employees in all the districts of the State.

58. Proper training facilities for different level functionaries are necessary. The arrangement for officer's training are being made at the Literacy House, Lucknow and in New Delhi. For training of other personnel the existing arrangements are inadequate. It is, therefore, proposed to establish training units in the Normal Schools and regional institutes for the district and regional levels respectively. These units will not only provide training to different categories of functionaries but also help in developing diversified teaching and learning materials according to the local needs, evolving suitable methods of teaching, distributing follow up literature, and organising workshops. A provision of Rs.10 lakhs has been made during the plan period for the establishment of these units.

59. Besides strengthening of the State resources centre, 11 resource centres at regional level are proposed to be set up to develop detailed curriculum, teaching aids, rearing materials and follow up literature. An Adult Educational Institute is

also proposed to be established at the State level. Continuing education and follow up programmes have also been proposed so that the learners do not lapse into illiteracy again. Further, a publicity scheme has been included in the Plan to acquaint people with the progress and achievements in this field and to enlist their support for the success of the programme.

60. *Direction and Administration*— There has been a tremendous increase in the work-load of the Directorate because of rapid expansion of educational facilities during different Plan periods. The numerical strength of the Directorate has not kept pace with the expansion in the number of institutions, their enrolment and the total educational expenditure. It is, therefore, necessary to suitably strengthen the Directorate according to the demands of the situation. Some important factors, such as the State responsibility for the disbursement of salaries to primary and secondary school teachers, quasi-judicial functions in respect of the privately managed schools and new recruitment procedures of teachers have increased the administrative work considerably. The present administrative machinery is able to cope with only the routine work. It is, therefore, proposed to take up a scientific study of the administrative machinery at different levels in order to find out the requirements of staff, to determine the nature and extent of decentralisation of powers and to make the system in tune with the modern management techniques.

61. It is being increasingly realised that in the context of the huge task of universalisation of elementary education, the inspecting staff is quite inadequate. Since with the expansion of educational facilities formal or non-formal education will be available now in almost every village, it is proposed to create a post of education officer at the block level who will guide and control all the financial and administrative aspects of education of his block, maintain the statistical data regarding every school, and be a drawing and disbursing officer in respect of the educational staff working in the block. During the Sixth Plan period, 60 posts of Block Education Officers and 500 posts of

Assistant Education Officers (SDIs/AIGs) are proposed to be created in the first phase.

62. At present there is no proper machinery in education department to look after the planning work on scientific lines. The planning activities of the department mainly consist of consolidating and transmitting proposals received from different sections to the Government. Projects are not scientifically formulated. Hence, during the Sixth Plan period setting up of a planning, monitoring and evaluation cell has been proposed to ensure educational development on desired lines.

63. *Sports and Youth Welfare*—The Fifth Plan schemes for promotion of sports, extra-curricular activities and youth welfare are proposed to be continued in the Sixth Plan. Some of these schemes are scholarships to the talented student-players, organising adventure camps, know your State and country and leadership training of students. Scheme for scouting and guiding has also been retained.

64. Amongst the new schemes proposed, is construction of a stadium on the campus of junior sections of Government Jubilee Inter College, Lucknow. An institution of school sport is also proposed to be set up under education department to provide intensive training and reorientation courses periodically to physical instructors to make them abreast with modern techniques. In addition to these, band units which lend added colour to youth festivals and other programmes periodically organized are also proposed to be set up in one boys and one girls schools in every district. Every regional headquarter is intended to be provided with an auditorium where competitions or cultural functions could be organized with a view to developing interests of student in the co-curricular and cultural activities. Provision has also been made in the Sixth Plan for organising art and cultural exhibition to enable the students to exhibit their talents and have their own share of joy through them.

65. No administrative machinery is available in the education department for the proper organisation and supervision of games and other youth programmes in and outside schools. It is, therefore, proposed

to set up an administrative machinery from the district to the directorate level in the Sixth Plan.

66. *Other Programmes*—Potentialities of the mass media as a powerful support to class-room instruction have not so far been properly utilized and evaluated though some attempt has been made in the area of school broadcasts. Provision has, therefore, been made in the Sixth Plan to equip the film unit of the Education Expansion Department with latest equipment to bring about greater collaboration between the education expansion and the Educational Technology cell and to set up film libraries in every region for educational purposes. Among other programmes, the continuing schemes of giving grant-in-aid to Sanskrit Pathshalas and Arabic Madarsas will be retained in the Sixth Plan as well. Library services will be suitably strengthened. It is also proposed to launch a programme of population education in the State from 1981-82 as a part of the project sponsored by the Government of India and the NCERT with UNESCO support. The expenditure on the staff will be borne by the State Government.

#### (b) SPORTS

67. To give an impetus to the activities concerning sports a separate Sports Department was established on April 1, 1974. Hence targets for the Fifth Five-Year Plan could not be fixed in advance. An outlay of Rs. 344.20 lakhs including Rs. 43.60 lakhs for hills was sanctioned. Actual expenditure for the first four years of the Plan 1974-78 was Rs. 253.34 lakhs. During the intervening two years, 1978-80, actual expenditure of Rs. 180.93 lakhs was incurred. An outlay of Rs. 800.00 lakhs has been proposed for the Sixth Plan which includes Rs. 100.00 lakhs for the hills.

68. At the beginning of the Fifth Plan, the Department inherited 10 stadia, 4 badminton halls, 1 basketball court and 1 swimming pool. During the Plan period, construction of 15 stadia, inclusive of 4 in the hills, along with two multi-purpose halls, one swimming pool and one hostel building was started, involving an expenditure of Rs. 48.31 lakhs. Along with this

50 developmental works were undertaken and completed at a cost of Rs. 44.57 lakhs. During this period, sports equipment worth Rs. 9.55 lakhs was also supplied to Regional and District Stadia. Eleven Sports Hostels having 206 inmates were also run for various games at a cost of Rs. 32.16 lakhs. A Residential Sports College having Classes IX to XII, with a capacity of 320 boys was set up at a cost of Rs. 129.82 lakhs at Gurumba, about 10 kms. from Lucknow. A sum of Rs. 23.16 lakhs was spent on Maya Hall Sports Complex for providing intensive coaching facilities in selected games. A sum of Rs. 26.67 lakhs has been spent on reconstruction of Green Park Cricket Pavillion and the Green Park Sports Complex, Kanpur.

69. As per primary objective of the Department, 3,310 coaching camps were organised benefiting 80,800 talented youngsters at a cost of Rs. 10.61 lakhs and 1,000 tournaments were held involving 75,600 players at a cost of Rs. 12.09 lakhs.

70. Eighty-five Central Coaching Camps were organised in various games and athletics at a cost of Rs. 4.63 lakhs benefiting 1,422 boys and girls. With a view to improve the performance of the State Teams in the various tournaments arranged at the national level, coaching up to a maximum of 21 days was imparted to 95 teams at a cost of Rs. 1.46 lakhs. Financial assistance to players/officials for participation in international tournaments was given to 33 players/officials, involving a cost of Rs. 1.48 lakhs.

71. Since 1974 Uttar Pradesh teams have not only made a mark at the national level, securing 39 golds, 29 silvers and 24 bronzes, but have also put up on the sports map of the World by inducting 37 players into the country's International teams including 5 Olympians at Moscow, which is an all-time record.

72. Broadly, objectives of the Sixth Plan are as follows :

(i) To expand facilities for games and sports down to the district level. This will include completion of Stadia under construction, to provide developmental works in the same, and to

construct new Stadia at the district level.

(ii) To spot talented boys and girls at a young age and to provide intensive coaching to them to enable them to obtain a place of pride at national and international events.

73. To achieve the said objectives, the Department needs Rs. 800.00 lakhs during the Sixth Five-Year Plan. This amount would be spent on the schemes outlined below :

(i) Establishment of a Sport College which will need a sum of Rs. 84.00 lakhs during the Sixth Five-Year Plan.

(ii) Construction of 15 Stadia undertaken during the Fifth Plan will be completed. Construction of 10 new Stadia will be started out of which 9 would be completed during the Sixth Plan period at a cost of Rs. 175.69 lakhs.

(iii) Rs. 7.70 lakhs to complete the remaining construction works of Mayo Hall Sports Complex, including dormitories and hostel.

(iv) Rs. 6.69 lakhs to complete the remaining construction works of Green Park Sports Complex, hostels and office buildings, etc.

(v) For completing the swimming pool under construction at Gorakhpur, constructing an Olympic size swimming pool at Allahabad, and a mini-size swimming pool at Jhansi, a sum of Rs. 49.53 lakhs will be spent.

(vi) Two multi-purpose sports halls, which are under construction will be completed, and 3 new multi-purpose sports halls at Varanasi, Bareilly, Bijnor are proposed to be constructed, at a cost of Rs. 28.86 lakhs.

(vii) One gymnasium is proposed to be constructed at a cost of Rs. 25.00 lakhs.

(viii) *Residential Sports Hostels*— This is an important scheme. It has already produced five out of 6 Olympians from the State, since 1974, and a number of international players.

It is proposed to admit 240 new hostellers in various games and sports during 1980—85. For this scheme, a sum of Rs. 36.90 lakhs is proposed to be spent.

(ix) It is proposed to undertake 14 new hostel buildings out of which 13 will be completed at a cost of Rs.75.62 lakhs. Apart from these, one of the sports hostel under construction, would be completed.

(x) Rs. 50.00 lakhs are proposed to provide additional playing facilities in more games in existing 11 Stadia and the 24 new Stadia like grass turfing, astro-turf, cricket pitches, wooden flooring, CC Basketball courts, cindertracks, etc.

(xi) Rs. 25.00 lakhs has been proposed to provide scientific and modern sports equipment in the Stadia.

(xii) As an integral part of coaching and to develop proper match temperament the Department organises tournaments in various games at district/regional/State level and All India level. A sum of Rs. 26.50 lakhs is proposed to be spent benefiting about 2 lakh players during the Plan period. It is additionally proposed to benefit about 50,000 girls in about 1,000 tournaments in different games and sports at a cost of Rs. 12.50 lakhs.

(xiii) About 80 players of the State may represent the country abroad and about 10 players in Los Angeles Olympic Games, 1984. A sum of Rs. 5.00 lakhs is proposed to be spent during the Sixth Plan period.

(xiv) Coaching facilities to 2.23 lakh boys and girls in about 11,000 coaching camps in various games and sports at a proposed sum of Rs.22.00 lakhs.

(xv) Coaching to about 2,000 boys and girls in central coaching camps during the Plan period, for which a sum of Rs.9.30 lakhs will be spent. State teams, which have to represent the State at the nationals are imparted intensive coaching for six weeks, railway fare, kit, at a cost of Rs.9.00 lakhs.

(xvi) To popularise sports amongst rural youth, rural sports centres have been set up at the rate of 5 centres in the plains and 8 centres in the hills per district. During the Sixth Plan, 246 new Rural Sports Centres would be set up, involving an expenditure of Rs.5.92 lakhs.

(xvii) Kits for coaches, at an expenditure of Rs.3.90 lakhs.

(xviii) So far the Department has been functioning with far less than the required strength of staff. In order to successfully implement the various proposed schemes and to boost activities following additional coaching and ground maintenance staff would be necessary during the Sixth Plan period :

1. Psychologist	1	
2. Sports Officer	80	Coaches.
3. Deputy Sports Officer	144	
4. Junior Engineer	5	
5. Draftsman	1	
6. Class III employees	144	Store Keepers tournaments assistants.
7. Class IV employees	200	Ground men, Swee- pers, Chow- kidars.
Total	575	

Total cost would be Rs.103.94 lakhs during the Sixth Plan period.

(xix) Direction and administration, refresher courses at NIS for sports officers coaches, financial assistance to ex-sportmen, State awards to outstanding sportsmen, financial assistance to students from U. P. getting training at NIS, tournaments, construction of Directorate office buildings, and financial assistance for mountaineering activities, involving a cost of Rs. 36.95 lakhs.

#### (c) Art and Culture

74. The basic objective of the Cultural Affairs Department is to promote art and culture and to preserve the rich cultural heritage of the State. In order to achieve

these objectives the department has formulated the following schemes for an outlay of Rs.350.00 lakhs for the period 1980-85 including Rs.86.65 lakhs for capital component. The Sixth Plan outlay also includes an outlay of Rs.30.00 lakhs for hills.

75. *Direction and Administration*—This scheme takes care of the head office of the department which is the Directorate of Cultural Affairs. The Directorate has as yet a small staff set up of 1 part-time Director and 2 Deputy Directors assisted by less than a dozen other hands. There are as many as 27 subordinate offices. It is, therefore, necessary to strengthen the Director of Cultural Affairs to ensure proper supervision and co-ordination of 27 subordinate offices and to implement schemes properly. Thus, a sum of Rs.8.25 lakhs has been proposed for this purpose for the period 1980-85.

76. *Fine Arts Education—(a) Architecture*—The department has a School of Architecture which has been so far awarding Diplomas. A Degree course in Architecture has been started in this college in 1980-81. In view of this innovation a provision of Rs.21.90 lakhs has been proposed for construction of additional class rooms, workshops, hostels and also for supplementing the staff during the plan period.

(b) *Music Education*—The department has under it a reputed music college, the Bhatkhande College of Hindustani Music, Lucknow for training in classical music and dance. For the development of this College during the Plan period an outlay of Rs.9.80 lakhs has been proposed.

(c) *Establishment of a University of Culture*—This new scheme provides for establishing a University of Culture which will affiliate Government School of Architecture, the Bhatkhande College of Hindustani Music and other music and art institutions of this State. A sum of Rs.14.00 lakhs has been proposed for 1980-85 to establish the University of Culture at Lucknow.

(d) *Expansion of Guest House*—Four suite Guest House has been planned for the Department. One suite of the same is ready. For the remaining 3 suites and the

kitchen, pantry, store staff quarters, a sum of Rs.2.15 lakhs is proposed for the Plan period which is for capital works.

77. *Promotion of Art and Culture*—A total sum of Rs.117.40 lakhs has been proposed for the period 1980-85 for the various projects relating to promotion of art and culture in the State which includes Rs.16.00 lakhs for capital component. Out of this sum, the department will give grants-in-aid to Lalit Kala Academi, Sangeet Natak Academi and some private cultural organisation for furtherance of their activities to promote art and culture.

78. *Archaeology*—Uttar Pradesh has a very large number of archaeological sites, monuments and remains. For the State Archaeological Organization at Lucknow, and its sub-unit at Pauri-Garhwal, a sum of Rs.28.25 lakhs has been provided for strengthening and expansion of its activities, on the lines approved by the Government of India.

79. *Archives*—There is a State Archives at Lucknow and five Regional Archives at Allahabad, Varanasi, Naini Tal, Dehra Dun and Agra. Besides this, there is also a Manuscript Library at Allahabad. For their strengthening and expansion of other activities an outlay of Rs.29.25 lakhs has been proposed during 1980-85 which includes Rs.2.00 lakhs for capital component.

80. *Museums*—To collect, preserve, study and publish the antiquities and art objects, the Department has established museums at Lucknow, Mathura, Jhansi and Almora. For the development of these museums, enriching their collections and expanding their activities an outlay of Rs.78.35 lakhs has been proposed which includes Rs.35.00 lakhs for capital component. It is also proposed to take over educational museums under this department and develop them on modern scientific lines as Regional Museums.

81. It is also proposed to take up several schemes concerning promotion of art and culture, archaeology, archives and so also or the expansion of the existing museum at Almora in the hill regions of the State for which an outlay of Rs.30.00 lakhs has been proposed.

## (2) TECHNICAL EDUCATION

82. Technical education programmes in the past have essentially been directed towards the training of engineering graduates, diploma and certificate holders to meet the requirements of technical manpower in various Government departments like public works, irrigation, industries, transport and agriculture as also of private and public sector undertakings. The programme has not been able to adequately motivate and train engineers and technicians for self employment.

83. In formulating proposals for the Sixth plan, a new orientation is proposed for the technical education programmes. Schemes of skill development and greater management technique are now to form the core of the future training programmes. Special stress would also be laid on the programmes to meet the requirement of trained personnel for rural development works and other schemes. Also a new orientation is being given to technical education by participation of the institutions in rural development work.

84. *Development at the degree level*— Technical education programmes have a long history in U.P. Thompson College of Engineering was established at Roorkee in the pre-independence period. Another important institution was the Harcourt Butler Technological Institute at Kanpur. During the First Five Year Plan, an Engineering College was established at Dayalbagh Agra. In the Second Plan, degree courses in textile technology and textile chemistry were started at the Government Central Textile Institute, Kanpur. During the Third Plan, new engineering colleges were set up at Allahabad and Gorakhpur and an engineering department was set up in 1966-67 in the Agricultural University at Pant Nagar as Pant College of Engineering and Technology. By the end of the Third plan, U. P. has seven degree institutions with an annual intake of 1050. In the Fourth plan no new institutions were established and stress was laid on consolidation. The programme of consolidation was further stressed during the Fifth plan and a new course in man made fibre technology was introduced at the Textile Institute Kanpur. During 1978-79 the Kamla Nehru Institute of Science and

Technology was started at Sultanpur. This increased the number of institutions to eight with an annual intake of 1120.

85. *Development at diploma level*— There were 11 diploma institutions in the State imparting training in Civil, Electrical, Mechanical Engineering, Textile Chemistry, textile Technology etc. in the year 1950-51 with an intake of 655. By the end of the Second Five Year Plan, the number of institutions rose to 27 and the annual intake of students rose to 2,930. The programme of expansion was continued in the Third Plan, and four new institutions were started and the intake of existing institutions was increased. A girls' polytechnic was also established at Lucknow. To meet the special growing requirement of the leather industry, a Leather Institute was established at Agra, besides, the one already running at Kanpur. A Institute of Paper Technology was also established at Saharanpur with Swedish aid. As a result, by the end of the Third Plan, the total seats available rose to 4,860. During the Fourth Plan, new courses in automobile engineering, refrigeration and air-conditioning, electronics and agricultural engineering were added and the number of seats in the institutes were increased to 6,240. During the Fifth Plan, ten polytechnics were started of which five were located in the hill region of the State and one in Bundelkhand. In the year 1979-80 three more polytechnics were approved of which two are in the hill districts. By the end of 1980-81 the seats available will increase to 8,320 while the number of polytechnics will be raised to 48.

86. *Courses at the certificate level*— The programme of Secondary Technical Schools was started in the year 1959-60 on the recommendations of the Government of India to make available trained and skilled workers to the industries. These courses are of 3 years' duration with Class VIII pass a minimum admission qualification. The Secondary Technical Certificate awarded by the Board of Technical Education, U. P., is now recognized as equivalent to Board of High School, U. P. The certificate is, however, not recognized under the Apprenticeship Act. The total number of Secondary Technical Schools now running is 12 with an annual intake of 860 students.



87. *Plan for 1980-85.* A new direction is proposed to be given to the technical education programmes during the Sixth Plan to motivate engineering graduates and diploma holders towards self-employment and entrepreneurship and schemes of training-cum-production centres, product development and management training have been introduced on a much wider scale. Stress will be laid on encouraging the students to learn practical skills. Under the new orientation, technical education programmes would play a useful role in transfer of technology to rural areas. For this purpose selected polytechnics would function as Community Polytechnics and act as focal points for transfer of technology to rural areas. Polytechnics would also participate in training of rural youth for self-employment.

88. In addition to the above programmes, emphasis had been laid on consolidation of existing facilities, modernisation of laboratories and workshops and also for diversification and for limited expansion with a view to reduce regional imbalances taking into account the likely manpower requirements. The State Government have proposed an outlay of Rs.1,600 lakhs during the 1980-85 plan of which Rs.410 lakhs is proposed for the hill region.

89. In the sphere of degree courses, the major thrust is towards consolidation and strengthening. It is proposed to restore the sanctioned intake of the universities to 450 at the degree level. Besides, three new diversified courses in computer technology, agriculture and rural technology and environmental engineering will be introduced with an annual intake of 35 students. It is also proposed to improve campus facilities, maintenance of computer centre, strengthening of library, instrumentation and testing centres, rural development centres, etc.

90. *Motilal Nehru Regional Engineering College, Allahabad*—It is proposed to restore the sanctioned intake of 250 from the present intake of 200 in this college. New diversified need based courses in computer science, industrial design, system engineering, rural engineering and architectural engineering are proposed to be

started during 1980-85. For quality improvement and to motivate the students for self-employment and for rural development, schemes for product development and training centre, village development, remedial courses for weaker students, facilities for games and sports are proposed in the Plan.

91. *H. B. Technological Institute, Kanpur*—The main emphasis laid in this institute also has been on consolidation, strengthening and development of continuing schemes from the previous years. New schemes such as degree course in pharmacy, a programme for interaction with industries, a centre for continuing education and rural industries development have been proposed in the 1980-85 plan. Provision has also been made for strengthening the degree course in leather technology started in 1978-79. New diversified course in Rubber Technology is also proposed. The total intake at the end of 1980-85 will be 260 from the present intake of 205.

92. *M. M. M. Engineering College, Gorakhpur*—Provision has mainly been made to consolidate the continuing schemes already sanctioned and to provide for staff, equipments, buildings, hostel facilities, staff quarters and other facilities which have not so far been provided. The institute has proposed a new scheme of running remedial courses for weaker students and to start a consultancy service cell. A new course of computer science with an intake of 10 is also proposed. The total intake will however remain at 150 as at present.

93. *Engineering College, Dayalbagh, Agra*—As elsewhere emphasis has been laid on consolidation and quality improvement of the existing courses. The intake of the institute will remain 60 by the end of 1980-85 plan as at present. Provision has been made for modernisation of laboratories, additional teaching staff, village development cell, consolidation of library and students amenities.

94. *Government Central Textile Institute, Kanpur*—During the Sixth plan, it is proposed to increase 10 seats in textile technology thus making a total of 50. In order to increase the efficiency of the

courses already running and to make them more effective, it is proposed to modernise the existing laboratories, workshops and library. Besides this, it has also been proposed to provide facilities for audio-visual aids. The scheme of students amenities, campus facilities, consultancy, research and testing centre as also village development programme have also been included in the 1980-85 plan.

95. *Pant College of Technology, Pantnagar, Naini Tal*—The main emphasis has been laid for providing staff, equipment, building and other facilities for the existing courses. Besides this, three new diversified courses—computer engineering, electronics and communication, planning and architecture have been proposed during the 1980-85 plan. The total intake at the end of the plan will be 130 from the present intake of 90.

96. *Kamla Nehru Institute of Science and Technology, Sultanpur*—The institute has been started recently and provision has been made for its development including provision for building, equipment and staff. The present intake is 50.

97. *Institute of Pharmacy*—In recent years, Pharmacy has assumed very great importance in the Drug and Pharmaceutical industry. In order to provide for training facilities of Pharmacists at all levels, it is proposed to set up an Institute of Pharmacy with an initial intake of 60 students.

98. *Degree course in Printing Technology*—It is also proposed to start a degree course in Printing Technology with an intake of 20 in 1980-85 plan.

99. *Diploma level*—At diploma level also, the main stress has been laid on consolidation of existing courses and provision has been made for completion of spill over schemes. Alongside a scheme for modernisation and replacement of obso-

lete equipment is being proposed. For proper control and supervision of the programmes, the Directorate of Technical Education is being strengthened. A provision is being made for a Manpower Planning Cell in the Directorate. Similarly provision has been made for strengthening of the Board of Technical Education which would, *inter alia*, be responsible for conducting a common entrance examination. The State Institute of Research and Development would also be strengthened. The scheme of training-cum-production centres will be expanded and it is proposed to sanction revolving funds to all the institutions to run production centres. The profits earned from training-cum-production centre be utilized in expanding the centre itself and for the development of the concerned institutions.

100. To enable proper placement of the students after training and to guide those interested in self-employment special training and placement cells have been proposed. Care would be taken to meet the special needs of the students belonging to the weaker sections of the society. A scheme for special tutorial classes for such weak students has been incorporated in the plan to assist them in improvement of their level of attainment.

101. *Special component plan*—Under various schemes of technical education, 18 per cent seats in admission are reserved for scheduled caste candidates, except at the Roorkee University, Roorkee where this reservation is 15 per cent. It is difficult to quantify separately the special component plan and hence overall consolidated expenditure on this account is expected to the tune of Rs. 350 lakhs during 1980-85.

102. *Physical programme*—As a result of the proposed additions in the intake of the students during the Sixth plan the targets would be :

Particulars	Item	Unit	Position at the end of 1979-80	Proposed Target for 1980-85
1	2	3	4	5
Degree course .. .. .	.. .. .	In take	No. 1120	1505
Diploma course .. .. .	.. .. .	In take	No. 8070	8640
Certificate course .. .. .	.. .. .	In take	No. 860	1100

**(3) SCIENTIFIC SERVICES AND RESEARCH,  
ENVIRONMENT AND ECOLOGY**

103. The Department of Science and Technology was established in the State in 1975-76. Subsequently, the Department of Environment and Ecology was created in 1976. These two departments were merged in 1978 to form the Department of Science and Environment. Policy guidance is provided by a State Board of Environment. Prior to 1977-78, the activities of the Department of Science and Technology were mainly restricted to (a) providing funds to U. P. Council of Science and Technology, an autonomous body, for supporting research work, and (b) the management of the State Observatory, Naini Tal. The scope of work of the Department was greatly enlarged in 1977-78 when it was made responsible for development of viable and appropriate technologies suitable for adoption in rural areas of the State.

104. The break-up of allocation of Rs.500 lakhs for the Sixth Plan (1980-85) amongst the above three activities of the department is as below :

Item	(Rs. in lakhs)
(a) Developmental activities of Department of Environment and Ecology	100.00
(b) Development of State Observatory, Naini Tal.	100.00
(c) Development of Science and Technology.	300.00
Total ..	500.00

105. *Developmental activities of the Directorate of Environment and Ecology (Rs.100 lakhs)*—Environment is a comparatively new subject which has still to find its due place both in the formulation and implementation of development plans. There is general acceptance at all levels that adequate provisions should be made for functions connected with preservation, protection and improvement of environment in all developmental plans and programmes. As a coordinating agency, the Directorate of Environment and Ecology oversees these functions in the State. General awareness of the importance of preserving environment and ecology, restoring or improving it at places where it has deteriorated, has yet to bring about action by different department to make adequate provisions for these purposes in their development plans. Expertise in planning

for ecological regeneration or improvement is also limited.

106. A multipronged attack on this problem is necessary which would, *inter-alia*, include the following action points—

(a) Preparation of a policy statement which would ensure that every agency pays due regard to environmental aspects. Directives would have to be given for the public and private sectors.

(b) Designing and introducing action for setting up intra-departmental Environmental Cells as well as an overall State level organisation for evaluation and review of the environmental impact of each project or action (legislative or administrative) proposed sponsored by any department of government or industry.

(c) Providing for enforceable restrictions on those projects and actions which tend to create severe adverse impact on the environment.

(d) Development environmental data banks and information transfer systems operated by the Directorate of Environment and Ecology.

(e) Providing environmental education which should permeate the entire fabric of society. It should include :

(i) Technical training of persons concerned with environmental issues ;

(ii) Awareness training for decision-makers and persons peripherally concerned with environmental issues ;

(iii) General environmental education in schools, colleges and of public in general and particularly of those intending to pursue careers in environmental science engineering ;

(f) Ensuring effective and comprehensive management of natural resources which should include, among other things, soil and water conservation, forestry, national parks, wild life and aquatic resource protection,

land use planning, pollution inventory, prevention of air, water and soil pollution, noise suppression, scientific exploitation of mineral resources consistent with ecological safeguards.

107. Since it is not as yet possible to make an accurate assessment of specific programmes, the proposed Sixth Plan for Environment provides for general activities already identified at the State level by the State Board and its Executive Committee, as also other activities that are proposed to be initiated during the plan period. As regards monetary estimates, only a broad assessment is indicated in the light of the observations made above. Detailed working estimates will be framed as various specific schemes take shape.

108. *Development of State Observatory, Nainital (Rs.100 lakhs)*—Till the end of the Fifth Plan, the Observatory was in a period of growth and consolidation. The basic aim was to optimise the use of acquired telescopes and to create viable research groups. The Observatory has now come of age and is recognised as a leading institution in India for research in astrophysics. By March, 1980, a total of about 190 research papers and 10 Ph.D. thesis had been contributed by the scientific staff in addition to the pioneering technological efforts in making optical, electronic and mechanical precision components for astronomical instrumentation.

109. The prime objective of the Observatory is the carrying out of research in branches of observational and theoretical astrophysics and also for this purpose to undertake relevant developmental projects in areas of astronomical optics, electronics and instrumentation, including telescope design and construction. While research in astrophysics is principally a pursuit of a pure science, the development of instrumentation leads to technological fall out.

110. During the Sixth Plan period, it is proposed to carry on with diversification of both instrumentation and research. In addition, it is proposed to begin work on the large 4-metre telescope which is to be completed by the end of the Seventh Plan. The specific schemes are as follows :

(a) *Personnel Requirement (Rs.11.10 lakhs)*—The expanding activities of the observatory will need additional and specialised personnel.

(b) *Development and Acquisition of Instrumentation (Rs.22.62 lakhs)*—Accessorial instruments like image intensifier tubes, colling units, filters and laboratory equipment will be acquired. This will improve and diversify the capabilities of existing telescopes leading to better research and development of more sophisticated instrumentation. To attain diversification in research and goals of technological self-reliance, the fabrication of coude-spectographs, interface data systems, infra-red and high speed photometers, automatic fast scanner, TV camera for 104 cm. telescope, Fabry-Perot interferometer, magnetographic registration facility and modern detection techniques would be undertaken.

(c) *Four Metre Telescope Project (Rs.33.64 lakhs)*—The proposed 4-metre telescope will enable tackling of the front line problems in the field of modern astronomy and also support basic research to enable India to keep itself at the frontiers of scientific development and to promote self-reliance. To economise on foreign exchange and to develop necessary expertise within the country, the telescope will be designed and fabricated in India with a minimum of imported components.

(d) *Support Facilities (Rs.6.40 lakhs)*—Exchange of ideas with other scientists working in identical fields is an extremely important part of scientific growth. It is necessary that scientific/technical personnel participate in relevant national and international conferences. For this a provision of Rs.2.70 lakhs is made. For dynamic growth it is necessary to acquire and update books and journals in the field of astronomy, other associated fields, and instrumentation. A provision of Rs.3.70 lakhs is made for this purpose.

(e) *Improvement of facilities for work and housing (Rs.26.24 lakhs)*—Proper facilities for work and housing lead to a better research and developmental environment. With this in view, extension and addition of functional buildings and also the improvement of existing roads at a cost of Rs.23.95 lakhs are proposed. Addition of a 75 KVA Generator, a telephone exchange and some protective works at a cost of Rs.2.65 lakhs are also proposed.

111. Research activities in the fields of stellar variability, stellar energy distribution galactic clusters, and the formation of molecules in the Sun will be continued. Efforts will be made to supplement the photometric observations with spectrographic ones and to reach fainter limits. It is expected that 125 research papers and at least eight Ph.D. thesis will be contributed by scientists during the Sixth Plan period.

112. Proposals for the period 1980–85 outlined above will be completed within a ceiling of Rs.100 lakhs.

113. *Council of Science and Technology*—Services of scientists and technologists and supporting staff required to carry out identified and approved activities for development of science and technology will be financed under this scheme at a cost of Rs.30 lakhs. This expenditure will be about 10 per cent of the total amount made available to the Council by the Government.

114. While the emphasis in R and D will shift to applied research mainly connected with development of appropriate technologies, it will be essential to continue the on-going programmes of basic research and also take up new projects which have a bearing on the problems of areas in which problems of development and transfer of technology are involved. Priority areas for such research and development work will be determined by experts in the field and through special studies. A provision of Rs.10 lakhs has been made for this purpose. It will be necessary for Council of Science and Technology to continue to utilize recognized institutions for carrying out major

portion of the work under this head.

115. The development of the State needs rapid exploration of its natural resources and assessment of their potentials. Conventional exploration methods are not adequate to keep pace with the requirements of growth. Employment of remote sensing techniques would help in quantitative assessment of dynamic phenomena particularly in the context of hydrological problems and changing environment. For the present, reliance will be placed upon data which will be available from the National Remote Sensing Agency through its collaboration with NASA. It has been decided that the Council of Science and Technology will act as the coordinating agency for the State for getting remote sensing data and processing it to an extent after which it could be utilized by the user departments and agencies. A data bank will be maintained regarding land use, forest cover, mineral and water resources, and studies will be undertaken for analysis and classification of data as required by user agencies. The remote sensing scheme will cost Rs.40 lakhs.

116. The Polytechnology Transfer Centre came into existence during 1979-80 as a joint venture of the Council of Scientific and Industrial Research, New Delhi, and the State Government. The Centre is a vital link for transfer of technologies to industry and rural development. It offers diagnostic services to identify scientific, technological and engineering needs of industry and ensures suitable assistance through relevant services of expertise. The Centre will build up expertise to deal with problems of different disciplines of industry for improving industrial performance. Provision proposed is Rs.10 lakhs.

117. The most important activity of Council of Science and Technology will be to develop and actually demonstrate suitabilities of proven technologies in respect of village, small scale and cottage industries. Due emphasis will also be given to develop suitable technology to improve productivity of such traditional crafts as are dying out on account of their having become non-competitive or out of date. Areas of assistance to specialised institutions for product development and redevelopment,

designing and engineering, upscaling to pilot plant and development of prototype will be assessed and necessary financial backup provided. Diagnostic studies will also be carried out in respect of the crafts and industries with particular reference to rural areas to be identified in future. Some of the programmes in operation include those for low cost housing, improved designs for cotton and woold spinning, and increasing the efficiency of extraction and prevention of inversion losses in mini-sugar technology. The scheme is proposed at a cost of Rs.190 lakhs.

118. *Documentation Centre*—An industrial technological information bank is necessary for pooling together the results of development efforts and research activities already undertaken and completed in different fields of Science and Technology. This is necessary not only to aid research work to be undertaken in the State by making information available about the research activities of other institutions but also to prevent dissipation of resources over work on subjects in which research work has already been done elsewhere. The information bank will collect and compile research data in respect of research done in other countries also. A well-equipped library will be attached to the documentation centre for use of research personnel.

119. *Museum of Science and Technology*—It is necessary to build up scientific temperament specially amongst the youth, and for this purpose dissemination of in-

formation about Science and Technology is essential. Museum of science will be of great educative value not only to students but to the public in general. A Planetarium is proposed to be added to it subsequently.

120. *Establishment of Prototype R and D Centres*—Some areas have already been identified, whcih will need the input of science and technology urgently. The strategy would be to identify institutions, Central, State or non-official organisations which can, with a minimum of financial input, help in the speedy research and development of identified activities. If the initial results are found encouraging further development of such research centres could be considered.

121. *Appropriate Technology Research Centres*—While the Council of Science and Technology, will largely take the assistance of already established centres in the development of appropriate technologies, there would be other areas of development where the Council of Science and Technology may decide to take up work on its own. Provision has, therefore, been made for identifying these centres in different parts of the State to take up some urgent research and prototype development in different regions.

122. An outlay of Rs.20.00 lakhs has been proposed for the schemes (i) documentation centre, (ii) museum of science and technology, (iii) establishment of prototype R and D centre, and (iv) appropriate technology research centre.

## CHAPTER 13

### MEDICAL, PUBLIC HEALTH, SANITATION AND WATER SUPPLY

#### (1) MEDICAL AND PUBLIC HEALTH

Health is a most important social input. The development of a society can be ensured if the citizens are healthy. Healthy manpower adds more mandays to the factory, field and office and thus increasing the working hours for gross production which in turn enhances *per capita* income of the nation. Provision of health care facilities are of fundamental importance. This principle has been reaffirmed in the international conference on Primary Health Care at Alma Ata, U.S.S.R. in September, 1978, which is now popularly known as Alma Ata declaration. The declaration to provide health care facilities for all by 2000 A.D. and further adds "The people have the right and duty to participate individually and collectively in the planning and implementation of Health Care Programmes." Primary health care addresses itself to the main health problems in the community, providing promotive, preventive, curative and rehabilitative services and accordingly it includes health education, proper nutrition, safe water supply and basic sanitation, maternal and child health care, family planning, immunization, control of diseases and provision of essential drugs with treatment of ailments.

2. The important components of health schemes are control and eradication of major communicable diseases, provision of curative, preventive and promotional health services followed by augmentation of training facilities to

different categories of medical and para-medical personnel with the aim to overcome shortages of qualified technical personnel and at the same time to improve the medical and public health services.

3. Planning for public health and medical services for the people of a big State like Uttar Pradesh is a complex problem due to considerable regional, intra-regional and rural and urban disparities which are characterized not only by differences in coverage ratio, but also in the relative distribution of indigenous, homoeopathic and allopathic services. The average number of hospitals, dispensaries per lakh population is the highest in hill region followed by Bundelkhand, Eastern and Central region, but in terms of average distance travelled to reach the medical care unit, Bundelkhand is relatively more backward. The average distance is lowest in the eastern region. Bed population ratio is also on higher side\* in hill region.

4. Planning for public health and medical care presents several other problems since difference in topography, climate, economic condition mode of living, the health and vulnerability to various disease of the people living in different areas shows marked variation. It does appear ironical that even though people living in villages or semi-urban areas are numerically more than those living in big cities but from the point of view of their vulnerability to diseases

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\*Annexure—I

as well as capacity to pay, they are very inadequately served. This pattern of services is being taken care of by paying more attention to the programmes which are devised for rural areas.

5. *Review of Financial and Physical Achievement*—A comprehensive study and analysis of expenditure and allocations for health sector and its percentage to the total outlay over periods of various plans is given below :

(Rupees in crores)

Plan	State Plan Outlay	Health Sector Outlay	Percentage	Health Sector Expenditure	Percentage w.r.f. to Health Sector Outlay
1	2	3	4	5	6
I Plan (1951-56)	153.00	5.58	3.65	4.70	84.22
II Plan (1956-61)	257.00	12.60	4.90	9.83	78.01
III Plan (1961-66)	530.00	28.14	5.30	24.71	87.81
Three Adhoc Annual Plan (1966-69)	433.54	14.97	3.45	15.21	101.00
IV Plan (1969-74)	965.00	35.50	3.68	31.89	90.00
V Plan (1974-79)	3012.50	35.83	1.18	35.43	99.00
Annual Plan 1978-79	750.00	11.20	1.49	11.15	99.55
Annual Plan 1979-80	810.00	17.00	2.09	17.02	100.11

6. As would be evident from above the provision of outlay in case of health sector as compared to that of State Plan outlay was the highest (5.9 per cent) in Third Plan and the lowest (1.18 per cent) in the Fifth Plan period. It is needless to emphasise that steady decline in allocation of funds for the health Sector has retarded the pace of development

of health development activities in this State.

7. The comparative picture of the availability of health and medical care services in the State is far from satisfactory and continued to be low as against the prescribed norm. This would be evident from the data below :—

(1) Doctor Population	UP.	India	Prescribed norm
(a) Beginning of Fifth Plan	.. 1:6674	1:4300	1:3500/3000
(b) Present	.. 1:5050	1:3622	
(2) Nurse Population Ratio	U.P.	India	Prescribed norm
(a) Beginning of Fifth Plan	.. 1:16000	1:6400	1:5000
(b) Present	.. 1:1200		
(3) Nurse patient	.. 1:10 (over all)	—	1:3 (Teaching Group) 1:5 (Non Teaching Group)
(4) A.N.M. population Ratio			
(a) Beginning of Fifth Plan	.. 1:40000	1:11700	1:10000
(b) Present	.. 1:10.000	N.A.	1:5000
(5) Bed Population Ratio—			
(a) Beginning of Fifth Plan	.. 0.47/1000	0.49/1000	1/1000
(b) Present	.. 0.53/1000	0.72/1000	—



8. *Review of Progress during Fifth Plan and Annual Plans 1978-79 and 1979-80*—During the fifth plan period special emphasis was laid on providing health services in rural areas through minimum needs programme. Broad strategy has been the establishment of 8—10 such centres in a P. H. C. covering a population of 10,000, upgradation of one out of every 4 P.H.Cs. in to 30-bedded hospital, and raising the allotment of medicines at the P.H.Cs. consolidating and improving the district and medical college hospitals through augmentation of specialist cadres and equipment and eradication and effective control of communicable disease. Due to constraints of funds the health and medical services could not be taken up at the desirable scale.

9. *Minimum needs programme*—During fifth plan, as against the proposed objective of construction of buildings of P.H.Cs. and sub-centres sanction was accorded to 78 against a back-log of 381 P.H.Cs. by the end of 1979-80. Similarly against a target of upgrading 220 P.H.Cs. out of 875, only 9 P. H.Cs. were upgraded into 30 bedded overall hospitals in the state. Consequently a huge back log of construction of 303 P.H.C. buildings is to be covered. In addition, 61 P.H.Cs. more have been sanctioned during 1979-80. Similarly, the target for upgrading 211 P.H.Cs. is to be achieved and these would be taken up during the Sixth Plan. As regards the construction of Sub-centres, the norm of one sub-centre for 10,000 population has been revised and now it is proposed to provide one sub-centre over 5,000 population in plains and over 3,000 population in Hill and Bundelkhand Regions of the State for rendering better services in the rural areas.

10. *Community health workers Scheme*—Community Health Volunteers Scheme sponsored by Government of India was launched in this State on October 2, 1977 covering 184 P.H.Cs. in its first phase. Under the scheme one community health worker, now known as volunteer, is selected for every village or a group of villages having a population of 1,000 and after a suit-

able short-term training is deployed for providing minimum health services to the community. By the end of 1979-80, 542 P.H.Cs. were covered under this scheme for providing elementary health aid in the remotest areas through the agency of 45,935 voluntary workers. This scheme was cent per cent centrally assisted upto 1978-79 but from 1979-80 it is being financed on 50 : 50 basis between Government of India and State Government.

11. *Control of Communicable Diseases*—Tuberculosis, gastro-intestinal disease, malaria, filaria and worm infestations take a heavy toll of human health and are major causes of morbidity and mortality. Emphasis was, therefore, laid on control and eradication of these diseases. State Government during the period 1974-79 met only the operational cost of these programmes, except small-pox and leprosy which were 100 per cent centrally sponsored. Since 1979-80, the financing pattern between the Centre and the State is 50 : 50 basis.

12. Under the control of communicable diseases Programmes, Small-pox has been completely eradicated and to check the resurgence of malaria revised strategy of control of disease was introduced in 1977. Spray of insecticides is being carried out in the areas where average positive index (API) is 2 or more. Community involvement in the control programme has been ensured by way of setting-up fever treatment depots, drug distribution centres at local level and distribution of drugs through teachers, gram pradhans etc.

13. For filaria control, six filaria survey units established during 1974-75 have been doing survey in the districts to find out the strength of population exposed to the risk and in all 18 filaria control units are presently functioning in the State. Two cholera combat teams are at Lucknow and the other at Varanasi are functioning in the State. For the control of tuberculosis 55 districts of the State have been covered with T. B. clinics and equal number of teams are also functioning for B.C.G.

vaccination. Indoor treatment facilities to the T.B. patients have also been augmented by providing 320 more isolation T. B. beds in the existing hospitals. T.B. beds in the state have now gone upto 3,437 beds in which 725 T.B. beds belong to voluntary organizations. At present four Government T. B. sanatoria, 14 T. B. hospitals, one T. B. demonstration and training centre-cum-chest institute and rehabilitation centre and several number of T.B. wards are catering to the needs of patients. Leprosy control programme was launched with a revised strategy in the fifth plan and considerable expansion of the scheme has been achieved\*

14. The programme for the prevention of blindness was launched more vigorously in the later part of fifth plan. A number of P. H. Cs. district hospitals, 2 medical colleges were provided extra inputs in the form of staff and equipment to launch the programme for the benefit of the population of the rural areas. Besides, Aligarh, Sitapur and Kanpur eye relief societies which are running a number of eye hospitals in the state and are carrying out eye relief work were given substantial financial aid during the period to augment their resources. For the control of sexually transmitted diseases 17 S.T.D. clinics which were established prior to the fifth plan are functioning in the State. In order to enforce the provision of the adulteration of food and manufacture of spurious drugs Act, the enforcement machinery has been augmented. Analytical Laboratory constructed at Varanasi has now been provided with staff and equipment to supplement the existing facilities for analysis.

15. Regarding the promotion of environmental sanitation in the state, a scheme of construction of combined latrine in Mal block of Lucknow has been started since 1979-80 on pilot basis.

16. *Hospitals and dispensaries*—Regarding the improvement in the medical care services in the State doctor population ratio which was 1 : 6674 at the start of the fifth plan has now im-

proved to 1 : 5050 at the end of 1979-80 against the recommended norm of one doctor over 3500/3000 population ; bed population ratio, which was 1 : 2120 at the beginning of the fifth plan, has touched the figure of 1 : 1890 at the end of 1979-80 against the desired norm of one bed over 1000 populations ; hospital/PHC/dispensary population ratio, in the state at the beginning of fifth plan was 4.53 per lakh of population which has improved to 4 : 91 . *Per capita* expenditure on medical health and family welfare services during 1974-75 was 5.13, which has reached the figure of 10.28. The hospital/dispensaries and beds have considerably increased during the fifth plan and in subsequent annual plans.\*\*\* Adequate efforts have also been made to provide specialist treatment facilities in as many hospitals as may be possible\*\*\* Establishment of Laxmipat Singhania Institute of Cardiology, Kanpur is a significant achievement in the State medical services. J. K. Institute of Radiology and Cancer Research has also been strengthened now by providing additional inputs in the form of staff and equipment so as to make it render better service to the public . Treatment facilities as well as rehabilitative service to mental patients are provided through 3 big hospitals at Agra, Varanasi and Bareilly. Provision of these services has also been made in Medical college, Lucknow by establishing a mental health wing.

17. *Medical Education*—There are 9 Medical Colleges (2 of Government of India) with an intake capacity of 908 students for M.B.B.S. and 40 students for B.D.S. courses in the State. In the beginning of Fifth Plan intake capacity was 1058 for M.B.B.S. course which was reduced to 908. The main emphasis was on the consolidation of existing medical colleges by providing extra inputs in the form of staff and equipment so as to bring them up to the standard prescribed by Medical Council of India but due to constraint of resources a lot remains to be done in this regard. Some salient achievements may be counted

as establishment of microbiology department in 6 medical colleges, post-graduate departments in surgery and medicine at medical college, Allahabad, intensive coronary care units at three places, establishment of 200 additional beds in Medical College, Meerut, additional funds for improving library services and provision of cobalt unit at Medical College, Gorakhpur. From the year 1978-79, medical education is being given new orientation by involving medical colleges in the community health services and providing training to the M.B.B.S. students in the community health needs so that they are able to meet the needs and aspirations of the community. 3 P.H.Cs. have been attached to each medical college along with mobile units.

18. *Training Programme*—For the training of para-medical workers, various training centres, such as, eleven general nursing training centres, one nursing college, four pharmacist training centres, four health visitors' training centres, forty-four A.N.M. training centres and two health inspectors training centres have been opened to cater to the needs of training in the State. Training facilities for the senior officers of the department were also provided.

19. *Indian System of Medicine and Homoeopathy*—Efforts were made to strengthen, expand and improve the standard of Indian system of medicine and homoeopathy by providing additional inputs. Hospitals and dispensaries of both the systems were established during the period under review. The significant achievements made in this system have been rationalisation of

pay scales of Ayurvedic/Unani doctors, enforcement of drugs Act, provincialization of colleges, strengthening of Directorate, expansion of the facilities for the training of homoeopathic compounders and bringing the manufacture of Homoeopathic medicines under the purview of Drug Act.

20. *Employees State Insurance Scheme*—Medical and health facilities to the factory workers are provided under this scheme. Services are rendered through the hospitals and dispensaries which are 97 in number. The Service rendering units have now increased to 12,218 in which 106 are static, 11 mobile and 5 big hospitals with 736 beds. Total bed strength under E. S. I. Scheme is about 1,310 beds in various hospitals spread over the state. The services under the scheme have also been extended to the hotel, cinema and transport organisation workers. Employees getting pay of Rs. 500 to Rs. 1,000 have been covered. Provision of medicines has also been raised from Rs. 16.00 to Rs. 30.00 per insured unit. The expenditure incurred on this scheme is shared between State Government and E. S. I. Corporation of India.

21. *Family Welfare Programme*—The national objective was to reduce birth rate to 30 births per thousand population per year by the end of fifth plan and to 25 births per thousand population by end of 1983-84. In view of the above objective, vigorous efforts were made to perform more sterilization operations and by I.U.C.D. insertions during fifth plan period. Method in used and achievements are as under.

(in Lakh number)

Year				Sterilisation	I.U.C.D.	Conventional contraceptive
	1			2	3	4
1974-77	..	..	..	10.32	5.20	9.81
1978-79	..	..	..	0.29	1.99	2.02
1979-80	..	..	..	0.56	2.22	3.03

Medical Termination of Pregnancy Act was enforced during 1972. During fifth plan (1974-78) total M. T. D. done were 53,782 Similarly, 65,332 M.T.P during 1978-79 and 84,393 during 1979-80 were also done. The family welfare programme has now been integrated with health, maternal and child health services. To make the small family norm acceptable to the people greater emphasis has been laid on M.C.H. services in the State.

22. Appraisal of the past experience has revealed that objectives set forth under the minimum needs programme could be met only partially. The desire number of sub-centres were made available but the programmes of upgradation of P.H.Cs. and construction of buildings of P.H.Cs. and sub-centres suffered a great deal. Buildings not only of the P.H.Cs. and sub-centres but also of other institutions, such as, medical colleges, hospitals/dispensaries etc. could not be constructed. There is thus a huge back log of construction work of these buildings which mostly are in rural areas. The shortage of nursing personnel also continues. In respect of communicable diseases also there is no arrangement for collection of data in respect of morbidity and mortality rates with the result that we still lack a scientific base for health planning. The medical colleges have also not been staffed and equipped to the desired standards as laid down by Medical Council of India. Regional and inter-regional imbalances are still persisting and need urgent attention. In recent years there has been considerable re-thinking in social, technological and philosophical basis of development of health services in the community *vis a vis* State. There is some dissatisfaction with the existing model of medical and health care services with its emphasis on hospitals, specialities and highly trained doctors in urban areas. It is being realized that it is this model which is depriving the rural areas and poor classes of society of even the minimum benefits of goods health and medical care services.

23. *Objective and Strategy of Sixth Plan*—Keeping in view the needs of the

health services and the achievements made so far the following objectives are proposed for Sixth Plan 1980-85;

(1) Strengthening the health services and their expansion in the rural areas where facilities at present are still very inadequate.

(2) Minimum needs programme has to be adequately provided for within the overall frame-work of available resources.

(3) Health care as such has been viewed as a total system consisting of appropriate steps in environmental sanitation, supply of safe drinking water, nutrition, health-education, immunization and family planning.

(4) To achieve the World Health Organization (W.H.O.) objective of "Health for all by 2000 A.D."

(5) Greater attention to mitigate the regional imbalances, according preference to areas having concentration of scheduled caste/scheduled tribes and urban slums in the matter of coverage and location of health services.

(6) Main thrust has to be towards better capacity utilization and completion as far as possible of all schemes in hand. It is equally necessary to consolidate the existing infrastructure and to make it yield better result than hitherto.

(7) Greater attention is to be attached to the strengthening of the planning and monitoring aspect at the State and district levels.

(8) Specialities and super-specialities to be restricted to the barest minimum depending upon the most pressing demand.

(9) To consolidate the existing facilities under medical education and to augment according to needs of time.

24. *Minimum Needs Programme*—Priority will be given to complete the spill-over works and clearance of backlog. The backlog of construction of

303 P.H.Cs. other than 61 under spill-over works will be cleared during this plan. It is also proposed to construct the buildings of 148 P.H.Cs., besides 63 under spill-over works and to undertake the commissioning of all the 100 PHCs for the purpose of upgradation. Additional sub-centres to the tune of 7,000 have been proposed for establishment in order to provide a sub-centre over 5,000 population in plains and 3,000 population in Bundelkhand and Hill regions of the State. It is also envisaged to construct the buildings of 1,000 sub-centres against a back-log of 6,036 sub-centre buildings. Another important scheme envisaged is the establishment of 100 additional PHCs. in other to make a headway in the direction of achieving the norm of one PHC over 50,000 population in plains and 30,000 in Bundelkhand and 20,000 in hill region. Provision has been made for the renovation, expansion, electrification and water supply arrangement in the existing PHCs. The scheme is being launched all over the State. On completion of these major programmes, health services will be considerably strengthened in rural areas and some headway would be made in the direction of achieving the goal of health for all by 2000 A. D.

25. *Control of Communicable diseases and Public Health Programmes*—The important schemes covered under control of communicable diseases are malaria, filaria, leprosy, T. B., Prevention of blindness etc. These schemes are on 50 : 50 sharing basis between the centre of the state government. The following new programmes are proposed to be taken up during 1980-85 Plan.

(a) Establishment of 10 filaria control units and 17 filaria clinics.

(b) Under malaria control programme provision of laboratory attendant at all the laboratories functioning at P.H.C.s District Headquarters, Divisional Headquarters and State Headquarters is envisaged besides the normal activities of the programme. It is also proposed to establish 13

more malaria units under urban malaria control programme.

(c) For the strengthening of T. B. Control Programme it is proposed to provide 250 T. B. isolation beds in various hospitals, construction of ten bedded 25 wards, establishment of State T. B. Centre at Lucknow; maintenance of T. B. Clinics, procurement of B. C. G. biologicals etc.

(d) Under the leprosy control programme, besides consolidating and strengthening of the existing structure it is also envisaged to establish 70 S.E.T. Units, 10 leprosy control units, 21 urban leprosy control centres, 46 leprosy wards and upgradation of 50 urban leprosy centres.

(e) Prevention of blindness and visual improvement programme will be expanded in 750 more PHCs, 41 district hospitals, 2 medical colleges by providing inputs in the form of staff and equipment. Also mobile units will be provided at 7 divisional headquarters.

26. In addition, schemes relating to strengthening of food and drug organisation by establishing new combined food and drugs laboratories at Meerut and Bareilly and constructing the building of public analyst laboratory at Lucknow, strengthening of State Health Institute at Lucknow and State Vaccine Institute, Patwa Danger (Naini Tal), provision of 24 epidemic vans, strengthening of health education bureau and construction of cold room for storage of vaccine under expanded Programme of Immunization would be taken up in the Sixth Plan 1980-85.

27. *Hospitals and Dispensaries*—The following schemes are proposed to be taken up during Sixth Plan 1980-85.

(1) Increase in 3,000 additional beds.

(2) Establishment of 25 intensive coronary care units.

(3) Establishment of E. N. T. sections at 42 places.

(4) Establishment of 8 plastic surgery burn units.

(5) Upgrading of 50 Tehsil headquarters hospitals by providing 50 beds and other basic specialities.

(6) Establishment of 100 Paediatric Units.

(7) Provision of ambulance at 60 places.

(8) Establishment of dental clinics at 69 places.

(9) Provision of full nursing scheme at 20 places.

(10) Yogic therapy units at 56 places.

(11) Establishment of 30 bedded 6 medical care units in KAVAL and big towns.

(12) Provision of centralized ambulance services in KAVAL towns.

(13) Expansion of Balrampur hospital and Civil hospital Lucknow.

(14) Provincialization of 50 hospitals/dispensaries/P.H.Cs.

(15) Construction of new 8 combined hospitals at district headquarters, 14 nurses homes, 40 mortuaries, 50 rural dispensaries, including staff quarters.

(16) Establishment of 50 male and female dispensaries in the rural areas.

(17) Completion of spill-over works.

*Expansion of Balrampur Hospital*—Balrampur hospital is a premier hospital at the State headquarters catering to the need of specialist treatment in various disciplines like Cardiology, neurosurgery, psychiatry, surgery, orthopedics etc. for thousands of patients coming from far flung places, especially from the rural areas of this vast state. But the facility at present available in this hospital are much inadequate to cope with the increasing number of patients. The existing Bed strength, equipment machinery operation theatre, O.P.D. etc. fall much short of the requirement and needs adequate strengthening in terms of staff, provision of modern equipment and expansion of the present old building is a paramount necessity. In

addition for providing better medical facilities to cardiac patients separate sound-proof cardiac wing with highly sophisticated equipments and increased bed strength of 60 bed is also proposed to be established. A dialysis centre will also be established with adequate staff and equipment to provide specialist treatment of kidney diseases. Residential facilities for medical and paramedical personnel is also needed.

28. *Medical education and Research*—Efforts would be towards consolidation of the existing medical colleges by removing discrepancies identified by Medical Council of India in case of staff, equipment and buildings. Another important scheme included in the plan is the provision of centralised services, namely central transfusion fluid preparation, central workshop for the repair and maintenance of equipments, central records and central laundry and establishment of neurosurgery has also been proposed in all the medical colleges. It is also proposed to establish post Graduate Institute of Medical Sciences at Lucknow.

29. *Medical College, Lucknow*—Schemes, such as, establishment of centre for cancer diagnostic and research in pathology department, gynaecology unit and urology unit in surgery department, expansion of endocrinology, psychiatry department, traumatic paraplegia unit, integrated paediatric centre etc. have been proposed. It is also envisaged to establish dialysis centre, expansion of neurology department, allergy unit, cardiac thoracic surgery unit, plastic surgery and cardiology department and to expand the faculty of dental science etc.

30. *Other Medical Colleges*—Establishment of dialysis centre, expansion of cardiology institute, microbiology department hospitals pharmacy and provision of additional staff, equipment and buildings. Expansion of cardiology and forensic medicine department in medical college, Allahabad, establishment of rehabilitation centre, cardiology section with intensive coronary care unit, microbiology department, cardiothoracic surgery unit Centre for tropical diseases and provision of private

and isolation wards in medical college, Gorakhpur, establishment of intensive care unit, extension of department of ophthalmology and expansion of radiology, department in medical college, Jhansi are some other important schemes which have been proposed during Sixth Plan period. It is also proposed to expand the department of human metabolism in medical college, Meerut. The present building of medical college, Agra is in the heart of the city and its expansion is not possible to meet the ever growing needs. Therefore, construction of new building of the college and hospital is proposed in the Sixth Plan.

31. *Training Programme*—It is proposed to consolidate the training Programme and introduce new schemes viz., degree course in Pharmacy, dental hygienist and mechanic training in Medical College, Lucknow. Establishment of 6 general nursing training Centres, mental health institute, Agra for the training of para psychiatric workers and to improve the training centres of X-ray technicians and Lab Technicians and Nursing College Kanpur.

32. *Indian system of Medicine and Homoeopathy*.—Expansion and strengthening of both the systems of medicine is very essential as they are gaining popularity in the State. It has been envisaged to establish 500 Ayurvedic/Unani dispensaries in rural areas and 10 hospitals each equipped with 25 beds in urban, provincialization of 10 dispensaries and raising the provision of medicines from Rs.3000 to Rs.10,000 in Ayurvedic/Unani dispensaries and hospitals. Also to establish a centre for the use of folk medicines in hill regions, centre for cultivation, collection and supply of herbs and drugs, Ayurvedic college and research institute for herbs and drugs and provincialization of Ayurvedic college, Handia, Allahabad, are proposed during Sixth Plan period. Under Homoeopathy system of medicine it is envisaged to establish 300 Homoeopathic dispensaries, construction of building of the State national homoeopathic medical college, and hospitals Lucknow. Provincialisation of 15 non-state homoeopathic medical colleges and to undertake the construction of some homoeo-

pathic dispensaries which are functioning in privately owned buildings.

33. *E. S. I. Scheme*—Under the scheme establishment of 14 E. S. I. dispensaries, 8 E. S. I. hospitals 3 regional offices, Blood bank at E. S. I. Hospital, Pandunagar and splitting up of twenty larger E. S. I. dispensaries and coverage of new sectors of employment such as cinema, hotel and restaurant etc. have been proposed.

34. *Other Programmes*—The schemes relating to strengthening of directorate, grant-in-aid to voluntary organizations taking part in delivery of medical and health services are proposed. Some new schemes such as strengthening of engineering cell, central medical store of drugs, finance and account organization, health intelligence cell, provision of 112 diesel generators in hospitals and construction of residences for the staff of directorate, are proposed to be taken up during this Plan period.

35. *Family Welfare*—programme continues to receive highest priority in the Sixth Plan also. It is being carried out according to the existing policy vigorously on absolute voluntary basis with no room what so ever for compulsion, coercion or force. The ultimate goal of the Programme is to reduce the birth rate to 30 per 1000 population at national level through various methods of family welfare. Greater emphasis would be laid on promotion of maternal and child health services, intensification of educational activities, mobilisation and active involvement of local leadership and consolidation of existing service organisation for efficient delivery system.

36. Monitoring and evaluation of schemes is of equal importance as their formulation and implementation due to lack of proper arrangement of staff monitoring and appraisal of the schemes is not properly done in the department. It is proposed to establish a monitoring and evaluation cell during the Sixth Plan period.

System of collection of health statistics, specially mortality and morbidity data is also not done effectively as there

is no specific organisational wing of the monitoring cell at the district headquarters. Thus great difficulty is being felt in the field and proper feeding back is not possible, a separate scheme has been included in this plan to improve the working in this respect.

37. *Proposed level of Health Services by the end of Sixth Five Year Plan*—As has been indicated in the foregoing pages that main emphasis has been laid on expanding health services in rural areas to the maximum possible extent during Sixth Five Year Plan. This is supported from the fact that as much as Rs.163.00 crores on the total Health Plan outlay of Rs.302.50 crores has been allocated to the programmes formulated for rural areas. Besides the above allocation of rural areas considerable funds will be spent in these areas under various schemes such as control of communicable disease viz. malaria, leprosy, T. B. prevention of blindness etc. during the proposed plan. The investment of this large sum in rural areas will not only improve the health services but will also contribute to mitigate the existing imbalances in urban and rural areas. It is also envisaged that number of hospitals/dispensaries will go up from 4183 to 5216 at the end of Plan, P. H. Cs will rise from 907 to 1007 and sub-centre from 7640 to 14640. Increase in bed strength will be made available at one bed over 1575 population at the end of plan in place of present one bed over 1890 population. Doctor population ratio will also be improved from 0.20 doctor to 0.22 doctor over one thousand population.

38. *Outlay proposed for Sixth Plan 1980—85*—An outlay of Rs. 302.50 crores has been proposed for the various medical and health schemes. The sub-sector-wise outlay proposed are indicated below:—

	(In crore Rupees)
	Outlay proposed for 1980—85
1. Minimum needs programme	105.00
2. Hospitals and dispensaries	71.07
3. Control of Communicable diseases	46.32
4. Medical Education and Research.	53.00

5. Training Programme	1.30
6. Indian System of Medicines and Homoeopathy.	20.00
7. E.S.I.	0.83
8. Other Programmes	4.98
	302.50

39. *Special component Plan--1980—85* Consistent efforts have been made under the various plans to look after the health needs of the entire population. Scheduled caste population provided through the institutions established in rural and urban areas of the State. The service are of such a nature that they cannot be reserved for any particular group of persons. Care will however be taken in the matter of location of dispensaries in predominantly Scheduled Caste areas. Keeping the above aim in view, the scheme proposed during the Sixth Plan would give maximum coverage in providing medical and health care to the members of Scheduled castes. An outlay of Rs. 1263.00 lakhs is proposed for the special component Plan for the Sixth Plan period. It is envisaged to upgrade 30 P. H. Cs. into 30 bedded rural hospital in the predominantly Scheduled caste areas.

## (2) SEWERAGE AND WATER SUPPLY

40. The drinking water supply scheme was started in 1971-72 and was included under Minimum Needs Programme in the Fifth Five Year Plan as safe and potable drinking water and a neat hygienic environment are two of the basic requirements for healthy living. Hence, it was considered necessary to provide adequate quantity of safe and potable drinking water through piped water supply and importance was attached to development of suitable sewerage facilities and solid waste disposal system. In urban areas, it is essential to provide underground sewerage system to put an end to the present system of manual transportation of human excreta. The U. P. Jal Nigam is implementing the Schemes of piped water supply and sewerage. While Gram Vikas Vibhag aims at providing drinking water facility to Harijan basties in the rural areas of the State through construction of wells and diggies.



41. (a) *L.S.G.E.D. (U. P. Jal Nigam)*  
According to 1971 census report, in the year 1971 U. P. had a population of about 90 million, *about 85 per cent of which lived in 1,12,561 villages and about 15 per cent in 293 urban townships*, including the five Corporation towns of Kanpur, Agra, Varanasi, Allahabad and Lucknow. A survey carried out by LSGED in 1971 and 1972 revealed that of the above 1,12,561 villages, 35,506 villages suffered from drinking water scarcity.

42. Piped Water Supply was first introduced in the State in the above five major towns about the year 1890. Subsequently some more towns were provided with piped water supply systems but for several years after Independence the development of water supply and sewerage sector did not make much

progress. The National Water Supply and Sanitation Programme was launched by the Government of India in the year 1954 and an allocation of Rs. 11 crores was made in the First Five year Plan for development of Water Supply and Sewerage sector in the country. Thereafter more and more allocations were made for the sector in the subsequent Plans. The allocations made under these Plans for the whole country and the share of Uttar Pradesh in these allocations have been shown in the following table. The table also shows the number of towns in which piped water supply and sewerage systems were introduced and the number of villages that were covered with piped water supply systems in the State up to the end of the Plan periods:

Serial no.	Plan	Total Allocation for the sector in the country (Rs. in crore)	Allocation for U.P. (Rs. in crores)			Share of the State (percent of national allocation)	Progress up to the end of the Plan		
			Urban	Rural	Total		Urban Water supply (No. of towns covered)	Urban Sewerage (No. of towns covered)	Rural Water supply (No. of villages covered)
1	2	3	4	5	6	7	8	9	10
1	First Five Year Plan.	11	6.65	0.01	6.66	60.5	73	17	Nil
2	Second Five Year Plan.	114	4.89	0.15	5.04	4.4	74	17	37
3	Third Five Year Plan.	116	0.58	2.04	11.62	10.0	132	18	164
4	Three Annual Plans. (1966-69)	106	4.47	6.12	10.39	10.0	44	26	1437
5	Fourth Five Year Plan.	574	9.45	16.63	26.03	4.6	180	35	3824
6	Fifth Plan	750	32.53	30.68	63.21	8.4	375	39	6670
7	Two Annual Plans. (1978-80)	N.A.	28.85	51.69	80.54	N.A.	409	42	10056

43. It will be seen from the table that up to the end of the Fourth Five-Year Plan *i.e.* up to the year 1973-74 a limited headway could be made in this programme in Uttar Pradesh. It was, therefore, considered desirable to explore the possibility of obtaining assistance from International agencies like the World Bank, UNICEF, Financial Institutions, Government of other countries etc. to accelerate the development of this sector in the State. Negotiations

in this regard were started with the World Bank in 1972 and the Bank came forward with an offer of a financial assistance of 40 millions USS on two conditions *viz.* that the drinking water service should be run on modern commercial liner to make it self-supporting, and that the recovery of the loan made available to the local bodies in the shape of completed works should be entrusted to a central organisation with statutory powers.

44. At that time the framing of water supply and sewerage projects was done by the "Local Self Government Engineering Department" of the State. In June 1975 the State Government created an autonomous Corporation with the name "Uttar Pradesh Jal Nigam" by an act of the State Legislature and merged the Local Self-Government Engineering Department with the Corporation. The U. P. Jal Nigam is responsible to prepare State Plans for Water Supply, Sewerage and Drainage, prepare execute, promote and finance the schemes for the supply of water and for sewerage and sewage disposal; and to review and advise on the tariff, taxes and charges for water supply in the State.

45. Up to the end of the Fifth Plan the total National Expenditure figure on Water Supply and Sewerage sector was approximately Rs. 1675 crores out of which Rs. 123.36 crores was made available to this State. This means that although the population of U.P. is approximately 16 per cent of the total population of the country expenditure on water supply and sewerage sector works out to only 7.37 per cent of the total National figures. Due to the limited financial resources even the State Government could not provide sufficient funds under its Plans for this sector. The allocations are shown in the following table :

Serial no.	Plan	Expenditure on State Plans (Rs. in lakhs)	Expenditure in Plan for water supply (Rs. in lakhs)	% of the State Plan expenditure
1	2	3	4	5
1	First Five Year Plan	15337	..	..
2	Second Five Year Plan	23334	250	1.07
3	Third Five Year Plan	56063	1167	2.08
4	Three Annual Plans	45163	1081	2.39
5	Fourth Five Year Plan	116259	2501	2.15
6	Fifth Plan	209025	7578	3.62
7	Annual Plan (1978-79)	81561	3917	4.80
8	Annual Plan (1979-80)	81000	4217	5.21

46. Although the State Plan allocations have been increased but most of increase was absorbed in price rise and net physical targets were not directly in proportion to the expenditure in subsequent Plans. Such low expenditure has resulted in very slow growth of water

supply and sewerage facilities in both the urban and rural areas of the State.

47. *Urban Water Supply and sewerage schemes*—The progress on provision of urban water supply facilities during the Five-Year Plan in this State is given below :

Serial no.	Plan	Water Supply	Sewerage
1	2	3	4
1	Prior to First Five Year Plan	27	10
2	During First Five Year Plan	46	7
3	During Second Five Year Plan	1	..
4	During Third Five Year Plan	58	1
5	During Three Annual Plans (66—69)	12	8
6	During Fourth Five Year Plan	44	9
7	During Fifth Plan	188	4
8	During Two Annual Plan (78—80)	33	3
GRAND TOTAL		409	42

48. The present status\* of coverage of different class of towns with urban water supply and sewerage services clearly indicates that about 235 towns under water supply and 602 towns under sewerage facilities are yet to be covered. The population served by water supply and sewerage schemes are 88.8 per cent and 46.3 per cent respectively of the total urban population of the State. Thus a large population shall remain to be provided with safe water and waste water disposal facilities. Besides this, there is need to reorganise, extend or augment the existing water supply and sewerage systems to meet the needs of the growing population and growth of towns due to extension of the old limits of the townships.

49. *Rural Water Supply Schemes*—The Govt. of India laid down the following criteria for identifying the number of villages having drinking water supply problem:

(i) Where source of water supply is 1.6 kms. away from the village

in plain areas or 0.8 kms. in case of hilly areas.

(ii) Where source is 100 metres up or down from the village in hilly areas or water level is 20 metres below the ground level in plain areas.

(iii) Where the sources of water supply are susceptible to water borne diseases like cholera, typhoid, guinea-worm etc.

(iv) Where water sources contain excessive salinity, iron or fluorides.

According to the survey conducted in the year 1971-72 the number of such villages was 35,506 having drinking water supply problem in the State. The following table gives the expenditure incurred, during the last various Plans and the number of villages provided with piped water supply so far:

Serial no.	Plan	Expenditure incurred (Rupees in crores)	Percentage of expenditure of water supply sector	No. of villages covered
1	2	3	4	5
1	During the First Five Year Plan .. ..	0.01	0.15	..
2	During the Second Five Year Plan .. ..	0.15	2.98	37
3	During the Third Five Year Plan .. ..	2.04	71.56	127
4	During the three Annual Plans .. ..	6.12	57.79	1273
5	During the Fourth Five Year Plan .. ..	16.63	63.89	2387
6	During the Fifth Plan .. ..	30.68	48.54	2846
7	During Two Annual Plans (1978-80) .. ..	51.69	64.18	3386
Total .. ..		107.32	49.00	10056

50. It will be seen from the above figures that investment for Rural Water Supply Programme started in a big way from the Fourth Five Year Plan onwards. Prior to that the investments, specially that during First Three Plan periods, were negligible. Subsequently, greater emphasis was laid on Rural Water Supply Programme and its share in the

over-all Plan allocation for the Water Supply sector increased from 0.15 per cent in the First Five Year Plan to 64% in the Fourth Five Year Plan. However, due to escalation in prices, the higher allocation could not produce a proportionate increase in physical achievements. Up to March 1980 the Region-wise position of the number of problem

\*Annexure V.

villages, already provided with water supply and the number that remained

to be covered is give in the following table :

Sl. no.	Region	Total No. of villages (1971 census)	Total of Scarcity villages	Total villages covered up to March 80	Scarcity villages covered up to March 1980	Balance of scarcity villages as on 1-4-80
1	2	3	4	5	6	7
1	Hill .. ..	15,010	7,771	5,886	4,376	3,395
2	Bundelkhand .. ..	4,545	2,809	1,170	880	1,929
3	Central .. ..	15,530	2,926	138	62	2,864
4	Eastern .. ..	49,395	15,412	2,574	1,486	13,926
5	Western .. ..	28,082	6,588	288	197	6,391
	Total .. ..	1,12,561	35,506	10,056	7,001	28,505

51. *Rural sanitation*—No significant effort has so far been made to improved sanitation in the villages, Some effort in the shape of construction of drains and paving village roads have however been made by the community development department. The age-old practice of defecating outside still continues and it is responsible to a large extent for the insanitary conditions in the rural areas of the State. The Planning Research and Action Institute carried out in some villages the programme for providing water flushed latrines. The Programme was, however, confined to a very small number of villages.

52. *Proposed strategy for development of drinking water supply and sewerage services in the Sixth Five Year Plan (1980-85)*—The 31st United Nations General Assembly endorsed the recommendations of the United Nations World Water, Conference held at Mar-del-Plata, Argentina in March, 1977 and set the target to provide clean water and sanitation for all the people during the next decade. (1981-91).

53. India being one of the participating countries in the conference has committed itself to the water supply and sanitation programme during the decade 1981-1991. The Government of India/WHO. organised a Workshop on the International Drinking Water Supply and Sanitation Decade at New Delhi

from November 6 to 8, 1978, wherein countries of the South East Asia Region participated. Target, set unanimously by the Member countries in the said meeting is summarized below :

1. *Urban Water Supply*—100 per cent of the Urban population to be covered with basic minimum needs of safe water supply.

2. *Urban Sewerage*—80 per cent of the Urban population with either sewerage system of sanitary toilet connected to safe disposal systems.

3. *Rural Water Supply* - 100 per cent of the rural population to be covered with basic minimum needs of the safe water.

4. *Rural Sanitation*— 25 per cent or more of the population to be covered with sanitary toilets.

In the light of the above targets a rough assessment has been made in respect of funds required as follows.

54. *Urban Water Supply* The total present urban population of the State of Uttar Pradesh is about 197 lakhs living in 644 towns. Out of these 644 towns, 409 have already been provided with piped water supply systems by March 1980. At the beginning of the above Decade Water Supply will be available

in towns having a total population equal to 88.8 % of the total urban population in the State. It is proposed to provide Water Supply in all the remaining 235 town during the decade. The cost of providing water supply to these remaining 235 towns having a population of about 22.15 lakhs works out to Rs. 50.00 crores.

55. Even most of the existing water supply systems require extension/augmentation/reorganisation because of growth of population and spread of the towns. It is estimated that the extension/augmentation/reorganisation of the existing water supply systems may have to be done in about 190 towns having a population of about 87.87 lakhs during the decade. This will require an amount of Rs. 124.00 crores.

56. *Urban sewerage and disposal*—The present status of urban sewerage in the State is not very satisfactory as only 42 towns with a total population of about 91.39 lakhs could be provided with only a partial sewerage system by March 1980. Even the existing sewerage systems in these town cover hardly fifty percent of the population and in most parts of the towns branch sewers do not exist. Sewage treatment works having not been provided in any of the towns and raw sewage is applied directly on land for irrigation in almost all the towns.

(i) *Sewerage*—Rs. 180 crores would be required to extend existing partial sewerage facilities in 42 towns, including 5 KAVAL towns, to cover 100 per cent population and to reorganise them to suit the future requirements by laying branch sewers, modifying trunk sewers system and by providing intermediate pumping stations. This will cover a population of 91.39 lakhs of the above 42 towns. Besides covering these 42 towns with 100 per cent sewerage (including reorganisation) it is proposed to provide sewerage facilities in the remaining 11 Class I and 24 Class II towns. 25 towns of Class III to Class V which are either endemic for diseases like Filariā etc. or have faster growth are also proposed to be provided with sewerage facility during the decade. It is estimated that Rs. 120.00 crores

will be required for providing sewerage systems in these 60 towns covering a population of 41.22 lakhs.

(ii) *Sewage Treatment*—No sewage treatment is being done at present in any of the 42 towns covered with partial sewerage to prevent pollution of rivers. Sewage treatment facilities, particularly in towns where effluents are in large quantity and are being discharged into water courses, need to be given priority. Therefore, sewage treatment facilities are proposed to be provided in 60 Class I and Class II towns (having population of more than 50,000) in the decade with an estimated cost of Rs. 175.00 crores.

(iii) *Conversion of Dry latrines in flush latrines in towns having Sewerage*—The state has partial sewerage systems in 42 towns. Though the sewerage system was first introduced in the State in 1930 and the total length of sewer net work in some of the KAVAL towns is as large as few hundred kilometres the number of private house connections to these sewers is very meagre. Lack of house connections defeats the very purpose of a sewerage system since the waste water which often carries faecal matter continues to flow through open drains and nallas creating insanitary conditions while on the other hand due to lack of adequate discharge the sewers get silted and choked. To promote house connections to sewer systems the Government of India in an order dated the 19th July, 1967 offered a 25 per cent subsidy and 75 per cent loan assistance (recoverable in easy instalments) to house owners for converting the dry latrines into water flushed latrines and connecting these to public sewers. Under this programme 38,800 dry latrines have been converted into water-flushed latrines up to March 1980. The cost of converting all the dry latrines in use by a population of about 89 lakhs living in the 42 towns having sewerage system into water-flushed ones and connecting these latrines to the sewers would amount to Rs. 89 crores. It is assumed that about 25 per cent of this population will consist of economically weaker people who cannot afford the cost of conversion and connecting the latrines

without financial assistance, a provision of Rs. 22.25 crores is proposed to be made for this item in the Decade Programme.

(iv) *Provision of sanitary latrines in towns not having Sewerage*—Due to financial constraints it will not be possible to provide sewerage facilities in 542 towns in the near future and it is proposed to adopt low cost sanitary latrines in such towns. This is necessary to improve the sanitary conditions as well as to discontinue the unhygienic, unaesthetic and inhuman practice of manual handling of night soil.

57. The total cost of providing sanitary latrines in all such 542 towns having a total population of about 65 lakhs will amount to Rs. 81.25 crores. It is, however, expected that once the people are convinced about the advantages of these sanitary latrines the individual house-owners will instal these latrines themselves at their own cost. However, for providing a nucleus in the shape of demonstration projects and also to help economically weaker sections of the society a provision of Rs. 20 crores is being made in the Decade Programme. This will benefit a population of about 16 lakhs of economically weaker sections living in these towns.

58. *Rural Water Supply*—There are 1,12,561 revenue villages in Uttar Pradesh (1971 Census). Out of which 35,506 are scarcity villages. Till March, 1980, only 10,056 villages (including 7,001 scarcity villages) covering 50.8 lakhs population could be covered with piped water supply. This leaves approximately 94 per cent of the rural population which is yet to be provided with safe and adequate water supply. It is proposed to cover all the remaining villages with piped water supply during the Decade. It is estimated that to cover all the remaining villages with piped water supply an investment of Rs. 1,709 crores would be required at present day cost.

59. *Rural Sanitation*—The people living in rural areas suffer greatly because of insanitary conditions prevailing in the villages. Open defecation is widely practiced and waste water is allowed to

stagnate in pools. It is therefore equally important to provide the rural areas with better sanitation to derive the full health benefits of providing safe water supply to the people. In the beginning it is proposed to provide 25 per cent of the rural population, *i.e.*, about 210 lakhs, with sanitary latrines. The approximate cost of this programme works out to Rs. 105 crores. With this provision 50 per cent of the above population who are economically weaker and are not in a position to afford a sanitary latrine in their houses will be given subsidies. Community latrines will be constructed for those who do not have sufficient space in their houses.

60. *Financial and physical targets of Sixth Five-Year Plan 1980-85*—To prepare draft Sixth Five-Year Plan the State Government has set up a Working Group. The Group has recommended an outlay of Rs. 910 crores keeping in view targets of International Water Supply and Sanitation Decades. Against this requirement an outlay Rs. 513.62 crores out of which 305 crores is earmarked for Rural Water Schemes has been proposed for the programme for 1980-85. (Against this outlay programme wise financial break-up and proposed physical targets are being discussed below.)

61. *Urban Water Supply :—Fresh Schemes*—Out of 644 towns including 5 KAVAL towns, 409 towns have drinking water supply as on March 1980. Work in 88 towns is in progress. It is proposed to complete the works in hand and remaining 147 towns will also be covered during Sixth Plan period. It is estimated that the cost to complete the remaining works of 88 towns and providing water supply in 147 towns, covering population of 22.15 lakhs works out to Rs. 50.00 crores. The provision for this amount is being made in the Sixth Plan.

62. *Reorganisation|Extension|Augmentation Schemes*—Reorganisation of existing schemes has also to be carried out simultaneously to meet the requirement of population increase. Thus during the

Plan period reorganisation of water supply systems of 19 Class I, 10 Classes II and 30 Class II to VI towns is proposed. This will cover about 23 lakhs of population.

63. Reorganisation of water supply systems in 5 KAVAL towns already in progress under IDA programme will also be completed in this period. Under IDA programme some of the works were proposed to cater the needs only up to 1981. Reorganisation of these systems to meet further needs is also to be done during the Sixth Plan period. It is proposed that level of service shall be increased from 248 litres *per capita* at present to 270 litres *per capita* at the end of the Sixth Plan.

64. A sum of Rs. 25.50 crores is proposed to be spent during the Plan period under this programme out of which Rs. 15.00 crores is proposed for 5 KAVAL towns also. Out of remaining Rs. 10.50 crores, Rs. 5.00 crores are proposed to complete the on-going reorganisation schemes and Rs. 5.50 crores for opening of new Reorganisation/Extension/Augmentation schemes. Due to financial constraints the works of Reorganisation Extension/Augmentation to cover long period cannot be constructed for the whole town. Usually these are constructed as and when the demand arise in the form of providing T. W. or reorganising the distribution system in one or two zones of the town therefore a list of the towns cannot be given in forehand. However a list of few large schemes which are expected to be started in the plan period is enclosed.

65 (ii) *Urban Sanitation (a) Fresh Sewerage Schemes*—Sixty towns covering a population of 42.72 lakhs are proposed to be covered with sewerage system at an estimated cost of Rs. 120 crores in the decade. This is in addition to 42 towns already having partial sewerage facility, with a provision of Rs. 45.00 crores the above 60 towns may be provided with partial sewerage facilities by laying trunk sewers with required appurtenant works during the Sixth Plan and remaining works will be taken up in the next Plan.

66 *Reorganisation | Augmentation Extensions Schemes*—As already mentioned, Rs. 180 crores will be required to reorganise the existing partial sewerage system of 42 towns including 5 KAVAL towns to cater for the increased population and dimensional growth of towns as well as laying of branch sewer in the unsewered areas of these towns. Keeping in view constraints in the availability of materials a provision of Rs. 51.50 crores is being proposed in the Sixth Plan for towns wherever such works are urgently required to be carried out.

67. *Latrines Conversion Programme Towns Having Sewerage*—To continue and develop the programme of conversion of dry latrines in Flush latrines in cities where sewerage exists, and to give maximum advantage to economically weaker sections of the society it has been felt necessary to provide Rs. 5.00 crores in Sixth Plan. A population 5 lakhs is expected to be benefited under the Programme by having Flush Latrines in 42 towns and will improve the sanitary conditions of towns.

68. *Towns not having Sewerage*—In view of providing sanitary conditions and to discontinue the practice of manual handling of night soil, as mentioned earlier, a provision of Rs. 12.00 crores is being made in the Plan to help poor persons by giving subsidy of providing community latrines for those who do not have space of latrines in their houses and for developing infra-structure to encourage the masses to adopt these demonstrations projects will be constructed and technical assistance to those who wish to adopt it, will be rendered. A population of 11 lakhs is expected to be benefited in 542 towns.

69. *Rural Water Supply*—It is imperative that low cost solution “should be attempted for rural water supply schemes and piped water supply scheme could be resorted to only if there are no definite prospects of local sources being available”. The Working Group set up by the State Government has un-animously recommended that

as an ultimate goal the water supply should not only be safe but adequate also which could be achieved through a piped water supply system only. However construction of deep hand pumps specially in rocky areas, may be taken up as a low cost and as an interim solution. Thus the JAL NIGAM would advocate only piped water supply because maintenance of hand pumps for instance would mean a recurring problem and recurring cost which from the nature of water supply system cannot obviously be recovered from the users. The risk of contamination and lack of potable water near the surface are also other considerations.

70. The number of scarcity villages yet to be provided with piped water supply facilities on April 1, 1980 is 28505. To cover these problem villages along with almost half number of the other villages with piped water supply an outlay of Rs. 605 crores is required. During the Sixth Plan period with an earmarked outlay of Rs. 305 crores, 22150 villages covering population 79-80 lakhs is proposed to be covered out of which 2000 villages in rocky areas of Bundelkhand and Mirzapur, Allahabad and Varanasi districts having population not more than 300 persons will be provided with deep bore hand pumps with the available DTH rigs with an allocation of Rs. 5.00 crores. In Hill region about 7000 villages will also be covered with an approximate cost of Rs. 139.10 crores.

71. Out of Rs. 305 crores, planned allocation for rural water supply, a sum of Rs. 10.10 crores and Rs. 21.00 crores shall be spent under IDA and Dutch Credit Programme respectively.

72. *Centrally sponsored scheme of accelerated rural water supply*—Besides the above MNP programme of providing drinking water supply in rural areas, Government of India launched accelerated Rural Water Supply Programme in 1977-78, 198 Rural water supply schemes covering 2600 villages, about 1300 of which are scarcity villages, estimating Rs.38.25 crores were taken in this programme. Government of India gives 100% grant in aid for these up to March 1980, Rs. 16.77 crores have been spent and 700 villages have been benefited. Remaining Rs. 21.58 crores are expected to be released in Sixth Plan Period and all the schemes will be completed benefiting 2600 villages with a population of 25 lakhs.

73. *Special Tools and Plants*—Working Group has recommended that since speedy execution of Rural Water Supply Programme is sometimes handicapped due to dearth of the rigs, specially the rigs required for the construction of tube wells in border areas, provision for procurement of such rigs and other special tools will be included in the Plan.

74. It has also been stressed that the developed and extended suitable training facilities and the Research and Development Activities directed towards field problems should be given an important place. Necessary provision for Training and for Research and Development activities be made in the Plan.

75. A provision of Rs. 1.00 crore has been made in the Plan for the purchase of special T & P and Laboratory equipment for R & D and Training Facilities.



76. The scheme-wise outlay for 1980—85 and annual plans for 1980-81 and 1981-82 is given below :

*Outlay for 1980—85, 1980-81 and 1981-82*

(Rupees in lakhs)

Serial no.	Major Head of Development	Outlay Proposed for 1980—85 Plan	1980-81		Proposed Outlay for 1981-82 Plan
			Approved Outlay	Anticipated Expenditure	
1	2	3	4	5	6
<b>I—NORMAL PROGRAMME</b>					
<b>A-1 Urban Sewerage :</b>					
	(i) Fresh Schemes .. ..	4500.00	104.00	54.00	600.00
	(ii) Augmentation schemes .. ..	5150.00	233.00	183.00	600.00
	<b>Total Urban Sewerage .. ..</b>	<b>9650.00</b>	<b>337.00</b>	<b>237.00</b>	<b>1200.00</b>
<b>2 Urban Water Supply :</b>					
	(i) Fresh Schemes .. ..	5000.00	273.00	223.00	1400.00
	(ii) Augmentaion Schemes .. ..	2550.00	384.00	277.52	800.00
	<b>Total Urban Water Spply .. ..</b>	<b>7550.00</b>	<b>657.00</b>	<b>500.52</b>	<b>2200.00</b>
<b>3</b>	<b>Conversion of dry latrines .. ..</b>	<b>1700.00</b>	<b>50.00</b>	<b>50.00</b>	<b>150.00</b>
	<b>Total (A) .. ..</b>	<b>18900.00</b>	<b>1044.00</b>	<b>787.52</b>	<b>3550.00</b>
<b>B-1</b>	<b>Rural Water Supply (MNP) .. ..</b>	<b>29490.00</b>	<b>2620.00</b>	<b>2238.00</b>	<b>2740.00</b>
<b>2</b>	<b>Advance Plan assistance for repair of flood damaged and cyclone hit pipe lines. .. ..</b>	<b>..</b>	<b>..</b>	<b>900.00</b>	<b>..</b>
	<b>Total (B) .. ..</b>	<b>29490.00</b>	<b>2260.00</b>	<b>3138.00</b>	<b>2740.00</b>
	<b>Total Normal .. ..</b>	<b>48390.00</b>	<b>3664.00</b>	<b>3925.52</b>	<b>6290.00</b>
<b>II—I.D.A. PROGRAMME</b>					
<b>A-1 Urban Sewerage :</b>					
	(i) Fresh Schemes .. ..	..	..	..	..
	(ii) Augmentation Schemes .. ..	350.00	50.00	50.00	300.00
	<b>Total (A) .. ..</b>	<b>350.00</b>	<b>50.00</b>	<b>50.00</b>	<b>300.00</b>
<b>2 Urban Water Supply :</b>					
	(i) Fresh schemes .. ..	..	..	..	..
	(ii) Augmentation Schemes .. ..	1450.00	950.00	949.99	500.00
	<b>Total 2 .. ..</b>	<b>1450.00</b>	<b>950.00</b>	<b>949.99</b>	<b>500.00</b>
	<b>Total II .. ..</b>	<b>1800.00</b>	<b>1000.00</b>	<b>999.99</b>	<b>800.00</b>
<b>B-Rural Water Supply (MNP) .. ..</b>		<b>1010.00</b>	<b>500.00</b>	<b>499.99</b>	<b>510.00</b>
	<b>Total I.D.A. .. ..</b>	<b>2810.00</b>	<b>1500.00</b>	<b>1499.98</b>	<b>1310.00</b>
<b>C-Tools and Plants .. ..</b>		<b>100.00</b>	<b>..</b>	<b>1499.98</b>	<b>50.00</b>
<b>D-Provision for Water Pollution preventions and Control Board. .. ..</b>		<b>62.00</b>	<b>6.00</b>	<b>6.00</b>	<b>..</b>
	<b>Total .. ..</b>	<b>51362.00</b>	<b>5170.00</b>	<b>5431.50</b>	<b>7650.00</b>

*Outlay for 1980-85 1980-81 and  
1981-82*

77. *Constraints and Bottlenecks*—Fulfilling above target of Sixth Plan 1980-84 cement may cause some problem since there is an all over scarcity of it. In the last two years allocation of the 10% cement to the Jal Nigam was only 10 of the requirement. To some extent the difficulties could be avoided by stream lining the distribution. Which could be made according to the budget allocation for the different sectors thereby eliminating the disparities to the coverage under those sectors.

78. In certain areas of the state e.g. Bundelkhand and some eastern districts where tube wells are not successful water has to be drawn from the dams/reservoirs belonging to the Irrigation Department. It takes a considerable time to obtain formal consent of the Irrigation Department for the procurement of this water and the execution of the schemes is delayed. It seems necessary that Irrigation Department should release this water for drinking water supply schemes ungrudgingly as supply of drinking water must have a higher priority than Irrigation.

*Rural Drinkiny Water Supply Scheme  
of Gram Vikas Vibhag*

79. The Drinking Water Scheme of Gram Vikas Vibhag aims at providing Drinking water facility to all localities of Harijans and other backward classes in the rural areas of the State. This scheme was introduced for the first time in the year 1971-72 and was included under minimum needs programme in the fifth Five year Plan. Under this scheme Drinking water wells are constructed in the rural areas of the plain Districts and Diggis in the Hill Districts by the block staff on *amani* basis.

80. The Scheme was started in 1971-72 In the year 1971-72 and 1972-73 financial allocation were provided from Non-plan resources of the State. In the year 1973-74, financial allocation was given by the Harijan and Social Welfare department of the State, under its plan expenditure. In the same year an allocation of Rs. 3.95 lakhs was also made available specifically for implementaion of the scheme in Tribal areas by the Harijan and Social Welfare Department from its plan Head expenditure. The details of the fund allotted and workdone during the above three year are given as under :

Year	allocations (Rs. in lakhs)	Expenditure (Rs. in lakhs)	Work done up to			31.3.80 Handpump
			(Wells)	Diggis		
1	2	3	4	5	6	
1971-72 (Non-Plan)	200.00	200.00	6988	477	956	
1972-73 (Non-Plan)	100.00	100.00	3553	..	..	
1973-74 (Harijan and Social welfare department (Plan).	34.95	34.95	885	281	..	

81. Hand pumps were initiated only in the programme of the year 1971-72. In the rest of the years only wells and Diggis were constructed.

82. In the Fifth five year plan 1974-78 the scheme was included under Minimum needs programme and funds were made available by Gram Vikas Vibhag from

its plan allocations. The year-wise break up of the expenditure and the work done from 1974-75 to 1979-80 is as under :

*Year-wise Expenditure and Physical Progress*

Year	Plains		Hills	
	Expenditure (Rs. in lakhs)	Wells constructed	Expenditure (Rs. in lakhs)	Diggis constructed
1	2	3	4	5
1974-75 .. .. .	20.70	437	2.15	156
1975-76 .. .. .	15.00	527	2.50	104
1976-77 .. .. .	22.00	543	3.00	49
1977-78 .. .. .	200.00	744	3.75	67
1978-79 .. .. .	728.00	7164	12.00	78
1979-80 .. .. .	308.00	14,130 2652 H.P.	25.00	196
Total .. .. .	1293.70	23,545 2,652 (H.P.)	48.40	650

83. To assess the total number of Harijan bastis where facility of Drinking water was needed and to know the number of the required wells and Diggis, a survey was conducted through out the State in the year 1977. The survey revealed that a total of 29,061 wells in plain district and 2802 diggis in hills districts were needed to be constructed. From 1977-78 to 1979-80, 22038 wells and 341 Diggis have been constructed. In the year 1979-80 an amount of Rs. 308.00 lakhs for plain districts and Rs. 50.00 lakhs for hill districts was allocated by the Government out of this amount, target of construction of 3515 wells, 2691 Hand

pumps (Hand pumps in Deoria District.) and 500 Diggis was fixed against which with the expenditure of Rs. 333 lakh 14130 wells and 195 diggis were constructed and 2652 handpump had been installed.

84. For Sixth Five-Year Plan 1980—85 the Outlays and targets are being proposed in such a way that the anticipated new developing localities of Harijans in the rural areas could also be provided with the facility of drinking water. The year-wise breakup of proposed outlays and targets for the sixth plan 1980-85 is as under :

Year	Proposed outlay (Rupees in lakhs)			Proposed targets		
	Plains	Hills	Total	Wells	Hand pump	Diggis in Hills
1	2	3	4	5	6	7
1980-81 .. .. .	150.00	50.00	200.00	1669	2000	208
1981-82 .. .. .	290.00	60.00	350.00	3331	2000	250
1982-83 .. .. .	420.00	60.00	480.00	4366	2000	250
1983-84 .. .. .	420.00	60.00	480.00	4866	2000	250
1984-85 .. .. .	420.00	70.00	490.00	4866	2000	292
Total .. .. .	1700.00	300.00	2000.00	19,598	10,000	1250

85. For this scheme entire amount is sanctioned by the State Government from its plan resources. This scheme is not sponsored or financed by any other institution or by central Government.

86. *Tribal sub-Plan*—In the Fifth Five-Year Plan under this scheme, out of the total amount of Rs. 11.40 lakhs sanctioned to the Hill Districts. A total of Rs. 3.00 lakhs was specifically sanctioned for Five Tribal Blocks of three Hills districts. During 1978-79 and 1979-80

out of total amount of Rs. 62.00 lakhs was also sanctioned for the Hill districts a sum of Rs. 15.00 lakhs was also sanctioned for the tribal Blocks. These Tribal Blocks are Chakrata, Kalsi in Dehradun, Puraula and Nagaon in Uttar Kashi, Jaunpur in Tehri Garhwal, Muniary and Dharchula in Pithoragarh, Khatima and Bazpur in Nainital and Joshi Math in Chamoli District. The year-wise break up of allocation and achievement of Diggis is as under :

*Tribal Sub-Plan allocation and Physical achievement*

Year	Total sanctioned amount to hills distts. (Rupees in lakhs)	Sanctioned to Tribal Blocks (Rupees in lakhs)	Diggis in Tribal blocks constrected
1	2	3	4
1974-75 .. ..	2.15	..	..
1975-76 .. ..	2.50	..	..
1976-77 .. ..	3.00	1.50	5
1977-78 .. ..	3.75	1.50	36
1978-79 .. ..	12.00	5.00	11
1979-80 .. ..	50.00	10.00	10 4 wells in Bazpur
Total ..	73.40	18.00	62 Diggis 4 wells

87. In the plan 1980-85 the proposed outlay for hills districts and for 10 tribal

Blocks of six hill districts. enumerated above is as under.

*Outlay and Physical Targets for 1980—85 Plan*

Year	Proposed total outlay for hill districts (Rupees in lakhs)	Total proposed outlay for Tribal blocks (Rupees in lakhs)	Proposed target Hill districts	Proposed target for tribal blocks
1	2	3	4	5
1980-81 ..	50.00	6.00	208	25
1981-82 ..	60.00	10.00	250	41
1982-83 ..	60.00	10.00	250	41
1983-84 ..	60.00	10.00	250	4
1984-85 ..	70.00	10.00	292	41
Total ..	300.00	46.00	1250	189

88. The construction of wells and Diggis under this scheme is done through block agencies on amani basis. The local labourers are engaged on payment of daily wages. Thus during the days of construction of a well or Diggi, the local labourers also get a source to earn their livelihood.

89. To ensure the successful execution of works and implementation of the scheme the work under this scheme is monitored at different levels. At the block level Block Development Officer

and at district level Additional District Magistrate (Development)/Distt. Development Officer are responsible for it. To ensure that the works are constructed only in localities of Harijans and other weaker sections, the site of the well or Diggi is approved by Committee constituted at the District level. At the Divisional level, the monitoring is done by Dy. Development Commissioner and the State Level the Agriculture Production Commissioner himself monitors the progress of the scheme.

## Annexure—I

*Present Position of Health Services in the Various Regions*

Regions	Area in (kms.)	Population 1.3.77 (in lakhs)	Density of population	Govt. hospital and PHCS and dispensaries, (Allo., Hom., Ayu., Unani)	Hospital dispensary per lakh population	No. of beds (Allo.)	Bed population ratio 1000 population	Average distance covered (in kms.)
1	2	3	4	5	6	7	8	9
Hills ..	51,920	43.24 (4.4%)	85	669	15.47	4012	0.93	4.97
Eastern ..	82,820	363.93 (37.1%)	424	1194	3.28	12200	0.34	4.84
Bundelkhand	1,29,900	48.31 (4.9%)	164	234	4.84	2240	0.46	6.28
Central ..	46,410	174.62 (17.9%)	381	633	3.62	8976	0.51	4.83
Western ..	82,480	357.90 (35.8%)	428	1064	3.02	12110	0.34	4.97
State ..	2,98,620	982.00	334	3794	3.85	39538	0.40	5.00

Annexure II  
Achievements during various plan periods are depicted in the following table  
*Planwise Physical achievements*

Items	Position at the end of each Plan				
	I Plan	II Plan	III Plan	IV Plan	V Plan (1974-79)
1	2	3	4	5	6
<b>1. Hospital/Dispensary</b>					
(a) Allopathic .. .. .	1141	1368	1408	1706 (including 395 Non- State).	2013
(b) Ayurvedic/Unani .. .. .	567	613	683	1370 (including 471 non- State).	1043
(c) Homeopathic .. .. .	..	..	10	187 (including non-State.)	397
2. P.H.Cs. .. .. .	37	521	875	875+29 (Additio- nal PHC).	875+30 (Addi- tional PHCs.)
3. Sub Centres .. .. .	N.A.	N.A.	N.A.	7000	7597
4. Allopathic Beds .. .. .	16497	17314	22566	44257 (including non-State)	49307
5. Medical Colleges .. .. .	3	3	6	9	9
Intake Capacity .. .. .	325+20*	325+40*	688+40*	1058+40*	958+40*
<b>6. Control of Communicable Diseases</b>					
(a) B.C.G. Teams .. .. .	11	16	12	52	55
(b) T.B. Clinics					
(1) G.I. pattern .. .. .	..	19	39	11	9
(2) Upgraded .. .. .	..	..	20	50	55
(c) Leprosy Control Unit .. .. .	6	9	16	22	27
(d) Urban Leprosy Centres .. .. .	..	..	..	..	50
(e) Survey, Education and treatment units under Leprosy.	..	..	30	90	985
(f) S.T.D. (V.D.) Clinics .. .. .	6	8	10	17	17
(p) Malaria Eradication Units .. .. .	10	67	67	67	67
(h) Malaria Eradication Urban Units .. .. .	..	..	..	3	6

\*(BDS)

ANNEXURE III  
Increase in the hospitals and dispensaries

Serial no	Item	Position at the end of Plan				Increase during	
		IV Plan	V Plan 1977-78	1978-79	1979-80	V Plan	1978-80
1	2	3	4	5	6	7	8
<i>1. Hospitals/Dispensaries</i>							
<i>A. Allopathic</i>							
	I. Rural .. ..	847	976	1089	1164	129	188
	II. Urban .. ..	888	909	924	932	21	23
..	III. Primary Health Centres	875	905	905	907	..	2
	IV. Sub- Centres ..	7000	7310	7597	7640	310	330
<i>B. Ayurvedic/Unani</i>							
	I. Rural .. ..	1264	1457	1510	1564	193	107
	II. Urban .. ..	125	131	133	135	6	4
<i>C. Homeopathic</i>							
	I. Rural .. ..	116	235	264	299	119	64
	II. Urban .. ..	71	82	83	83	11	1
<i>2. Beds</i>							
<i>A. Allopathic</i>							
	I. Rural .. ..	7078	9224	9852	1028	2154	1056
	II. Urban .. ..	37687	38806	39455	39868	1219	1062
<i>B. Ayurvedic/Unani</i>							
	I. Rural .. ..	1538	2310	2526	2738	772	428
	II. Urban .. ..	1257	1407	1457	1462	150	..
<i>C. Homeopathic</i>							
	I. Rural .. ..	258	258	258	258	..	..
	II. Urban .. ..	321	321	321	321	..	..



## ANNEXURE IV

*Provision of specialities in district and womens hospitals*

Specialities	Position at end of			Increase during	
	IV Plan	V Plan 1977-78	1978-80	V plan	1978-79
1	2	3	4	5	6
1. Children Clinics .. ..	22	31	59	9	28
2. Orthopaedic Section .. ..	16	34	61	18	27
3. Emergency Services .. ..	23	31	109	8	68
4. Pathology Unit .. ..	43	52	64	9	12
5. Radiology Unit .. ..	43	54	63	11	9
6. Anaesthesiology Unit .. ..	57	67	110	10	43
7. Full Nursing Scheme .. ..	74	77	88	3	11
8. Plastic Surgery Unit .. ..	..	8	10	8	2
9. Ophthalmology Unit .. ..	6	11	30	5	19
10. Blood Bank .. ..	54	56	56	2	..
11. E.N.T. Section .. ..	6	7	16	1	9
12. Intensive coronary care Unit .. ..	..	3	8	3	5
13. Dental Clinic .. ..	56	68	79	12	11

Annexure—V  
STATUS OF URBAN WATER SUPPLY AND SEWERAGE SERVICES

(Population in lakh)

Serial no.	Class of town	No. as on 1-4-80	Population on 1-4-80	Water supply services						Sewerage services						
				Covered			Not yet covered			Towns partially covered			Approximately extent of coverage	Not yet covered		
				No.	Pop.	%	No.	Pop.	%	No.	Pop.	%		No.	Pop.	%
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Class I	30	103.30	30	103.30	100	..	..	..	19	82.98	80.33	50	11	20.32	19.67
2	Class II	30	20.10	30	20.10	100	..	..	..	6	3.60	17.91	50	24	16.50	82.09
3	Class III	80	23.30	80	23.30	100	..	..	..	8	3.41	14.64	50	72	19.89	85.36
4	Class IV	248	36.20	147	21.00	58	101	15.20	42	7	1.25	3.45	50	241	34.95	96.55
5	Class V	165	12.60	93	7.20	5	72	5.40	43	2	0.15	0.19	50	163	12.45	98.81
6	Class VI	91	2.20	29	0.65	29.5	62	1.55	70.5	..	..	..	..	91	2.20	100.00
Total		644	197.70	409	175.55	88.8	235	22.15	11.2	42	91.39	46.30	50	602	106.31	53.70

## CHAPTER 14 HOUSING AND URBAN DEVELOPMENT

### (1) HOUSING

#### (i) URBAN HOUSING

1. Housing is one of the basic needs of man. Good housing increases the productivity of worker and raises the standard and quality of life. Unfortunately, to day, housing conditions in the State are extremely unsatisfactory. The situation has assumed serious proportions in recent years and the problem is becoming more and more acute, with migration from rural areas. Till recently, no proper attention was being paid to the housing problem of these persons and slums have come up, people have squatted on Government land or where ever they could find vacant land, and old areas with low rental value have become over-crowded. In the most of advanced countries, the private sector has played a leadin role in the field of housing construction. Unfortunately, private investment in housing has been very restricted in the state due to a variety of factors such as the low per capita income, the rising construction cots, control and regulations etc. The limited private investment in the field of housing provides houses only for the people in the middle and higher income groups while the majority of persons belonging to economically weaker sections and low income groups are left out .

2. With a view to assist the target group in the population the Government of india had initiated during the fifties various schemes for social housing. While in the initial stages, various schemes of social housing were in the Central sector, these were subsequently tranferred to the state sector, and the progress slowed down due to the low priority given to the housing sector in the state budget because of paucity of fands. While the highest investment was 4.1 per cent of the total

outlay given to this state in the second Plan, it declined to 0.60 per cent in the Fifth plan. This is evident from the fact that only 68,169 houses were built under social Housing Schemes from plan funds in Uttar Pradesh between 1951 and 1979-80.

3. Almost all modern Governments the world over, irrespective of their political ideology or the stage of their economic development, have been providing-substantial finance for promotion of housing programmes. However in Uttar Pradesh, because of the paucity of overall resources and higher priorities which are being accorded to core sectors, it has not been found possible for the Government to accord priority to "Social and Community services" which include the housing sector. There is a need to consider housing as a basic human need and treat it as an industry and accordingly accord it a higher priority in the non-core sector.

4. Apart from the constraints of resources, the non-availability of essential building materials i.e. (cement, coal for burning bricks), steel etc., has further aggravated the problem. The present procedure of land acquisition is very cumbersome and invariably leads to delays and protracted litigations. In view of this the procedure for acquisition of land needs to be simplified. Rent Control Act has adversely affected the quality and the supply of housing by discouraging private investment. The smaller local bodies are also facing the problem of inadequate technical staff for formulation as well as implementation of the housing and urban development projects in the State.

5. *Strategy, for Sixth Plan(1980—85)*, The Working Group on "Housing and Urban Development" estimated a shortage of 9.80 lakhs dwelling units in the urban areas in of the State 1980 which is

likely to increase to 14.84 lakhs by the end of Sixth Plan. It is estimated that a sum of Rs2230 crores would be required to wipe out the above shortage even with the barest minimum accommodation. It is not possible to arrange for such a huge amount even by mobilising all possible resources in the public and private sectors. In order to enable the Social housing programme to ameliorate the living conditions of the poorer sections of the population, a selective approach has, therefore, to be adopted and priority fixed accordingly.

6. With the above back drop the following objectives have been proposed for the Sixth Plan:

(a) The Sixth Plan visualises a reorientation of social housing schemes in such a way as to benefit the poorer sections of the urban population. The social housing schemes would be so formulated as to cater largely to the needs of economically Weaker Sections within their affordability limits. This will be achieved by making allocations for various social housing schemes in proportion to the house-holds in each income group.

(b) For provision of housing to economically weaker sections the strategy envisages provision of 'Sites and Services' and 'Core Housing' programmes. These will enable the beneficiaries to own a shelter within their affordable limits and also to gradually improve the quality of accommodation through their own efforts thereby promoting and encouraging self-help.

(c) Housing for industrial workers would be provided in areas where large scale development of industries has been proposed in the Sixth Plan. The private industrialists would also be encouraged to provide housing for their workers. The pattern of assistance under the integrated subsidised industrial

housing scheme to private industrialists will remain unchanged during the Sixth Plan period. Use of substitute local building materials for housing of industrial workers will be adopted so that the cost of construction is within the prescribed ceiling costs.

(d) Public ownership of land is an important factor for an orderly growth and development of urban areas. A policy of large scale acquisition of urbanisable land in towns and cities would be adopted to implement housing and urban development schemes at reasonable costs.

7. *Programme for Sixth Plan (1980-85)*—Against the requirements of 14.84 lakhs houses, it is proposed to take up housing programme in public sector for at least 20 per cent of the above shortage and thus, about 3.25 lakhs houses will be constructed at the cost of Rs.451.20 crores. Various sources from which funds are proposed to be obtained during sixth plan are as follows :

	(In crore Rs.)	
(a) State Sector .. ..	..	₹8.84
(b) Implementing agency and public Contribution.		120.02
(c) HUD CO loans .. ..	..	236.14
(d) G. I. C. .. ..	..	25.00
(e) Private Employees .. ..	..	1.20
	Total ..	451.20

8. Out of the above funds, the social housing schemes would be formulated in such a manner as to be in proportion to the percentage of households in each income group. The existing income distribution is E. W. S. 75 per cent, L. I. G. 15 per cent, M. I. G. 9 per cent and H. I. G. 1 per cent. With this distribution it is anticipated that 20,250 dwelling units will be constructed under various social housing schemes in the State Sector during the above period and the remaining through Institutional Financial sources.

9. It has been realised that this State is lagging behind in raising financial resources from HUDCO. Steps have to be taken to speed up formulation of housing projects for financing by HUDCO. For this purpose, each of the Development Authorities will create "HUDCO Cell" so that shelf of projects may be prepared and

kept in the pipe. line. It is also proposed that 2, 14, 750 houses would be constructed through institutional finances mostly from HUDCO and G. I. C. during the Sixth Plan. The physical targets for the proposed State Plan together with efforts of institutional finance and other resources are given below :

*Physical Targets for Social Housing for 1980-85 Plan*

Serial no.	Scheme	State Plan (Housing)	Institutional Finance		Other* sources	Total	
			HUDCO	G.I.C.			
1	2	3	4	5	6	7	
1	Sites and Services	..	40,000	..	65,000	1,05,000	
2	Core Housing	..	20,000	..	20,000	40,000	
3	Housing for E.W.S. including slum clearance	12,250	56,500	31,250	..	1,00,000	
4	Low Income Group Housing Scheme	6,000	42,000	..	..	48,000	
5	Middle Income Group Housing Scheme	2,000	23,000	..	4,000	29,000	
6	High Income Group Housing Scheme	..	2,000	..	1,000	3,000	
	Total	..	20,250	1,83,500	31,250	90,000	3,25,000

10. *Outlays and targets and mobilisation of resources for State Plan*—The proposed and physical targets for

various housing schemes in the Sixth Five Year Plan 1980—85 are as proposed below :

*Outlays and Targets for Sixth Plan 1980—85*

Serial no.	Scheme	Proposed outlay 1980-85 (Rs. in lakhs)		Physical Targets 1980—85 (no. of dwelling units)	
		Total	of which L. I. C. share		
1	2	3	4	5	
1	Integrated subsidised Housing Scheme				
	(a) By P. W. D.	..	200	2,500	
	(b) By Private Industrialists	..	200	4,000	
	(c) By local bodies	..	350	4,750	
	Total	..	750	11,250	
2	Low Income Group Housing Scheme	..	1,080	6,000	
3	Middle Income Group Housing Scheme	..	660	2,000	
4	Land Acquisition and Development Scheme	..	3,094	3600 Hectare of development land.	
5	Slum Clearance/Improvement Scheme	..	50	1,000	
6	Seed Capital	..	1,250	..	
7	Rental Housing for State Government Employees	..	..	559	
	GRAND		6,884	5,586	20,250

\* This includes 4,000 houses for M.I.G. and 1,000 houses for H.I.G. under self financing scheme through Public contribution, 65,000 "Site and Services" and 20,000 "Core Housing" under I.D.S.M.T. and KanPurUrban Development Project under Urban Development Sector.

11. Out of the funds received from Life Insurance Corporation of India, 10 per cent of the funds is earmarked for 'Rental Housing Scheme for State Government Employees'. Hence, a sum of Rs.559.00 lakhs is being kept at the disposal of the Estate Department for the implementation of this scheme. During the Sixth Plan efforts will also be made to obtain funds from HUDCO for the housing projects worth Rs. 236.14 crores for the construction of 1,83,500 dwelling units apart from the State Sector. Out of these 1,16,500 will be for economically weaker section of the community including sites and services, 42,000 for low income group, 23,000 for middle income group and 2,000 for higher income group. Similarly, General Insurance Corporation of India will also be approached to contribute Rs.25.00 crores for construction of 31,250 dwelling units for economically weaker Section housing "Sites and Services" and "Core housing" units under Integrated Development of Small and Medium Towns and Kanpur Urban Development Project, Low Income Group and Middle Income Group housing through self financing scheme will also comprise of 90,000 dwelling units.

12. As indicated above a sum of Rs. 68.84 crores is proposed to be allocated during Sixth Five Year Plan in the State Sector for various urban social housing schemes. It is anticipated that about Rs.55.86 crores will be available from Life Insurance Corporation of India and 90 per cent of this amount i.e. Rs.50.27 crores will be utilised for these housing schemes and remaining Rs.5.59 crores will be kept at the disposal of Estate Department for "Rental Housing Scheme" for State Government Employees". The various social housing schemes for which allocations are proposed are briefly narrated.

13. *Subsidised Industrial Housing Scheme*—Under this scheme financial assistance is extended to the public, private and cooperative sector for the construction of houses for industrial workers and persons of eco-

nomically weaker sections of the society having an income up to Rs.350 per month. A total sum of Rs.7.50 crores including Rs.5.00 lakhs for Hills is proposed out of which Rs.2.00 crores will be for P. W. D., Rs. 2.00 crores for private industrialists and Rs.3.50 crores for local bodies during the Sixth Plan. It is anticipated that about 11,250 dwelling units will be available at the end of the Sixth Plan.

14. *Low income group housing scheme*—Under the Low Income Group Housing Scheme, the segment of population having an income up to Rs.600 per month is covered, local bodies provide housing facilities to this section of people either on hire-purchase basis or on rental basis. The financial assistance under this scheme is extended in the shape of 100 per cent loan. The proposed allocation for the Sixth Plan is Rs.10.80 crores, including Rs.10.00 lakhs for hills to construct 6,000 houses.

15. *Middle income group housing scheme*—Under this scheme housing facility is provided to persons having a monthly income between Rs.601 to Rs.1,500 either on rental or hire purchase basis. The financial assistance is given in the shape of 100 per cent loan to Housing Board, Local Bodies, and Development Authorities. The proposed outlay for the Sixth Five Year Plan is Rs.6.60 crores including Rs.15.00 lakhs for Hills for the construction of 2,000 houses.

16. *Land acquisition and development Scheme*—Non availability of developed land is a major bottle-neck in the speedy execution of housing schemes as well as other development schemes. Hence, a large scale programme for land acquisition and development has been proposed in the Sixth Plan. An Outlay of Rs.30.94 crores is being proposed for the Plan and it is expected that an additional 3600 Hectares of developed land will be available by the end of the Plan.

17. *Slum Clearance Scheme*—Under this scheme financial assistance is extended to local bodies and Development Authorities in the shape of 50

per cent loan and 37.5 per cent subsidy for clearance of slums and rehabilitation of slum dwellers. These agencies undertake the work of construction of houses for the rehabilitation of slum dwellers and allot houses on subsidised rent. It is proposed to allocate a sum of Rs.50.00 lakhs including Rs.5.00 lakhs for Hills in the Sixth Plan for the construction of 1,000 houses.

18. *Seed capital*—In order to solve the housing problem expeditiously, the State Government has already established Development Authorities in 11 major cities of the State. The proposal for creating Development Authorities in some more cities of the State is under the consideration of the Government. It has been considered necessary to provide financial assistance in the shape of Seed Capital to these authorities so that these authorities may resolve and generate more funds. A sum of Rs. 5.11 crores has already been given up to 1979-80 and an Outlay of Rs. 12.50 crores is being proposed during the Sixth Plan for this purpose.

19. *Special Component Plan*—Various housing agencies i.e. U. P. Housing and Development Board and Development Authorities etc. reserve a quota of 20 per cent of the developed plots or constructed houses for allotment exclusively to these categories.

Out of the total target of 3.25 lakhs dwelling units to be constructed during Sixth Plan, 20 per cent i.e. 65,000 dwelling units will be reserved for these sections. Similarly out of a total number of plots developed, 20 per cent plots will also be reserved for these sections.

20. *Employment and manpower*—Construction activity accounts for a substantial portion of employment and is important in the process of development. About 30 per cent of the cost of construction is on labour and construction gives direct employment. It is estimated that for taking a housing programme worth Rs.451.20 crores, about 82 millions man-days

unskilled and 41 million man-days semi-skilled employment opportunities will be generated which means 28,000 skilled and 56,000 unskilled persons will get direct employment during the entire Sixth Plan period. Another 1.50 lakhs persons will also get indirect employment in allied activities.

21. *Building materials requirements*—For taking up the housing programme during the Sixth Five Year Plan to the order of Rs.451.20 crores, the requirements of some of the important building materials will be as follows:

(a) Steel	..	..	92,000	Tonnes
(b) Cement	..	..	5,80 lakhs	Tonnes
(c) Bricks	..	..	500	Crores
(d) Coal (For burning of bricks)			15 lakhs	Tonnes

During the past, the allocation of steel, cement and coal has been very meagre. Uttar Pradesh Housing and Development Board and various Development Authorities in the State are getting only 15 per cent of their requirements of cement. Similarly these authorities are also not able to get steel at J. P. C. prices with the result they are compelled to purchase it from open market at higher rates. It is, therefore, essential that special efforts be made to allocate steel, cement and coal etc. to these authorities in required quantities.

22. *Region-wise achievements*—From the past experiences it has been observed that major portion of the divisible outlays were utilised in the Central (59 per cent,) Western (22 per cent), and Eastern (17 per cent) regions during Fifth Plan whereas Bundelkhand and Hill regions together could utilised only 2 per cent of the divisible outlays. The main reason for such a regional imbalance is that at present there is no Development Authority in these two regions and the local bodies are handicapped due to non-availability of expertise with them in preparation and implementation of urban housing schemes. However, during Sixth Plan higher priority will

be given in allocating the funds for implementation of housing projects proposed by the local bodies of these two regions.

(ii) RURAL HOUSING

23. *Housing for Rural Poor.*—The growing congestion in the rural settlements in U. P. can be judged from the fact that in 1951 the average population per inhabited settlement was 489 and rose to 571 in 1961 and 674 in 1971. Hence the continuous increase of rural population has resulted in a two fold problem. On one hand there has been greater pressure on land with fragmentation of holdings, while on the other hand, small unhygienic dwellings hardly sufficient to accommodate a family, are per force being utilized by large size households. Provision of a suitable accommodation to all sections particularly for economically weaker sections is one of the fundamental requirements in a welfare state.

24. (i) *Allotment of House sites (Revenue Department)*—To meet the growing requirement of the rural poors the Government of India initiated a scheme in the year 1972 to provide free house-sites of 100–150 square yards each to landless workers in the rural areas. The State Government accordingly prepared a scheme for allotment of house sites to members of Scheduled castes/Schedule tribes, village artisans and other agricultural labourers. In this scheme a family consisting of a husband, wife and minor children was treated as a unit. Family units which had no house of their own or had insufficient space for their residence were to be provided house-sites of 100 to 150 sq. Yards. Up to 1973-74 the scheme was dealt with in the Central Sector and thereafter it came under the State Sector. In the first survey 12,12,014 families were found eligible for the allotment of house sites but afterward 28,326 more persons requested for allotment, raising the total number of eligible families to 12,40,340. Now a fresh survey is being conducted throughout the State to prepare up to-date lists of persons who have now become eligible for the allotment of house sites. A time bound programme had

also been prepared by the Board of Revenue for the allotment of house sites along with the new survey.

25. Out of these 12,40,340 eligible families, house-sites had been allotted to 12,36,545 families till the end of March 1980. Possession on house-sites had been given to 12,32,956 families, and remaining 3,689 families have yet to be accorded possession on house-sites. As far as possible, Gaon Sabha lands were allotted for the house-sites and private land was acquired only where no suitable Gaon Sabha land was available. Due to suits and writ petitions filed by private owners challenging the acquisition proceedings, the work of allotment/delivery of the possession to the allottees have resulted in delay. However, a target of allotment of 50,000 house-sites has been proposed for the Sixth Plan 1980–85.

26. (ii) *Development of house sites.*—The programme of development of house sites was also included in the fifth plan. Before the coming into existence of the U. P. Scheduled Castes and Weaker Sections Housing Corporation, this work was done by the Rural Engineering Service under the direct supervision of Government in the Rural Development department and about 20,000 house-sites were developed at a cost of Rs.25.74 lakhs. Later on, this work was entrusted to above Housing Corporation and a sum of Rs. 110.05 lakhs was allotted to them during the period 1975–78. The norm for expenditure on development of house-sites, which includes levelling and development of the sites, construction of link roads, 'Kharanjas', drains and other items of common utility such as provision of drinking water etc., was fixed at the rate of Rs.150 per house site by the Government of India. However, during the Fifth plan period, the Scheduled Castes and Weaker Section Housing Corporation could not draw up any programme for the development of house-sites themselves and entrusted some work to the Rural Engineering Service which was also doing the work of construction of houses for Harijans. The latter, therefore, took up the development of only



such house sites on which they proposed to construct Harijan colonies.

27. According to National Plan 45 per cent of allotted house sites i.e. 5.50 lakhs house-sites have to be developed. Out of these 20,000 house-sites were developed till the end of March 1980 leaving a balance of 5.30 lakh house sites to be developed which could require a sum of Rs.2650.00 lakhs at the rate of Rs.500 per house-site. Due to paucity of funds, a target of 50,000 house sites for development has been proposed for the Sixth Plan 1980—85.

28. Of the total amount of Rs.2800 lakh in 1980—85 plan for rural housing Rs.300 lakhs proposed to be earmarked for the allotment of house sites by the Revenue department, 10 per cent of the amount i.e. Rs.30 lakhs has been set apart for the hill region. Out of the remaining amount, the item-wise and year-wise break-up is suggested as under :

Year	For Payment of compensation land acquired for allotment of house-sites	For development of House-sites.
1	2	3
	Lakh Rs.	Lakh Rs.
1980-81	11.00	Nil
1981-82	12.00	8.00
1982-83	14.00	54.00
1983-84	16.00	62.00
1984-85	17.00	76.00
Total	70.00	200.00
Special Component for SC/ST)	56.00	160.00

29. Against the above allocation of Rs.270 lakhs for plains 80 per cent of the amount i.e. Rs.216.00 lakhs including Rs.56.00 lakhs for payment of compensation for land acquired and Rs.160.00 for house-sites development will be ear-marked for the welfare of Scheduled Caste under the Special Component Plan which including the amount allocated for the Hills this will total up to Rs.240.00 lakhs for the scheme.

30. (iii) *Rural House Construction (Rural Development Department)*.—Mere allotment of house sites does not serve much purpose unless these sites are developed, some minimum facilities and measures are provided to assist the actual construction of houses. Consequently, the state government entrusted this work to Harijan and Nirbal Varg Avas Nigam in the year 1976. But it did not make much headway. Since the inception of this scheme in 1976 up to the end of June 1980, subsidy of Rs.116.25 lakhs was paid by the Nigam and the construction of 1082 houses has been completed and another 2000 houses are under construction.

31. Since 1979-80 the Rural Development Departments has started a comprehensive housing Scheme for the rural areas. Under this scheme subsidy is granted in the shape of building material to such permanent resident of rural areas who are scheduled caste/scheduled tribe, agricultural landless labourer, other backward class agricultural labourers and marginal agriculturists of other castes who are landless or who have irrigated land not exceeding 0.04 hectare or unirrigated land not exceeding 1.00 hectare and any member of their family may have no other source of income than agricultural labour.

In regard to the selection of sites it has been decided that sites for a cluster of even 5 houses can also be selected. If anyone wants to build single house inside the village that too is permitted. House-sites are selected at a better place so that people are attracted to come and build the house at that site.

In connection with the development of sites special attention is given to the raising of the sites, construction of link roads, construction of storm-water drains, construction of lanes and pavements construction of internal drains, deepening and beautification of tanks if available nearby and construction of drinking water wells. All the above works are done under 'Food For Work Scheme'. A sum of Rs.150 is allotted for the development of each house site. Approach culverts on the link roads are constructed from the funds given by panchayat Department for culverts under food for work programme.

For construction of houses the limit of subsidy has been fixed up to Rs.2,000 or 75 per cent of the total cost of the house, which ever is less in the plains and Rs.3,000 or 75 per cent of the total cost of the house, whichever is less in the hill areas. This subsidy is given in the shape of building material. No cash payment is made to the beneficiaries. The beneficiaries contribute 25 per cent in the shape of labour. The house is to be constructed according to the designs released by UPDESCO. Different designs have been prepared by UPDESCO for eastern, western, central, Bundel khand and hill regions of the state keeping in view different geographical conditions of these regions and availability of building material there.

32. An outlay of Rs.2,500.00 lakhs has been proposed for the Sixth Plan (1980—85) under this scheme, for the development of house-sites and assistance to allottees for construction of houses. With this outlay a target of construction of 1,10,500 houses has been fixed tentatively for the period of 1980—85.

33. To implement the rural housing programme effectively, a Rural Housing Board has been constituted recently under Rural Development De-

partment, which is preparing detailed out-lines for this programme.

(iii) CONSTRUCTION OF BUILDINGS OF  
OTHER DEPARTMENTS.

34. *Police Housing*—In view of the onerous nature of duties and responsibilities of the police force expansion of the Department residential and non-residential buildings to the force becomes particularly important. In the Fifth Five Year Plan, the programme of police buildings was taken on the plan side and against the requirement of 1550 lakhs, an outlay of Rs.1131 lakhs was provided for construction of residential and non-residential buildings. Against this outlay, an expenditure of Rs.925.57 lakhs was incurred during 1974—78, two annual plans 1978-79 and 1979-80 started with spill over works costing Rs.1,027 lakhs and in addition new works costing about Rs.1,251 lakhs were also sanctioned during these two years. Thus against the total liability of Rs.2,278 lakhs, the Department was allocated Rs.770 lakhs during the two annual plans, leaving substantial spill over work taking Rs.1,508 lakhs. Out of the funds made available upto 1979-80, 6956 residential and 163 non-residential buildings could be completed by the end of 1979-80.

35. *Sixth Plan (1980—85)*—With the abnormal escalation in the cost of building construction, it is estimated that the spill over work of Rs. 1508 lakhs will require a sum of Rs. 1890 lakhs for their completion during the Sixth Plan period (1980-85). In the conference of Chief Minister held in June 1979, it was decided to provide living accommodation (barracks and quarters) to 75 percent of the non-gazetted force in the next four years or so. Accordingly, a comprehensive housing scheme costing about Rs. 120.00 crores has been formulated. However it has in view of the resource-constraint, been decided to implement the project on the next ten years. But this also appears to be unactionable.

36. The requirement of Police Department for continuing and new works relating to residential and no-residential buildings is enumerated below :

Serial no.	Items of works	No. of works	Estimated cost (Rs. in crores)
1	2	3	4
1	Residential quarters (non-gazetted)	54,543	131.64
2	Residential quarters (gazetted)	800	96.56
3	Barracks for 9444 police personnel	NA	6.57
4	Police stations	292	11.68
5	Police outposts	150	3.00
6	Fire stations	71	10.65
7	PAC Battalion	10	20.00
8	Police offices	10	2.60
9	Sector offices	5	0.25
10	Police Hospitals	5	0.50
11	T. B. Wards	7	0.21
12	Rifle Ranges	39	0.78
13	Police Training Institute/Lines	5	3.80
14	Recruitment Training-Schools	2	4.50
15	Godown for Central Stores, Kanpur	NA	0.10
16	Police Bhawan Complex at Lucknow	NA	3.00
17	Police Lines	3	3.50
18	Water Supply Schemes	35	1.75
<b>Total</b>		..	301.09

37. Against the above requirement, an outlay of Rs. 4500.00 lakhs only has been provided in the Sixth Plan

for executing the following item of work.

(Rs. in lakhs)

Serial no.	Name of items	Spill over works No. of works	Cost	New Works No. of works	Cost	Total cost Spillover new works
1	2	3	4	5	6	7
1	Police Station .. ..	46	183.09	95	485.00	668.09
2	Outposts .. ..	6	6.05	48	144.00	150.05
3	Fire Stations .. ..	1	10.00	14	210.00	220.00
4	PAC Battalians .. ..	7	809.18	2	600.00	1409.18
5	Police Lines .. ..	1	216.77	2	100.00	316.77
6	Water Supply Schemes .. ..	12	20.49	16	80.00	100.49
7	Police Hospitals .. ..	1	20.37	2	20.00	40.37
8	Police Offices .. ..	..	..	6	156.00	156.00
9	Rifle Ranges .. ..	..	..	4	8.00	8.00
10	Barracks .. ..	9	20.82	11	65.60	86.42
11	Radio Stations .. ..	4	14.14	5	12.23	26.37
12	Misc. Buildings .. ..	16	44.09	20	729.17	773.26
13	4 Housing Schemes for 3299 non-Gazetted residences.	..	545.00	..	..	545.00
Total ..		..	1890.00	..	2610.00	4500.00

38. No provision has been made for any new police housing schemes due to paucity of funds. In the programme, however, residential quarters for 100 gazetted police offices, 5274 non-gazetted personnel and barracks for 6143 men will be constructed during the Sixth Plan. In addition 3299 quarters for non-gazetted personnel are likely to be completed under the spill-over programme. Moreover, with the interest earned from Police Griha Nirman Nidhi, it is anticipated that 2300 quarters for constables will be constructed during the plan period.

(b) OTHERS

39. *Judicial Department*—There has been rapid increase in the institution of cases, particularly criminal cases, during

the last ten years. While the institution of Session's cases in the year 1970 was only 9,440, it rose to 25,563 in the year 1978. As a result, the pendency of Session's cases rose from 10,116 in 1970 to 30,917 cases at the end of 1978. Similarly, the pendency of majisterial cases rose from 81,000 in 1969 to 6,14,877 in 1978. With this heavy pendency of criminal cases strength of judicial officers has been increased and the Judicial Department is facing an acute shortage of court buildings, as well as residences for judicial officers. In a recent conference of the Chief Secretaries and Inspectors General of Police of all the State it was pointed out that heavy pendency of cases had a demoralising effect on the public and the police, and as such the need of constructing more court room was strongly recommended. Beside in

order to provide speedy justice to litigants at low expenses, specially to mitigate the grievance of the rural litigants it becomes necessary to establish courts at the tehsil headquarters. For this also, court buildings and residences will have to be constructed.

40. The position of residences for judicial officers is still worse. Only a few officers could be provided Government residences so far. A majority of the officers, therefore, have to live in the rented private houses. Keeping in view the nature of duties of judicial officers, such a situation is not at all desirable. In the conference of Chief Justice's held in November 1976 it was resolved that the status and nature of duties of judicial officers demanded that they should be provided with suitable Government accommodation as well as suitable court rooms. Similar is the problem of residences for High Court judges who have to be provided with a free furnished official residence. The employees of the High Court and subordinate courts are also facing acute housing problem.

41. The total number of courts sanctioned at present is over 1400. Standard court rooms existing before 1976-77 were about 350. Sanction for construction of 475 court rooms and about 400 residences for judicial officers have been issued during 1976-77 to 1979-80. There is thus need for construction of at least 500 more court-rooms, 600 residences for judicial officers and 30 residences for High Court Judges besides 1650 residences for subordinate staff.

42. Against the estimates of works amounting to Rs. 18.22 crores sanctioned during 1976-77 to 1979-80, an expenditure of Rs. 11.54 crores was incurred up to 1979-80 leaving a balance of about Rs. 7.00 crores to complete these works. Due to unprecedented rise in the construction cost, an extra expenditure of Rs. 1.25 crores is further estimated. Thus a total amount of about Rs. 8.00 crores is needed to complete the spill-over works. In a nut-shell, the total requirement during 1980-85 period comes as under :

Requirement of new buildings	No.	Funds required (Rs. in lakh)
1	2	3
1. Court-rooms (nos.) ..	500	1250
2. Residences :		
(i) For High Court Judges	30	65.00
(2) For Judicial officers ..	600	800
(3) For subordinate staff	1650	500
<b>Total</b> ..	..	<b>2615</b>
3. Spill over works ..	..	800
<b>Grand Total</b> ..	..	<b>3415</b>

43. Against the requirement indicated an outlay of Rs. 24 crores only has been provided in the Sixth Plan due to constraint of resources.

44. *Revenue Department*—Revenue Department is one of the oldest departments of Government organisation and collectorate and tehsil buildings are generally more than 100 years old. Out of 242 tehsil buildings, about 150 were built more than 100 years back. These buildings are in dilapidated condition and construction of new tehsil buildings is urgently needed. To begin with at least 15 tehsil buildings need immediate replacement in the Sixth Plan. A new tehsil building costs Rs. 30.33 lakhs, therefore, the cost of 15 buildings would be about Rs. 455 lakhs.

45. After abolition of the Zamindari system, the State has to engage a large number of officials for collecting revenue and other dues directly from the tenants. The number of gazetted officers and their courts. The cumulative effects of these developments has been that the officers as well as the officials of the Revenue Department now face a lot of inconvenience for want of accommodation for their offices, courts and residences. At the district headquarters as well as tehsils, there are very few government houses for officials. At the lowest rungs officials like supervisor kanungos, Lekhpals/Patwari, and peons etc. have to serve

large section of rural population but so far no steps have been possible to ameliorate their living conditions. In the hills, the Patwaris perform police duties also and it is necessary that adequate arrangements for their officers, hawalat and residences etc. are made. Most of the old Patwari Chowkis have fallen out and have become unserviceable. A beginning has to be made to construct quarters for them in the Sixth Plan.

46. To implement the policy of decentralisation of district administration, S. D. Os. have been asked to shift their headquarters to tehsils. To accelerate the development process, two sub-divisions viz. Ghaziabad and Lalitpur were upgraded to district level and 7 new tehsils in the plain and two in the hill were created besides 3 Peshkaris. Adequate arrangement for housing in the newly created district and tahsils have not yet been possible for want of funds.

47. The requirement of funds for continuing work in plains is Rs. 196.50 lakhs and in hills Rs. 40.90 lakhs. The scheme wise details are given in the table below :

*Requirement of funds for spill-over work*

Serial. no.	Items	Spillover cost (Rs. in lakhs)
1	2	3
<i>Plains</i>		
1	Construction of Collectorate buildings at Lalitpur and Varanasi.	54.04
2	Construction and extension of various Revenue buildings.	73.58
3	Construction of Hapur and 23 other tahsil buildings.	52.38
4	Construction of excise malkhana ..	6.01
5	Construction of tahsil buildings, Purnapur.	4.42
6	Extension of office of Board of Revenue	4.00
7	Re-electrification of Revenue buildings	2.07
Total ..		196.50

<i>Hills</i>		
1	2	3
1	Construction of tehsil building at Munsiyari-Pithoragarh.	5.16
2	Construction of buildings at tehsil Bageshwar, Almora.	2.42
3	Construction of tehsil building at Almora.	2.60
4	Construction of Record room at collectorate, Almora.	2.16
5	Construction of staff quarters at tahsil Ranikhet in Almora district.	3.70
6	Construction of tehsil staff quarters in Almora district.	8.62
7	Construction of Residences Pithoragarh.	16.24
Total ..		40.90
Grand Total ..		237.40

48. Besides the above, the minimum requirement for new works in plains is Rs. 653.67 lakhs and in hills Rs. 613.39 lakhs. Thus a total requirement of Rs. 850.17 lakhs for plains and Rs. 654.29 lakhs for hills are estimated for the Revenue department. Against the total requirement of Rs. 1504.56 lakhs, an outlay of Rs. 1500.00 lakhs has been proposed for the Sixth Plan 1980-85 including Rs. 650 lakhs for hills.

49. *Estate Department*—Estate Department is expected to provide residential accommodation to Government employees posted at Lucknow as also to the members of the Government and the legislature. It is also charged with the responsibility for providing office accommodation for the Secretariat and allied offices. On a rough estimate about 4000 gazetted officers, 38,000 Class III and about 10,000 Class IV employees are employed at the headquarters of the State Government. Out of these some of the officers and employees have their own houses or arrangements to live in. However, taking into consideration the waiting list maintained in the Estate Department, 800 gazetted officers, 2080 Class III employees and

3000 class IV employees are waiting for accommodation. To ease the problem, a plan ceiling of Rs. 35 crores has been proposed for this purpose for the Sixth Plan period. It is proposed to construct 3000 type I quarters, 1,000 type II quarters, 800 type III quarters, 480 type IV quarters and 15 type V quarters during the Sixth Plan period. The cost of construction of these quarters is estimated at Rs. 19.50 crores.

50. There is also a great paucity of office accommodation at Lucknow. It is estimated that about 6,18,000 sq. ft. of office accommodation will be needed to meet the requirement. The demand for office accommodation has been increasing with the opening of new offices and increase in the strength of old offices. At the rate of Rs. 230 per sq. ft. a sum of Rs. 15.50 crores is required for office accommodation during the Sixth Plan period.

51. *Public Works Department*— Public Works Department executes construction of houses under pooled housing in all the districts of the State excluding Lucknow and three border districts of hills. It also execute departmental buildings included in the P. W.D. Plan. During the Third, Fourth and Fifth Five Year plans, construction of 12644 pooled houses were sanctioned. Out of this, 9908 pooled houses were completed by the end of 1979-80, 451 are in progress and 2285 still remain to be started. It is proposed to complete these works during the Sixth Plan period for which a sum of Rs. 9.60 crores is required.

52. Under the pooled housing scheme, the demand of housing for Govt. servants has tremendously increased on account of expansion of staff as a result of increase in developmental activities all over the State. It has been estimated that about 21,000 more houses of different categories are still required in the State for various categories of officers, officials for which about Rs. 156.00 crores will be needed. Taking into consideration the amount needed for completion of spill over works, the total requirement is of the order of about

Rs. 166.00 crores. Obviously, it is not possible to provide such a large outlay in one Plan. The entire programme will have to be taken up in a phased manner spread over several Five Year Plans.

53. The Fifth Plan provided for the construction of non-residential buildings for P.W.D. offices. All of them could not be completed so far. A sum of Rs. 130.00 lakhs is needed to complete those continuing works. This includes construction of Chief Engineer's office and some inspection houses. It is proposed to take up some urgent new works also under the non-residential category in the Sixth Plan. The details of the proposed buildings are given below :

Name of the building	Fund required (Rs. in lakhs)
1. Office accommodation of 4 Zonal Additional Chief Engineer's Staff.	40.00
2. Office accommodation for 14 Superintending Engineers and their staff.	59.00
3. Office accommodation for 25 Executive Engineers and their staff.	205.00
Total	304.00

Thus the total requirement for continuing and new works under the non-residential category comes to Rs. 434 lakh proposed in the Sixth Plan.

54. Before 1979-80, no provision has ever been made in any of the Plan for constructing residential houses for the PWD staff. As per assessment made by the Department, the requirement of funds for providing residential accommodations to the officers and staff of the P.W.D. is to the tune of Rs. 121.00 crores. In view of the colossal requirement of funds on the one hand and constraint of resources on the other, a huge programme of providing residential accommodation to the officers and the staff of the P.W.D. in every district cannot be undertaken. However, it needs to be clearly emphasized that the officers and the staff of P. W. D. should get their due share in the pooled housing programme in each

district which has been given comparatively higher outlay than in the previous plans.

55. From the above it would be seen, that the requirement of outlay for the pooled housing and P.W.D. building would be of the following order :

(i) Pooled Housing	Rs. in Crores
(A) Continuing works ..	9.60
(B) New works .. ..	156.00
Total ..	165.60
(ii) P.W.D. Buildings Non-Residential I	
(i) Continuing works ..	1.30
(iii) New works .. ..	3.04
Total ..	4.34

56. In view of the extreme urgency of the pooled housing programme, spread all over the State, it deserves attention on priority basis. Therefore, for completing the continuing works, and for taking

up new works, in outlay of Rs. 25.00 crores has been allocated for the pooled housing programme in the Sixth Plan. For P. W. D. non-residential buildings, an outlay of Rs. 5.00 crores has been allotted for completion of the continuing works as well as to for starting new works of non-residential character.

57. *Finance (Sales Tax) Department*—The Finance (Sales Tax) Department being a major revenue earning department of the State, has been expanding its operational activities at a fast speed. It is, therefore, undoubtedly in need of more residential and non-residential buildings. During the period 1974-79, a sum of Rs. 122.08 lakhs could be spent on buildings of Sales Tax Department. The significant achievement during this period related to the purchase of 262 residential houses of different types at Lucknow, Allahabad, Braeilly, Gorakhpur, Ghaziabad, Varanasi, and one Jaipur House at Agra for office building.

58. In the Sixth Five Year Plan (1980—85), an outlay of Rs. 200.00 lakhs has been proposed to meet the building requirement of Sales Tax, organisation. The item-wise requirement is given in the table below :

<i>Item-wise break-up</i>		(Rs. in lakhs)	
Serial no.	Item	1980—85 proposed outlay	1981-82 proposed outlay
1	2	3	4
1	Purchase of office building at Allahabad .. ..	6.83	..
2	Purchase of land and office building at Lucknow .. ..	31.59	..
3	Purchase of Butler Palace and appurtenant land installation of lift construction of four motor garages and canteen.	13.19	5.49
4	Construction of lecture hall and library at Ram Sagar Mishra Nagar trainees centres.	1.18	..
5	Construction of sales tax office Building at Gonda .. ..	8.60	3.60
6	Purchase of land for construction of Office building at Aligarh .. ..	10.00	5.00
7	Construction of Office building on Nazul land at Hardoi .. ..	6.00	2.00
8	Purchase of land and construction of Office building at Mathura .. ..	3.64	3.64
9	Purchase of land and office building at Saharanpur .. ..	15.00	..
10	Purchase of land and construction of office at Kanpur .. ..	15.00	..
11	Purchase of office building and land at Meerut .. ..	4.60	4.60
12	Purchase of land and construction of building at Moradabad .. ..	6.00	..
13	Construction of check post building and Residential Houses at Mohan Nagar, Ghaziabad and Varanasi.	39.30	..
14	Construction of Residential houses in Jaipur House at Agra .. ..	31.30	10.00
15	Construction of building, godowns, electric installation, weigh bridges etc. at different check Posts.	7.77	0.67
<b>GRAND TOTAL ..</b>		<b>200.00</b>	<b>35.00</b>



59. *Food and Civil Supplies Department*—Government foodgrains at various places of the State are stored in Government owned/hired godowns. As the hired godowns are generally not scientific, there are heavy storage losses. Besides this, a huge amount is spent every year on the rent of these godowns. Therefore, with a view to keeping government foodgrains more safely, a decision was taken in 1972 to construct more godowns on scientific lines in various phases, in the State. In the first phase of this scheme, administrative and financial sanctions for the construction of godowns of 65,650 M. T. capacity at 19 places was accorded. But the second phase of the construction of godowns could not be started due to paucity of Funds. Out of the said 19 places, godowns of 53,500 M.T. capacity have been constructed at 14 places and the remaining godowns are under construction.

60. The scheme was first sanctioned as a non-plan one. It was in the Fifth Five Year Plan that it was included in the plan. Over the years 1974-80 an expenditure of Rs. 103.57 lakhs was incurred. A sum of Rs. 10.00 lakhs has been allotted during the current year 1980-81 for this purpose.

61. Existing storage capacity available with the State Government is 88,807 M. T. It has been decided that the total capacity of the State owned godowns should be 2,00,000 M. T. inclusive of present capacity. On the completion of the godowns under construction, for which a sum of Rs. 40.00 lakhs approximately is needed, the total capacity of the State owned godowns will be 1,05,407 M. T. Thus in order to implement this decision, additional godowns of 94,593 M.T. are required to be constructed. A sum of Rs. 502.00 lakhs is required for the purchase of land and construction of buildings. But due to paucity of resources an outlay of Rs.300.00 lakhs has been proposed for 1980-85 plan.

62. For the year 1981-82, an outlay of Rs. 12.00 lakhs has been proposed which includes Rs. 5.00 lakhs for the Hill.

63. *Jail Department*—Most of the Jail buildings in the State are old and need renovation. With the increase in crimes and change in crime centres the capacity of jails falls for short of requirement. Magistrates have been posted at several tehsil head quarters to dispose of criminal cases, but the under-trials have to be transported to these courts from district head quarters because there are no sub-jails at in tehsil head-quarter. Agra Central Jail was demolished some time ago and the new Agra Central Jail is under construction. There are no jails in some hill districts. Besides, Jail staff has compulsorily to live in Jail premises, but their quarters are in a very bad condition.

64. In order to provide adequate accommodation to jail inmates and to remove over-crowding, works amounting to Rs. 310.31 lakhs were undertaken during the last plan period of which an amount of Rs. 138.38 lakhs was spent up to March, 1980. The balance of Rs. 171.93 lakhs for the seven continuing schemes is being provided to complete the works in this plan. Under the new schemes, it is proposed to take up the construction of 169 staff quarters of different types at the sites of 10 jails and at the headquarters of the Inspector General of prisons, involving an expenditure of Rs. 42.22 lakhs. Sub-jails will be constructed at two tehsil head-quarters with an outlay of Rs. 112.50 lakhs. Besides, two triple storey barracks will be constructed at District Jail, Orai at a total cost of Rs. 23.45 lakhs.

65. In the hill areas, six staff quarters will be constructed at Almora at the cost of Rs. 2.13 lakhs. A new Jail building will be constructed at Gopeshwar, the head quarter of Chamoli district and another at Pithoragarh at the total cost of Rs. 90.04 lakhs. The district Jail at Pauri is too small to accommodate the criminals of the areas and is presently situated in a busy market. It is propose to shift it to another site where a new jail will be constructed. This will involve an expenditure of Rs. 34.50 lakhs. Extension of the exiting district Jail at Dehradun and sub-jail at Haldwani is

also proposed which will involve an expenditure of Rs. 26 lakhs.

66. Thus in all 20 new schemes will be undertaken during the Plan period at the total estimated cost of Rs. 330.84 lakhs, including the cost of spill over works, the total requirement comes to Rs. 502.77 lakhs, of which Rs. 500 lakhs—the outlay fixed for the Sixth Plan will be spent in the plan period and the balance during the next plan.

67. *Civil Defence (Home Guards)*—Under the Head Civil Defence come two organisations, namely civil Defence and Home Guards. The Home Guards organisation renders valuable service in assisting the police in maintaining law and order. The organisation was made permanent in 1977. Proper accommodation for offices and employees of the organisation is not available. It is proposed to provide for the construction of the following buildings at the cost mentioned against them during the Sixth Five Year Plan period.

*Item-wise requirement of funds for 1980—85*

Serial no.	Name of Project	Outlay (Rs. in lakhs)
1	2	3
1	Construction of 10 bedded Hospital in Central Training Institute (C.T.I) Lucknow.	2.60
2	Construction of 20 latrines and 10 bathrooms in C. T. I. Lucknow.	0.67
3	Construct on of Office Building for Home Guards Head Quarters, Lucknow.	4.05
4	Construction of a Central Armoury in C. T. I. Lucknow.	3.40
5	Construction of one lakh litre capacity water tank in C T. I. Lucknow.	1.20
6	Construction of 56 residential quarters for Class IV employees in C. T. I. (28 Quarters in VIth Plan and rest in VIIth Plan).	10.58
7	Construction of 23 residential quarters for class III employees in C. T. I. (12 Quarters in VIth Plan and rest in VIIth plan)	8.03
	Total	30,53

68. Of the buildings mentioned above, the hospital will be useful for the indoor treatment of trainees coming to the Central Training Institute, Lucknow. At present, there is no facility of latrines and bathrooms in the Institute, therefore necessary provision has been made for construction of 20 latrines and 10 bathrooms. There is no Armoury in the Institute and arms are brought from and sent back to police armoury daily. Therefore provision for an Armoury at the C.T.I. has also been made. To provide for proper office accommodation an administrative block will also be constructed. It is also proposed to construct 28 residential quarters for class IV employees and 12 quarters for class III employees. In order to make sufficient water available to the employees residing in the campus and working at the Home Guard Headquarters, a water tank of 1 lakh litre capacity will also be constructed which will also cater to the needs of the trainees.

69. The total requirements for the above works will be Rs. 30.53 lakhs of which Rs. 20 lakhs will be provided during the Sixth plan period and the rest during the next plan.

70. The Phasing of the total outlay of Rs. 20 lakhs during the Sixth plan period is as follows :

Year	Outlay (Rs. in lakhs)		
1	2	3	
1980-81	..	..	1.80
1981-82	..	..	3.00
1982-83	..	..	5.20
1983-84	..	..	5.00
1984-85	..	..	5.00
	Total	..	20.00

71. *Loans for Government servants (Finance Department)*—For the last several years there has been a rising trend in the demand for house building advances to Government servants. Demands for

more than Rs. 700 lakhs are received every year from various Heads of Departments and Sections of the Secretariat. Consequent upon the recent relaxations in the priorities for house building advances by the Government, the Government servants having less than twenty years of service and also those who have been allotted houses constructed by the Housing and Development Board/Development Authorities/Municipal Corporations or Municipalities, have also now been given priority for getting house building advance from Government. Naturally, therefore, there will be a regular increase in the future annual demands for house building advances as compared to previous years.

72. The State Government have recently constituted a Pay Commission and it is obvious that due to the recommendations of the Pay Commission the pay of Government servants will rise which will have an impact on the quantum of the house building advances. Recently the Government have extended the facility of house building advances even to temporary Government servants of the State as a result of which the demand for house building advance is bound to increase. In view of the facts stated above, the minimum demand for loans to Government servants is Rs.2,800 lakhs. But on account of constraint of resources, an outlay of Rs. 1,000 lakhs only has been proposed in the 1980-85 plan.

73. *Karmik Vibhag*—The State Public Service Commission has an important role to play in selection of candidates for various jobs in the Government. The number of posts to be filled through the Commission has been increasing rapidly and this trend would continue during the VIth Plan period.

74. The Office of the Commission is at present situated in a building which is more than a hundred years old. This building is in a dilapidated condition and may collapse any day. Thus the building being unsafe, and inadequate to meet the emergent and urgent requirements of the Commission, it is essential to construct a new building within the campus of the Commission. For seating arrange-

ment of candidates for conducting the examination, the Commission has got at its disposal only one double storied examination hall with a capacity of about 1,400 candidates. The Commission, is also required to conduct the examination of Union Public Service Commission. It is, therefore, essential to arrange additional accommodation for conduction various examinations.

75. The Union Public Service Commission has opened a centre at Lucknow also for all examinations conducted by them. Owing to the increase in the number of candidates, the State Public Service Commission has also been conducting almost all examination at Lucknow centre as well. It is, therefore necessary to construct an examination hall at Lucknow for seating 2,000 candidates along with complementary accommodation in the campus at Lucknow for which the land has already purchased basis.

76. As regards the housing problem of the Members/Chairman, Gazetted and non-gazetted employees, there are at present only 8 residential quarters for members, Chairman and 2 for gazetted officers. 40 class IV employees have been accommodated for the time being in the out houses of the old officers Training School buildings which too are unsafe. There is urgent need for construction of one type-V quarter for the Members and 6 type IV quarters for gazetted officers. Necessary accommodation has also to be arranged for class III employees of Public Service Commission. The Commission also require suitable guest house accommodation for experts and advisers both at Allahabad and Lucknow. It has roughly been estimated that a sum of about Rs. 3.50 crores would be required for the construction of residential and non-residential buildings. Against the requirement, an outlay of Rs. 100.00 lakhs. Public Service commission has been proposed in the Sixth Five Year Plan for the buildings.

77. *Finance (Stamp and Registration) Department*—Most of the buildings of Stamp and Registration Department in the State, are very old and in a dilapidated condition. In many offices there is

no sufficient accommodation. During the the year 1979--80 an outlay of Rs. 2.00 lakhs was provided and following construction works were taken up:

Serial no.	Works	Estimated Cost (Rs. in lakh)
1	Construction of Sub-Registrar's office Khurja (Bulandshahr) .. .. .	1.26
2	Construction of Sub-Registrar's office Mawana (Meerut) .. .. .	0.59
3	Construction of Sub-Registrar's office Balrampur (Gonda) .. .. .	0.28
4	Construction of Sub-Registrar's office, District Registrar's office and Central Record Room, Pratapgarh. .. .. .	1.36
5	Construction of Sub-Registrar's office Dalmaun (Raebareli) .. .. .	0.64
6	Extension of Central Record Room Banda .. .. .	0.27
7	Construction of Sub-Registrar's office Kashipur (Nainital) .. .. .	0.89
	Total .. .. .	5.29

78. A sum of Rs. 2.00 lakhs has been provided in the current years plan, although it will not be sufficient to meet total requirement. There are various new works which the department intends to start during the Sixth plan. An outlay of Rs. 20.00 lakhs has been proposed in the Sixth Plan 1980--85 to enable the department to complete the continuing works and to take-up a few new works.

79. *Excise Department*—At present the office of Excise Commissioner, U. P., Allahabad is scattered in many buildings situated at different places in the city. This State of affairs is adversely effecting efficiency and smooth functioning of the department. It has therefore been felt necessary to house the different offices in one building, with this object in view it is proposed to construct a building at Allahabad to accommodate the different offices of Excise Commissioner in the Sixth Plan 1980-85. The total cost of the work is estimated to be Rs. 35.08 lakhs. Due to constraint of resources an outlay of Rs. 26.00 lakhs has been proposed for the Sixth Plan 1980--85.

## (2) URBAN DEVELOPMENT

80. Uttar Pradesh represents a below average urbanisation. Out of total population of 88.34 millions in Uttar Pradesh in 1971, 12.38 millions or 14.02 per cent have been residing in urban areas. This is lower than 19.91 percent urban population ratio for India as a whole. However, the State is passing through a crisis of phenomenal population growth.

The total population of the State increased by 19.78 per cent during the decade 1961--71 while the urban population has increased by 30.68 per cent .

81. The 1971 Census indicated that the 12.38 millions urban inhabited resided in 293 urban settlements, while the total rural population was 75.96 millions which was distributed in 1,12,561 rural settlements. Redistribution of population has taken place with 22 large cities with population over one lakh absorbing 66 per cent of the population increase in recent years while rural and smaller urban settlements have largely remained static. Approximately, one-third of the urban population of Uttar Pradesh is concentrated in five large cities known collectively as the KAVAL cities. The largest of the KAVAL cities in Kanpur which has a population of 1.27 millions in 1971 :

Conditions of living in the largest cities have deteriorated rapidly on account of slums, squatter areas, increasing backlog in services, lack of community facilities and staggering housing shortages etc. Rapid increase in urban population has accentuated the problems of critical segments of the urban poor of housing, employment opportunities and access to civic services.

82. The share of population in Class I cities to the total urban population increased from 54.23 per cent in 1961 to about 57.06 per cent in 1971.

Except for the Class I cities, the proportion of urban population during the decade 1961-71 in the remaining urban

areas has remained more or less static or has somewhat declined as would be evident from the table given below :

*Population According to Size of Cities and Towns (1961—71)*

Size of cities and towns			Number of urban centres 1961—71		Decadal percentage variation in number of towns from 1961—71	Percentage of total urban population 1961—1971	
1			2	3	4	5	
Class I (1,00,000 and above)	..	..	17	22	(+)29.41	54.23	57.06
Class II (50,000 to 99,999)	..	..	16	20	(+)25.00	11.76	10.33
Class III (20,000 to 49,999)	..	..	52	67	(+)28.85	16.55	16.70
Class IV (10,000 to 19,999)	..	..	75	91	(+)21.33	11.01	10.44
Class V (5,000 to 9,999)	..	..	74	80	(+) 8.10	5.92	4.74
Class VI (Below 5,000)	..	..	10	13	(+)30.00	0.33	0.33

Source: General Population Table Part II A, U. P. Census of India, 1971.

83. According to the population projections made by the Registrar General of India, total population of the State is likely to be 153 millions by 2001. Urban population is estimated to be 32.22 millions, which would mean that percentage of urban population will increase

from 14.02 in 1971 to 21.08 in 2001. Projections of urban population of the State, Class I and II towns (trend based) are presented in the following table. From the projected figures it is evident that the number of urban centres will increase considerably.

*Projected population of cities and Towns (Class I and II) 1971—2001.*

Year			Uttar Pradesh urban population (in millions)	Class I cities		Class II towns	
				Number	Population (in millions)	Number	Population (in millions)
1			2	3	4	5	6
1971	..	..	12.38	22	7.07	20	1.34
1981	..	..	17.17	26	9.23	25	1.83
1991	..	..	23.61	29	12.21	30	2.09
2001	..	..	32.22	36	15.68	38	2.51

OBJECTIVES OF THE SIXTH FIVE YEAR  
PLAN 1980--85

84. In the foregoing context, the objectives for Urban development and related programmes during the Sixth Five-Year Plan 1980--85 have been proposed as under :

(a) To continue preparation of Master Plans and Regional Plans to increase proper orientation of development of urban areas.

(b) To resume pressure of migration to metropolitan and large cities by encouraging growth of small and medium towns, by providing employment opportunities and minimum level of standards of living.

(c) To encourage the growth of medium and small towns and cities so as to equip them to serve as growth centres and service centres to foster and supplement rural growth and to subserve the rural economy.

(d) Improve conditions of slum dwellers in towns having population

of 1 lakh and above as per 1971 Census.

(e) To initiate development action programme in metropolitan and large cities specifically oriented towards improving living conditions of the urban poor.

(f) Implementation of Urban Development Project by providing financial assistance to local bodies for remunerative and non-remunerative projects such as commercial complexes, office complexes, transport complexes, auditoria, theatres and community centres, parks and play grounds, etc.

85. The development strategy of the urban development in the Sixth Five-Year Plan 1980--85 will thus have an overall objective to provide low cost urban services and employment opportunities with particular emphasis on the poorer sections of the urban population.

86. *Outlays and targets for Urban Development : Sixth Five Year Plan 1980--85*—In the light of the above, stated objectives it is proposed to allocate the Plan outlays for urban development as follows :

			(Rs. in lakhs)	
Name of Schemes	Sixth Plan outlays 1980-85	Proposed Targets 1980-85		
1	2	3		
<i>Urban Development:</i>				
1. Urban development Scheme (Assistance to Local Bodies).	482.00	2500 shops, 50 offices, 10 community centres, 2 guest houses, 22 parks, 4 Auditoria.		
2. Town and Regional Planning .. ..	105.00	40 Master Plans 11 Regional Plans.		
3. (a) Environmental Improvement of slims ..	3450.00	18.25 lakh slum population to be benefited		
(b) Slum Improvement and Clearance Board ..	200.00			
4. (a) Integrated Development of Small and Medium Towns and NCR.	1280.00	30 Towns**		
(b) Project formulation Units for IDSMT ..	100.00			
(c) Strengthening of Engineering Staff of local bodies.	100.00			
5. (a) Kanpur Urban Development Project I ..	4000.00†	15,000 sites and services plots, and 20,000 slum households to be benefited.		
(b) Kanpur Urban Development Project II ..	430.00			
6. Research and Development .. ..	50.00*			
Total .. ..	10,197.00			

\*\*This figure indicates the total number of towns proposed to be taken up for integrated development during the Sixth Five Year Plan.

	Rs. Lakhs
†(a) State Government Share .. ..	1143
(b) Central Government (World Bank) Share .. ..	1400
(c) Institutional Finance Sources .. ..	1100
(d) Internal resources of implementing agencies .. ..	357
Total .. ..	4000

\*This includes Rs. 40.00 lakhs for Regional Centre for Urban and environmental Studies Lucknow University.

PROGRAMMES FOR THE SIXTH FIVE YEAR  
PLAN 1980-85 :

87. *Urban development Scheme—(Financial Assistance to Local Bodies for remunerative and Non-remunerative Projects)*—The Urban Development Scheme was introduced in the year 1971. Under this scheme, financial assistance is provided to Local Bodies and Development Authorities of such towns whose Master Plans have been prepared for construction of shopping centres, office complexes transport complexes, community centres, auditoria, theatres, parks and playgrounds etc. Up to the year 1979-80, 594 shops, 28 offices etc. have been constructed.

88. It is proposed to make provision of Rs.482 lakhs during 1980-85 under this scheme, out of which Rs. 5.00 lakhs will be for Hills. Financial assistance, in the shape of loans and grants will be released after careful examination and appraisal of the schemes to ensure maximum benefits. In addition to this, it is proposed that Development Authorities should also obtain loans from the other financial institutions including banks for such projects. It is anticipated that 2,500 shops, 50 offices, 4 auditoria, 10 community centres, 22 parks etc. will be constructed during the Sixth Five Year Plan period under this scheme.

89. *Town and Regional Planning*—Master Plans for fast growing towns and cities have been prepared with a view to provide a physical frame of land uses and communications for a projected population over a period of 20-25 years providing the framework for their regulated and planned growth and a long-term programme embracing various sections of development, such as residential and housing, indus-

trial and business centres, traffic and transportation, water supply, sewerage, drainage and community facilities of education, health and recreation.

90. Regional Plans provide a broad policy guide in orienting urban development programmes appropriately for each region including need for reducing pressure of migration to the large cities.

91. The Town and Country Planning Department is responsible for the preparation of Master Plan and Regional Plans. Regional Planning Divisions of the Town and Country Planning Department have already been established at each Commissioner's headquarters. The expenditure on 9 divisions is met out of the non-plan funds while that of the remaining two viz. Lucknow and Kumaon from the Plan funds. An unit for planning of New Tehri Township has also been created under the plan funds besides a Project formulation and monitoring cell to guide and monitor the progress of the formulation of Kanpur Urban Development Project. A Civil Lines Unit for the preparation of a Redevelopment Plan of Civil Lines, Allahabad is also functioning out of non-plan funds.

92. *Master Plans*—Out of 293 towns and cities as in 1971 in the State, Master Plans for 34 towns have been prepared so far. Besides the above, preparation of Master Plans for 19 towns are under progress and will continue as spill-over projects during the Sixth Five Year Plan period. It is proposed to take up preparation of 32 new master plans besides master plan for Singrauli Complex during the Sixth Five Year Plan, 1980-85. The Division-wise programme for the preparation of Master Plans is as under :

*Master Plans to be Prepared during 1980-85*

Sl. no.	Name of Division	Spill-over Master Plans	New Master Plans
1	2	3	4
1	Meerut .. ..	1. Bulandshahr ..	1. Hardwar 2. Muzaffarnagar
2	Gorakhpur .. ..	2. Deoria .. ..	3. Azamgarh 4. Basti

Serial no.	Name of Division	Spill-over Master Plans	New Master Plans
3	Agra .. ..	3. Firozabad .. .. 4. Hathras .. ..	5. Meunath Bhanjan. 6. Fatehpur Sikri 7. Dayalbagh
4	Jhansi .. ..	5. Banda .. .. 6. Deogarh .. ..	8. Etah 9. Mainpuri 10. Lalitpur 11. Mahoba
5	Garhwal .. ..	7. Srinagar .. .. 8. Badrinath (Revision) .. ..	12. Karvi 13. Hemirpur 14. Uttar Kashi 15. Kedarnath 16. Kotdwara 17. Rishikesh.
6	Kumaon .. ..	9. Haldwani-Kathgodam .. ..	18. Ramnagar 19. Nainital 20. Pithoragarh.
7	Lucknow .. ..	10. Shuklaganj .. .. 11. Unnao .. ..	21. Sitapur 22. Hardoi
8	Allahabad .. ..	12. Farrukhabad cum-Fatehgarh. 13. Fatehpur	23. Etawah 24. Kannauj
9	Varanasi .. ..	14. Ramnagar-Mughalsarai 15. Pipri-Turra-Renukoot	25. Mirzapur 26. Ballia 27. Bhadohi 28. Ghazipur
10	Faizabad .. ..	16. Faizabad-Ayodhya .. .. 17. Bahraich	29. Barabanki 30. Gonda
11	Bareilly .. ..	18. Shahjahanpur 19. Rampur	31. Badaun 32. Pilibhit
12	Civil Lines Unit .. ..	Redevelopment Plan of Civil lines area.	
13	New Tehri Township Unit .. ..	New Tehri Township.	
14	New Planning Unit to be created.	Singrauli Complex.	

93. *Revision of Master Plans*—It is also proposed to take up revision of such Master Plans which were sanctioned by the Government more than ten years ago as required under the provisions of existing legislations. Cities which require revision of their Master Plans are :

1. Ghaziabad
2. Saharanpur
3. Kanpur
4. Lucknow.

94. *Regional Plans (Study of Growth Centres and Linkages)*—Preparation of regional plans was taken up during the Third Five Year Plan and till now 5 regional plans and one district plan have been prepared. It is proposed to complete 11 regional plans (ten spill-over and one new) during the Sixth Five Year Plan, 1980—85 as under :

1. Allahabad-Fatehpur Region.
2. Basti District Plan.
3. Jaunpur-Ghazipur-Ballia Region.
4. Faizabad-Barabanki Region.
5. Jhansi-Lalitpur-Jalaun Region.
6. Agra-Mathura Region.
7. Saharanpur-Muzaffarnagar Region.
8. Bareilly-Pilibhit Region.
9. Hardoi-Kheri Region.
10. Garhwal Region.
11. Kumaon Region.

95. *Physical Survey*—For the preparation of base maps required for the preparation of master plans of existing towns and new growth centres in the State a Physical Survey Division already exists in the Town and Country Planning Department since the Third Plan. Increasing



assistance of aerial photographs and mapping from the Survey of India will be taken for the preparation of base maps required for preparation of Master Plans according to schedule.

#### STATISTICAL DIVISION :

96. As a new function of the Town and Country Planning Department, it is proposed to be organised as a separate Division to conduct studies on continuous basis and compile and prepare statistical data base, conduct urban research, and organise a urban and regional information system for the use of physical planning in the State. This Division will also assist in drafting of bills relating to town planning laws, rules etc.

#### TECHNICAL SCRUTINY AND MONITORING OF HOUSING AND URBAN DEVELOPMENT PROJECTS :

97. Since the task of planning and execution of Housing and Urban Development Projects is stupendous, the organisational set up of the implementing agencies such as State Housing and Development Board, Development Authorities, and Local Bodies, particularly their technical, administrative and financial wings will be adequately strengthened and streamlined for efficient implementation of the projects during the Sixth Five Year Plan 1980—85.

98. It is also proposed to create a Technical Scrutiny and Monitoring Division at the headquarters of the State Town and Country Planning Department which will be appropriately staffed with a view to perform the following functions:

(a) Preparation and finalisation of Five Year Plans for Housing and Urban Development Sector, preparation of Annual Plans and follow up actions.

(b) Technical scrutiny and proper formulation of housing and urban development schemes submitted by Local Bodies.

(c) Monitoring the progress of various schemes by making site inspections and transmitting progress reports to the State Government regularly.

99. There are four specific areas which will need careful monitoring :

- |  |                   |
|--|-------------------|
| (i) Housing Schemes (E.W.S., L. I. G., M. I. G., L. A. D., Slum clearance and Urban Development Schemes) | Rs. 73.66 crores  |
| (ii) Environmental Improvement of Slums  | Rs. 36.50 crores. |
| (iii) Integrated Development of Small and Medium Towns   | Rs 29.50 crores   |
| (iv) Kanpur Urban Development Project.   | Rs 40.00 crores.  |

100. It is proposed to create four units in the Technical Scrutiny and Monitoring Division, each under the charge of class I Officer, while the entire Division will be headed by a Senior Planner.

101. The outlay for Town and Regional Planning for the Sixth Plan is proposed to be of the order of Rs.105 lakhs out of which Rs.25.00 lakhs will be for Hills, the break up of which is given below :

<i>Town and Regional Planning</i>	<i>Rs. in lakhs</i>
1. Existing Divisions	} 77.00
2. Strengthening of existing Divisions.	
3. Revision of Master Plan	
4. Aerial Survey and Mapping	.. 9.00
5. Statistical Division	.. 4.00
6. Technical Scrutiny and Monitoring Division for Housing and Urban Development Projects.	15.00
Total	Rs. 105.00

102. *Environmental Improvement of Slums:* During the last two decades, the Government has been seized with the problem of making improvement in the living conditions of the existing slums and the following steps have been taken :

(a) Enactment of the U. P. Slum Areas (Improvement and Clearance) Act, 1962, which provides for the improvement and clearance of slum areas, rehabilitation of their residents and protection from eviction of tenants from slum areas ;

(b) A national programme for environmental improvement of slums was first started in the year 1972-73 by the Government of India for cities having population of more than eight lakhs as per 1971 Census. At that time, only two cities, namely Lucknow and Kanpur, were covered under this programme. The scheme remained under Central Sector upto the end of Fourth Five Year Plan i.e. up to March 31, 1974. An expenditure of Rs.132.19 lakhs for Kanpur and Rs.124.05 lakhs for Lucknow, i.e. Rs.256.24 lakhs in all was incurred, benefitting 2.50 lakhs slum population.

103. The scheme was transferred to the State Sector in the Fifth Five Year Plan. Seven cities having population of more than three lakhs as per 1971 Census have been covered. An expenditure of Rs.620.70 lakhs has been incurred, benefitting 6.77 lakhs persons,

since 1972 in the seven cities viz. Kanpur, Lucknow, Allahabad, Varansi, Agra, Meerut and Bareilly.

104. It is proposed to extend this scheme to all the cities having a population of one lakh and above during the Sixth Five Year Plan. It has been estimated by the Working Group on Housing and Urban Development, constituted by the State Government that over one fourth population (25 per cent) constitute the slum population in class I cities of this State (22 cities). On this basis, the slum population may be around 25 lakhs at the beginning of the Sixth Five Year Plan. After deducting the benefit already extended to 6.77 lakhs slum population so far, it is proposed to cover the remaining 18.25 lakhs slum population during this Plan period by spending Rs.200 *per capita* for this purpose. The city-wise slum population is given below:

*Citywise estimated slum population and slum population already benefited by 31-3-1980*

Sl. no.	Name of the city	Estimated slum population 1980-81	slum population already benefited up to 31-3-1980	No. of persons to be benefited.
1	2	3	4	5
1	Kanpur .. .. .	6.140	2.047	4.093
2	Lucknow .. .. .	2.850	1.762	1.088
3	Agra .. .. .	2.240	0.758	1.482
4	Allahabad .. .. .	1.880	0.581	1.299
5	Varanasi .. .. .	2.600	0.399	2.202
6	Meerut .. .. .	1.000	0.884	0.116
7	Bareilly .. .. .	0.830	0.345	0.485
8	Gorakhpur .. .. .	0.730	..	0.730
9	Ghaziabad .. .. .	0.390	..	0.390
10	Jhansi .. .. .	0.530	..	0.530
11	Moradabad .. .. .	0.740	..	0.740
12	Rampur .. .. .	0.480	..	0.480
13	Mathura .. .. .	0.400	..	0.400
14	Saharanpur .. .. .	0.790	..	0.790
15	Firozabad .. .. .	0.430	..	0.430
16	Aligarh .. .. .	0.770	..	0.770
17	Faizabad .. .. .	0.300	..	0.300
18	Dehradun .. .. .	0.520	..	0.520
19	Mirzapur .. .. .	0.310	..	0.310
20	Shahjahanpur .. .. .	0.360	..	0.360
21	Muzaffarnagar .. .. .	0.360	..	0.360
22	Farrukhabad .. .. .	0.350	..	0.350
Total ..		25.000	6.776	18.224 Say 18.25

105. *Slum improvement and Clearance Board*: At the State level, a separate Slum Improvement and Clearance Board is proposed to be set up during the Sixth Plan with a view to formulate a perspective plan for slum improvement in the entire State and execute this massive programme over a definite period of time.

106. The proposed outlay for this scheme during Sixth Five Year Plan 1980-85 will be Rs.36.50 crores as detailed below :

1. Environmental Improvement of Slums	Rs. 34.00 Crores
2. Slum Improvement and Clearance Board	Rs. 2.00 Crores
	Rs. 36.50 Crores

107. *Integrated Development of Small and Medium Towns*: This is a centrally aided scheme which has been started during the year 1979-80. The scheme lays emphasis on integrated development of small and medium towns to enable them to act as growth and service centres for the rural hinterland and also to reduce the rate of migration to metropolitan and big cities. Under this scheme towns having a population of 1 lakh and below are eligible for assistance. The towns are to be selected on the basis of the following criteria.

- (1) District Headquarter towns
- (2) Sub-divisional Headquarter towns,
- (3) Mandi Towns,
- (4) Town of national tourist importance,
- (5) New towns for multipurpose complexes.

108. The Central Government provides loan assistance on a matching basis to the extent of 50 per cent for land acquisition and development, housing schemes including sites and services, traffic and transportation to sub-serve shelter and employment projects and development of mandies/markets, provision of industrial estates, etc. The remaining 50 per cent is to be met from the State Plan for components such as slum improvement, upgrading, renewal and small scale employment generation activity, low cost schemes of water supply, sewerage, drainage and sanitation, pre-

ventive medical/health facilities, health care, parks and play grounds and assistance for making modifications in the city master plans to permit mixed land uses.

109. During the year 1979-80, projects for 6 towns viz. Jaunpur, Fatehpur, Azamgarh, Hathras, Pauri and Banda having an estimated cost of Rs.581.65 lakhs was submitted to the Government of India. The State Government also released a sum of Rs.15 lakhs for development of Hapur under N. G. R. during the year 1979-80.

110. During 1980-81, sixteen towns have been tentatively selected for development. These towns are : Barabanki, Ballia, Dala-Chopan, Obra, Chunar, Singrauli, Vrindaban, Raebareli, Pilibhit, Garhmukteshwar, Bulandshahr, Srinagar, Chitrakoot, Kitcha, Badrinath and Pithoragarh.

111. In Uttar Pradesh, there are 20 class II cities with a population between 50,000 to 1 lakh and 251 towns below 50,000 population, as per 1971 Census. Since it would not be possible to cover all the towns during this Plan period, it is proposed to tentatively select 48 towns (including 9 in hills and Hapur under N. C. R. for development.

The list of towns selected is given hereunder :—

*Plain Areas, small and medium towns selected for development during 1980-85.*

1. Jaunpur.
2. Fatehpur.
3. Azamgarh.
4. Hathras.
5. Banda.
6. Barabanki.
7. Ballia.
8. Dala-Chopan.
9. Obra.
10. Chunar.
11. Singrauli.
12. Vrindaban.
13. Rae Bareli.
14. Pilibhit.
15. Garhmukteshwar.
16. Bulandshahr.
17. Chitrakut.
18. Kitcha.
19. Budaun.

20. Ramnagar.
21. Sitapur.
22. Jalaun.
23. Lakhimpur-Kheri.
24. Bijnor.
25. Sambhal.
26. Etah.
27. Etawah.
28. Hapur.
29. Sultanpur.
30. Maunath Bhanjan.
31. Unnao.
32. Bahraich.
33. Deoband.
34. Najibabad.
35. Amroha.
36. Chandausi.
37. Bhadohi.
38. Pipri-Turra-Renukoot.
39. Deoria.

#### Hill Areas

1. Srinagar.
2. Badrinath.
3. Pithoragarh.
4. Mussoorie.
5. Naini Tal.
6. Rudrapur.
7. Pauri.
8. Almora.
9. Kedarnath.

112. For the purposes of formulation and implementation of the schemes, it is proposed to set up a local level co-ordination committee.

113. The task of formulation of the projects under this scheme is proposed to be entrusted to the Project Formulation Units of Town and Country Planning Department to be created in each town, in addition to which existing Divisions of the Town and Country Planning Department will also be suitably strengthened to perform the task of guiding the Units in the preparation of the projects and co-ordination with other concerned agencies.

114. The proposed outlay in the State Sector for this scheme during the Sixth Five-Year Plan 1980—85 will be of the order of Rs.1,480.00 lakhs as per details given below :

1. Integrated Development of Small and Medium Towns and NGR.	Rs. 1280.00 Lakhs
2. Project Formulation Units at Local level and strengthening of existing Divisions of the Town and Country Planning Department.	Rs. 100.00 Lakhs
3. Strengthening of Engineering Cadre of the Local Bodies for implementing the scheme.	Rs. 100.00 Lakhs
Total	Rs. 1480.00 Lakhs

115. The allocation for hill towns under this scheme will be of the order of Rs.20 lakhs during the Sixth Five-Year Plan period.

116. The local bodies will be the implementing agencies for this scheme. In order to suitably strengthen the engineering cadre of the local bodies implementing this scheme, an outlay of Rs.100.00 lakhs has been proposed during the Sixth Five Year Plan 1980—85.

117. *Kanpur Urban Development Project (KUDP—I)*: Kanpur is the only metropolis in Uttar Pradesh and ranks eighth among the nine metropolitan cities of the country. The rapid growth of the population of Kanpur has resulted in severe backlog in services, lack of adequate shelter and quick access to employment opportunities. The Kanpur Development Authority in collaboration with Kanpur Nagar Mahapalika, Kanpur Jal Sansthan and U. P. Directorate of Industries has drawn up the Development Project I (KUDP-I) for which financial assistance of the World Bank has been sought. The basic objective of the proposed project is to expand shelter related programme that would improve the living conditions, particularly of the economically weaker sections and low income groups. Major emphasis will be given on low cost programmes that would be affordable by

the target groups permitting cost recoveries from the beneficiaries. It is proposed to achieve the above objectives through direct physical investment and also through the strengthening of the management and finances of the institutions that provide and maintain urban services, namely Kanpur Development Authority, Kanpur Nagar Mahapalika and Kanpur Jal Sansthan.

118. The project having an estimated cost of Rs.40 crores will have the following components and will benefit population of about two lakhs.

(a) *Sites and Services*—About 15,000 serviced residential plots, community facilities, building material loans, small business-cum residential plots.

(b) *Slum Upgrading*—Upgrading of 'ahatas' in central city core, comprising about 20,000 households, including provision of land tenure, improved infrastructure services, community facilities and business-cum-residential plots.

(c) *Environmental Sanitation*—Improvements to Sewerage, water supply, storm water drainage, solid waste, management and maintenance.

(d) *Technical Services and Training*.

119. The financing of the project will be through the undernoted sources :

1. State Government share	Rs 11.43 Crores.
2. Central Government share (World Bank)	Rs. 14.00 Crores.
3. Institutional finance sources	Rs. 11.00 crores.
4. Internal resources of the implementing agencies.	Rs. 3.57 crores.

Total .. Rs. 40.00 crores.

120. *Kanpur Urban Development Project (KUDP II)*—This project has been conceived as a part of a long term programme as the improvements in all the key sectors can not be achieved by the above project spanning a period of three years;

It is, accordingly, proposed to take up another project to be implemented during 1984—87 for which a provision of Rs.10.00 crores would be needed during the Sixth Plan. The State Government's share of Rs.4.3 crores has been proposed during the last year of Sixth Five-Year Plan i.e. 1984-85.

121. *Research and Development*—It is proposed to take up research on housing and urban development through Regional Centre for Urban and Environmental Studies, Institute of Public Administration, Lucknow University and also through Town and Country Planning Department. The Regional Centre intends to undertake training and research programme relating to housing and urban development particularly with regard to small and medium towns including regional planning metropolitan planning, administrative and organisation of small and medium towns cities in the process of urbanisation. The Town and Country Planning Department will focus attention on research in urban planning and also urban housing and suggest economy in land utilisation and provision of essential services and improved designs of houses etc.

122. The Regional Centre for Urban and Environmental Studies proposes to improve infra structure facilities in order to cope with its increasing activities. The Centre has been allotted a 3-acre site in Lucknow where a new complex consisting of Conference Hall, Seminar Rooms, Hostel for trainee officers, guest rooms and guest suites. Some studies are also proposed to be provided at an estimated cost of Rs.30.00 lakhs. In order to conduct training and research, provision of Rs.10 lakhs will be needed and will be met out of Rs.40 lakhs proposed to be allotted to the Regional Centre. Another Rs.10 lakhs is proposed to be allotted for research and development activities of the State through the Town and Country Planning Department.

123. *Manpower Requirement*—For Urban Development programmes proposed during the Sixth Five-Year Plan 1980—85, about 30

millions mandays unskilled and 15 million mandays skilled employment opportunities, will be generated, which means that 20,000 unskilled and 10,000 skilled persons will get direct employment during Sixth Five Year Plan period.

**HILL OUTLAY/PROGRAMME :**

124. During the Sixth Five Year-Plan an outlay of Rs. 50.00 lakhs for Urban Development/Projects will be for Hills. The scheme-wise break-up is as under:

		(Rs. in lakhs)
Sl. no.	Name of the Scheme	Proposed Outlay
1.	Urban Development programme (Financial Assistance to Local Bodies)	5.00
2.	Town and Regional Planning	25.00
3.	Integrated Development of Small and Medium Towns.	20.00
<b>Total</b>		<b>50.00</b>

125. *Special component*—The Sixth Five Year-Plan 1980—85 will lay special emphasis on the Environment Improvement of Slums under the R. M. N. P. This programme is now proposed to be extended 22 towns having population of one lakh and above. About 18.25 lakhs slum population are expected to be benefited by this programme. Out of this about 50 per cent slum dwellers belonging to Scheduled Castes and Scheduled Tribes will also be benefited under this scheme. Besides, 20 per cent of the shops sites and services, plots etc. to be constructed under the Urban Development sector will be reserved for Scheduled Castes and Scheduled Tribes.

CHAPTER 15  
OTHER SOCIAL SERVICES

(1) INFORMATION AND PUBLICITY

Primary role of Information and Publicity in a planned economic development is to make known to people at large the policies and programmes of the government and thereby secure maximum public participation. It has a vital role to play in the dissemination of new production techniques and technology etc. Considering the vastness of the state it has not been possible to effectively cover the entire population living in remote villages. During Sixth Plan it is proposed to strengthen publicity set up so that an awareness about progress of various development programmes could reach the farthest corner of the state.

Review of the Previous Five Year Plans.

2. During second plan for the first

time schemes of information and publicity department were included in Plan and then subsequently provision were made in the Third, Fourth and Fifth Plan. The level of expenditure in these five year plans has been to the tune of Rs. 56.03 lakhs, Rs. 63.25 lakhs, Rs. 37.80 lakhs respectively. During 1979-80 and 1980-81 an outlay of Rs. 24.40 lakhs and Rs. 15.00 lakhs respectively for the various schemes was too meagre to fulfill the basic obligation of the department. These outlays were fully utilised. Additional allocation of an outlay of Rs. 40 lakhs during 1979-80 and 50 lakhs during 1980-81, was made for Chalchitra Nigam for construction of mini and small cinema houses in rural and semi-urban areas and also to give incentives to film producers. The level of achievement of various publicity programmes during different plan periods is indicated below:

Serial no.	Item	Unit	Achievement		
			Fifth Five Year 1974-79	Annual Plan 1979-80	Annual Plan 1980-81 (anticipated)
1	2	3	4	5	6
1	Songs, drama and cultural programmes ..	Nos.	396	25	25
2	Documentary films ..	Nos.	13	3	3
3	News Reels ..	Nos.	19	4	4
4	Kisan Melas ..	Nos.	95	1	2
5	T. V. Sets ..	Nos.	104	18	10
6	Radio sets ..	Nos.	200	60	..
7	District Information Centre ..	Nos.	25	3	6
8	Tehsil Information Centre ..	Nos.	..	11	2
9	Exhibitions ..	Nos.	129	8	8
10	Publication, pamphlets, folders, poster, and others ..	Nos.	75	33	10
11	Cinema Houses ..	Nos.	..	17	50

### STRATEGY OF APPROACH IN THE SIXTH PLAN 1980-85

3. Considering level of literacy in the state (22 per cent according to census 1971), regional variations in the dialect as also the cultural and social values, communication strategy in the Sixth Plan would revolve round towards developing a package of communication techniques including printing of reading materials, and developing audio-visual material, etc. for dissemination of Government policies and programmes. Working group on information and publicity has also identified "gray areas" for communication net work. Use of audio-visual media such as films, cinema slides, television, radio, exhibitions and visual aids would be adequately emphasised both for general entertainment and creating awareness among masses. Strengthening of publicity set up at regional and tehsil levels for efficient implementation of the publicity programmes would also be taken up. Production of newsreels and documentary films will be stepped up adequately so also the production of literature specially for use in rural area. Mini and small cinema houses would be constructed at important places in rural and semi-urban areas where no such facility exists either to so that entertainment could be made available to those people close to their habitats.

4. To achieve these objectives an outlay of Rs. 750 lakhs has been proposed for the Sixth Plan 1980-85, out of which Rs. 205.76 lakhs has been earmarked for 1981-82.

5. Following important schemes are proposed to be taken up during 1980-85 :

(1) Strengthening of publicity set up at the regional and tehsil levels so as to make it more effective. Dissemination of information on varied problems of a particular region or district, its economic development plans and flowing therefrom leading to development of that area can best be achieved in this manner.

(2) Use of audio-visual-aid, such as television, newsreels, documen-

tary films and community listening scheme. It is proposed that these be utilised on a wider scale so that programmes meant for rural areas and illiterate masses be intensified. With this purpose in view film unit are proposed to set up in Kumaun, Garhwal and Bundelkhand regions.

(3) Wider utilisation of language newspapers for extensive publicity through advertisements, features and articles etc.

(4) Greater emphasis on song and drama and cultural programmes with a view to have better personal contacts.

(5) It is proposed to open regional photography units for coverage of important events and developmental activities of these regions.

(6) Opening of regional exhibition units for organising exhibitions up to the block level.

(7) Publication of district-wise booklets showing progress of developments, posters and pamphlets etc. for distribution upto tehsil level. Reference section will also be further strengthened.

(8) For providing healthy entertainment in small town rural areas and such other places where this facilities generally does not exist or is inadequate. Seventeen cinema houses have already been constructed by U. P. Chalchitra Nigam and it is expected that 50 cinema houses will be opened by the end of 1980-81. There is a target of constructing 200 cinema houses during 1980-85.

(9) It is proposed to strengthen U. P. Information Centre, New Delhi and establish a photography unit there so that an over all picture of development could be presented at national capital level also.

(10) For prompt and more economical printing of various publications of the department, it is proposed to establish a printing press at headquarters.



6. The targets proposed for various publicity schemes during 1980-85 and 1981-82 are as follows:—

Serial no.	Items	Unit	Proposed targets	
			1980-85	1981-82
1	2	3	4	5
1	Documentary films	Nos.	48	12
2	Newsreels	Nos.	52	12
3	District Information Centres.	Nos.	6	..
4	Tehsil Information Centres.	Nos.	102	25
5	T.V. Sets	Nos.	310	100
6	Cultural Programmes	Nos.	10505	2620
7	Division Exhibition Units.	Nos.	12	3
8	Exhibitions	Nos.	1200	120
9	Kisan Mela	Nos.	56	12
10	Printing Press	Nos.	1	1
11	Divisional Photo Units.	Nos.	8	3
12	Cinema House	Nos.	50	..
13	Film Unit		19	4
14	Publications		432	114

7. The publicity schemes of the Information Department are not essen-

*Expenditure/Outlay*

tially employment oriented. However, employment would be provided to about 606 persons.

## (2) LABOUR AND LABOUR WELFARE

8. In a Welfare State, the Government has responsibility to safeguard the interests of working labour class by ensuring reasonable wage as well as to prevent them from exploitation. Providing better working condition is equally important as it contributes indirectly to the planned economic growth and increase in labour productivity. This is possible if proper labour management relationships are established through workers' participation in management. The State has also been responsibility to continuously assess the manpower requirement of industry and provide trained and skilled craftsmen to meet the growing need of the industry. Employment service and vocational guidance is provided through a state wide net-work of employment exchanges providing effective liaison between the employers and employees. Thus the schemes of labour welfare are classified into the following three sub-sectors :

- (i) Labour Welfare.
- (ii) Craftsmen Training.
- (iii) Employment Service.

9. The details of the financial outlays/expenditure in these sub-sectors on the plans are indicated below :

(Rupees in lakhs)

Serial no.	Period		Labour Welfare	Crafts- men Training	Employ- ment Service
			3	4	5
1	2				
1	Fifth Plan (1974-78) actuals	..	71.16	109.86	1.13
2	Annual Plans (1978-79 and 1979-80)	..	1979.78	106.00	5.97
3	Sixth Five Year Plan (1980-85 proposed outlay)	..	304.00	635.00	69.00
4	Annual Plan (1981-82) proposed outlay	..	40.00	112.00	8.00

## (1) LABOUR WELFARE

10. The key activities of the labour welfare are both regulatory and welfare oriented. Under the regulatory activities, the main task is enforcement of various labour laws and reconciliation and settlement of labour disputes. The welfare part includes provision of medical, sports, recreation and other cultural facilities.

11. The enforcement machinery of Labour Department supervises the enforcement of forty labour legislations related with the work and life of the working class. The quantum of work has increased considerably due to enact-

ment of new legislations and also due to substantial increase in the number of industrial both in organized and un-organized sectors.

12. The number of registered factories at the beginning of 1960 stood at 2,482 employing about 2,85,496 workers. This number increased to 5,420 in 1977, requiring greater surveillance under the Factories Act, Payment of Wages Act, Employment of Children Act and for compliance of safety provisions. The increase in the work load of the supervisory machinery can be estimated from the following table :—

*Quantum of work relating to Labour Welfare in various years*

Item	(In Nos.)							
	1960	1965	1970	1975	1977	1978	1979	
1	2	3	4	5	6	7	8	
1. Strikes Lockouts .. ..	60	116	208	112	194	247	213	
2. Conciliation Cases .. ..	4310	4460	5000	6297	5425	6088	6409	
3. Cases handled by labour courts ..	517	753	1421	2221	1603	2500	3089	
4. Cases handled by tribunals .. ..	181	285	351	920	629	976	757	

13. In order to provide greater protection to the large section of unorganised labour, many more employments have been brought within the purview of the Minimum Wages Act. As against the 13 employment schedules to the Minimum Wages Act at the end of 1950, there are now 49 employments in the schedule. The manner of fixation of minimum wages has also undergone considerable change and the trend is towards evolving a new structure of wages keeping in view the requirement of skill as well as conditions of the industry. On account of frequent need for revision of prescribed rates of wages, it has been linked to cost of living index. Further to safeguard the interests of unorganised labour, Bidi and Cigar Workers Act, Contact Labour Act and Equal Remuneration Act are some of the legislations enacted recently.

14. The enforcement machinery of department has been adequately activated\*

15. Various facilities under the head labour welfare are provided through 80 Labour Welfare Centres in the State. Further two T. B. Clinics for industrial workers with a strength of 58 beds have been established. As a part of expansion and decentralisation of inspection functions, 12 regional offices, 7 sub-regional offices, 11 regional offices of Inspector of Factories and 60 offices of Labour Inspectors have been created in the State so far.

16. The industrial housing scheme has been taken up to build subsidised industrial houses for workers. By the end of 1979 the number of quarters constructed was 30,147 under this programme.

\*Annexure I.

17. Work of rehabilitation of bonded labour has been taken up in the State since 1976-77 in certain blocks of the hill district of Dehra Dun, Uttarkashi and Tehri Garhwal. From 1979-80 the scheme has been extended to plain areas also. In Sixth Plan (1980-85) an outlay of Rs. 110.00 lakhs as State's share has been proposed for the rehabilitation of bonded labour in the hill areas here 3,211 families with 4,373 bonded labour were identified. Out of these, 1,281 families have been fully rehabilitated and 1930 families have been partially rehabilitated. The bonded labourer have been rehabilitated in various activities, agriculture, horticulture, animal husbandry and other craft based occupations. Survey is being done in other areas and as a result of this survey 3,449 new families of bonded labour have been identified till the end of May 1980.

18. The broad strategy of labour welfare in the Sixth Plan would be advance planning for launching the new programmes, creation of special cell for evaluating the programmes, conducting short and diagnostic studies; simplification of record-keeping procedure; creating in-service training facilities and refresher courses for the officers of the industrial enterprises and also of the trade unions and participation of labour in management to promote cohesiveness and industrial harmony. Economic emancipation [or bonded labour also occupies a place of priority in the Sixth Plan. The main objectives set forth in the Sixth Five Year plan are given below :

(i) Wider coverage of the Minimum Wage Regulation and effective enforcement of the Contract Labour (Regulation and Abolition) Act) Equal Remuneration Act, the Employment of Children Act and other legislative measures,

(ii) Streamlining of the industrial relations machinery under the existing set-up.

(iii) Identification, emancipation and progressive rehabilitation of bonded labour in the hill/tribal and plain areas of the State.

(iv) Augmentation of the labour welfare programme, opening of welfare centres in area of recent industrial growth including centres of handicraft, cottage industry and home industries and expansion of the welfare content of the activities of centres.

(v) More effective enforcement of labour laws in the factory and other organised sectors; and securing safe working conditions which are also promotive of efficiency.

(vi) Conducting of action-oriented diagnostic studies in the field of labour.

(vii) Creating greater interest among worker in the affairs of organisations and suitably equipping them with the necessary know-how for fruitful participation in management.

(viii) Promotion of general efficiency of the existing apparatus of the Labour Administration by suitable reorganisation and improvement of quality of its personnel by means of in-service training, greater specialisation, and development of labour intelligence.

19. A brief description of some important schemes proposed to be taken up during the Sixth Plan 1980-85 is being given in the following paragraphs :

20. *Strengthening and decentralisation of enforcement machinery*—For effective enforcement of the different Labour Laws particularly Shops and Commercial Establishment Act, Factories Act, Payment of Wages Act, it is proposed to create more offices of Labour Officers at the district level and more offices of Labour Inspectors at the tehsil level where there exist no such offices at present. Existing certification machinery would also be equipped to cope with the increased volume of work.

21. *Authority for wages, gratuity and workmen's compensation*—Under the various legislation such as payment of Wages Act, Minimum Wages Act, Equal

Remuneration Act, Workmen's Compensation Act, seven labour officers are proposed to be appointed in the various regions exclusively to deal with the claim cases.

22. *Creation of Additional Labour Courts*—For the maintenance of industrial peace and to decide the disputes expeditiously, three Labour Courts are proposed to be set up one each in Western, Eastern and Central regions of the State during the Sixth Plan.

23. *Expansion and decentralisation of conciliation machinery*—It is proposed to widen the conciliation service facilities in view of the fast development of industrial areas particularly at the regional office, Kanpur, Ghaziabad and Mirzapur. The load of work in these places has considerably increased on account of the growing problems of industrial relations in organised sectors of the working class. Worker's participation in industry would also be emphasised. Necessary preparation will be made to implement it effectively.

24. *Construction and purchase of buildings*—Regional Labour Office at Agra is housed in a rented building which is very old and also falls short of requirement. Similarly all the five labour courts and ten industrial tribunals at Kanpur are at present housed in separate rented buildings. It is proposed to construct one building at Kanpur for all the labour courts and tribunals. This building will also accommodate all the proposed additional labour courts. Office buildings for Varanasi and Ghaziabad are also proposed to be constructed in the Sixth Plan. It is further proposed to construct/purchase at least two buildings to house labour welfare centres at Rae Bareilly and Moradabad. Factory Inspectorate Office at Lucknow would also be constructed during the plan period.

25. *Expansion of labour welfare activity*—With a view to providing healthy and educative entertainment to workers, television sets would be provided at the welfare centres at Rae Bareilly, Lucknow,

Jajmau, Hathras and Shamli. The incidence of tuberculosis being the highest in Kanpur, it is proposed to provide 10 additional beds in the existing T. B. clinic Babupurwa, Kanpur. It is proposed to provide knitting machines at 6 welfare centres to train the ladies of the working class. Apart from labour welfare activities, a few shopping centres around the welfare centres would be established. In the first phase of the programme, one complex is proposed to be established around welfare centre, Shastrinagar, Kanpur.

26. *Strengthening of statistics and research wings and decentralisation of Planning Cell*—For the collection and maintenance of data regarding strikes, look-outs, lay-off, retrenchment, loss of production and mandays lost on regional basis, statistics and research wing would be strengthened. The Planning Cell would also be strengthened for formulation of five-year and annual plans and to monitor the implementation aspect of the various programmes.

27. *Setting-up of a women cell in the Labour Commissioners Office*—A women cell is proposed to be established at the headquarters of Labour Commissioner to facilitate specialised treatment to the problems connected with women and child labour.

28. *Strengthening of the Publicity Section*—With a view to giving wide publicity of various activities and the benefits admissible to workers under various welfare programmes, publicity cell of the department would be strengthened and more programmes of publicity will be introduced.

29. *Setting-up of an Institute of Participative Management and Labour Relations*—Facility of training of personnel of the Labour department and trade union leaders will be provided to bring about change in their attitude and to help them to take result oriented skills in the field of industrial relations and participative management.

30. *Expansion of library at the headquarters and at regional and other field offices*—Under the scheme adequate

provision for purchase of books, current journals on labour and industrial economics and labour laws will be made in the Sixth Plan.

31. *Mechanical aid to improve efficiency*—In order to keep pace with increasing work of maintaining records and registers pertaining to the registration of Shops and Commercial Establishments Act, it is proposed to introduce a cardex system in the regional offices at Meerut and Dehra Dun.

32. *Setting-up of telex-communication system at head office*—Looking to the increasingly complicated labour problems and vastness of the state, it is proposed to set-up telex-communication system for timely receipt of information about labour problems and make efforts to solve them.

33. *Rehabilitation of Bonded Labour*—For the rehabilitation of bonded labour a project office has been set-up at Dehra Dun. The results of recent surveys regarding further identification of bonded labour conducted by the project office, Dehra Dun after March 1980, are being checked by the Labour Commissioner's organisation. In the plain areas, a detailed survey covering Manikpur block of Banda district and Shankergarh block of Allahabad district is in progress and likely to be completed in 1980. A project office for rehabilitation of bonded labour in plain areas has also been set-up at Manikpur. During the Sixth Plan, 5,474 bonded labourers are proposed to be rehabilitated by various economic programmes, of which 850 labourers would be rehabilitated in 1981-82.

34. *Special Component*—Fifty per cent of the benefit of labour welfare scheme would flow to those belonging to Scheduled Castes. Accordingly, Rs. 150.00 lakhs has been quantified as the outlay which would flow to Scheduled Castes. The scheme of rehabilitation of bonded labour would by and large, benefit members of Scheduled Castes and Tribes.

## (2) CRAFTSMEN TRAINING

35. Industrial training plays an important role in accelerating the pace of industrial development and thus, makes its due contribution in the economic and social development of the State by making skilled workers and technicians available to the industries. The industrial training also provides the technical know-how to the youth, to enable them to be self-employed.

The objects of the Craftsmen Training Scheme are:—

(i) to ensure a steady flow of skilled workers to the industry;

(ii) to raise Industrial Productivity by systematic training of workers and ;

(iii) to reduce unemployment among the educated youth by equipping them for suitable industrial employment and preparing them for self-employment.

36. In order to achieve the above objectives, it is felt that there is an urgent need of improving quality of the training which is being imparted in the institutes so that it can keep pace with ever changing technology. It is therefore necessary that the institutes are well equipped with machines tools, trained staff, raw materials etc.

## REVIEW OF PRESENT STATUS

37. In the State of U. P. there are 67 Industrial Training Institutes with capa-

city of 26,912 seats in 43 skills. The plan-wise progress is given below :—

*Industrial Training Institutes and their Capacity*

Plan period	Number of I.T. Is opened	Total No. of I.T.Is at the end of plan	No. of seats added	Total No. of Seats at the end of the plan
1	2	3	4	5
First Plan	..	8	..	1,832
Second Plan ..	7	15	2,240	4,072
Third Plan	33	48	13,496	17,568
Three Annual Plans (1966—69)	..	48	5,012	22,580
Fourth Plan	4	52	2,204	24,764
Fifth Plan	15	67	1,584	26,368
Annual Plans (1978-79 and (1979-80)	..	67	432	26,800

*Financial Provisions*

Plan Period	Total approved outlay (Rupees in lakhs)
1	2
Second Five Year Plan ..	179
Third Five Year Plan ..	532
Three Annual Plans (1966 to 1969)	669
Fourth Five Year Plan ..	233
Fifth Five Year Plan (1974—78)	132
Two Annual Plans (1978 to 1980)	106
Sixth Five Year Plan	635

38. It would be seen that during and after the Third Five Year Plan there was very substantial expansion in the craftsmen training programme. This was necessary in order to make available trained manpower for large and small

organised and unorganised industry and trades. Such rapid expansion led to shortage of trained teachers and made the task of maintenance of proper standards difficult.

39. A qualitative evaluation of the shortcomings has been made and it is proposed to remove them during the Sixth Five Year Plan to improve the quality of trained personnel and increase their utility and employability. The main shortcomings noticed in the evaluation are as below :

(1) Inadequate accommodation, staff and equipment in newly opened and existing ITIs.

(2) Obsolete and work out equipment and inadequate maintenance of machines and equipment due to the deficiencies of maintenance staff and material required for maintenance.

(3) Prescribed inspection work was not carried out due to inadequate inspection machinery.

(4) Reformed Trade Testing System was introduced without providing any proper staff machinery for its effective implementation.

40. The broad strategy of the Sixth Five Year Plan will be as under :

(i) Fuller utilisation of existing training facilities and opening of new ITIs where necessary.

(ii) Modernisation of the equipment.

(iii) Eradication of unemployment among the I.T.I. trained personnel through better placement policy and interface with local industries and employers in formulating training programmes.

(iv) Diversification of the courses in popular trades and refresher courses for instructors in popular trades.

(v) The training needs of rural workers in the context of integrated rural development.

(vi) Apprenticeship Training.

(vii) Self-Employment promotion Programme.

41. An outlay of Rs. 635.00 lakhs has been proposed for the Sixth Five Year Plan out of which Rs. 250.00 lakhs

is for hill region. Of this Rs. 194.35 lakhs (including Rs. 73.72 lakhs for hills) will be spent on meeting the needs of the continuing schemes. Against the remaining outlay of Rs. 440.65 lakhs, the following new schemes are being proposed. I.T.Is. have been established in Bara Banki and Lalitpur. It is proposed to start Craftsmen Training Scheme in these districts for which an outlay of Rs. 62.20 lakhs has been proposed, for this scheme during the Sixth Plan. It is proposed to open 5 branch I.T.Is. in the hill region during the Sixth Plan to cater for the increasing demand. These institutes shall function under the supervision of the Principal of I.T.I. located nearby. An outlay of Rs. 19.50 lakhs has been proposed.

42. *Creation of posts of Class I Principals*—In accordance to the norms prescribed by NCTVT, ITIs. having 600 or more seats must have one principal of Class I and one Vice-Principal of Class II. ITIs of Mirzapur, Bulandshahr and Almora have got more than 600 seats but only one principal of Class II is sanctioned at these institutes. It is therefore, proposed to provide 3 posts of Principal Class I for these institutes. The present post of Principal Class II will be re-designated as Vice-Principal.

43. *Introduction of 112 seats in hill region*—Dovetailing with the present need of trained personnel and the requirement generated by industries and other sectors, it is proposed to introduce 224 seats in popular trades in hill area during the Sixth Five Year Plan, 112 seats being opened in the annual plan of 1980-81, an outlay of Rs. 9.24 lakhs is proposed for the remaining 112 seats, all in hill region during the Sixth Plan.

44. *Making of deficiency of tools and equipment in the existing ITIs*—Government of India and NCVT have prescribed norms in respect of tools and equipment for each trade. On the broad based norms they had also prescribed Rs. 1,800 per seat up to Third Plan period, and thereafter Rs. 3,030 per seat for the purchase of tools and

equipment. In addition to this Rs. 110 per seat was prescribed for furniture. On these broad based norms there exists a shortage of tools, equipment and hand tools worth Rs. 400.00 lakhs in various ITIs. In addition to this, due to their continuous use, some of the machinery and equipment have been worn out and needs replacement. During the plan, it is proposed to spend Rs. 88.30 lakhs to make good deficiency in the I.T.Is. of which Rs. 50.20 lakhs have been allotted for hills.

45. *Provision for training of officers and technical staff in new technology*—In order to raise the level of technical know how of officers and technical staff. Central Training Institute for instructors and advance training institutes have been established by Directorate General of Training and Employment, Government of India. It is proposed to avail this facility and to get 100 officers and 600 other technical staff trained during the plan. An outlay of Rs. 8.40 lakhs is proposed for the Sixth Plan out of which Rs. 1.26 lakhs is for hills.

46. *Making-up of deficiency of Mathematics and Drawing Instructors*—In accordance with the norms prescribed by NCTVI, there must be 258 posts of Mathematics and Drawing Instructors while only 218 posts are sanctioned at present. It is proposed to make up the deficiency of 40 posts in the Sixth Plan for which an outlay of Rs. 6.00 lakhs is proposed.

47. *Making-up of deficiency of the post of Millwright Foreman*—In accordance with the norms prescribed by NCTVT, there is a shortage of 15 Millwright Foreman (2 in hills and 13 in plains). Ten posts for plains being taken in the annual plan of 1980-81, it is proposed to create 5 posts (3 in plain, and 2 in hills) during the plan for which an outlay of Rs. 2.89 lakhs has been proposed including Rs. 1.01 lakhs for hills.

48. *Making up of deficiency of the post of Foreman*—In accordance with the norms prescribed by NCTVT, there is a shortage of 118 posts of Foreman and

it is proposed to reduce the deficiency in phases. Accordingly, 50 posts of Foreman are proposed to be created including 10 posts in hill region during the plan. The outlay of Rs. 14.06 lakh is proposed during the plan out of which Rs. 2.60 lakhs is for hills.

49. *Making up of deficiency of the post of Supervisor*—There exists a shortage of 175 posts of supervisors in accordance with the norms prescribed by NCTVT and the shortage is proposed to be reduced during the plan in phased by creating 85 posts in the Sixth Plan including 15 for hills. The outlay proposed in this scheme is Rs. 14.31 lakhs out of which Rs. 5.13 lakhs is for hills.

50. *Making up the deficiency of supporting staff, tools and equipment in the 2 centres under the AVTS Scheme*—Advance vocational training facility was provided at the Rae Bareilly and Meerut I.T.Is. in collaboration with the Government of India and UNDP to raise the quality and productivity of skilled workers in some important trades. Strengthening of the scheme alongwith the constructed of additional building being taken in the plan of 1980-81 it is proposed to arrange supporting staff at Meerut and Rae Bareilly and make up the deficiency of tools and equipment for which an outlay of Rs. 10.18 lakhs is proposed during the Sixth Plan.

51. *Opening of 3 centres under AVTS Scheme*—Keeping in view the urgency of improving the quality and productivity of skilled workers, it is proposed to start AVTS scheme at three more ITIs. for which an outlay of Rs. 64.00 lakhs is proposed during the Sixth Plan.

52. *Strengthening of the 5 offices of Zonal Deputy Directors*—To make the working more effective it is being felt to strengthen the offices of the Zonal Deputy Directors which were established at Kanpur, Varanasi, Lucknow, Agra and Dehra Dun. At the same time, some more offices need to be opened to make the inspecting



machinery more effective, to improve the standard of training and to have better liaison between industry and ITIs. Accordingly, it is proposed to open two offices of the Deputy Director at Meerut and Gorakhpur in the plan of 1980-81, Strengthening of the existing offices of Deputy Directors has also been proposed. An outlay of Rs. 11.15 lakhs is required out of which Rs. 2.23 lakhs is for hills.

53. *Establishment of the Office of State Council of Training and Vocational trades at Headquarter*—The State Government have recently established the State Council of Training and Vocational Trades and to begin with, nominal staff has been sanctioned. To run the Council as a full-fledged institution, it is proposed to provide an outlay of Rs. 6.40 lakhs in the plan.

54. *Purchase of land and construction of building for ITIs*—Five I.T.Is. in plains and 10 in hills are running in rented buildings having inadequate space for training and workshop. It is proposed to purchase land and construct buildings for 2 I.T.Is. , namely Hardwar and Bahraich in plains and for 7 I.T.Is. namely Tanakpur, Shalt Mahadeo, Pokhra, Karan Prayag, Barkot, Arkot, and Kanda in hills during the Sixth Plan. In hills, land has been purchased for ITIs at Shalt Mahadeo, Karan Prayag, Pokhra, Tanakpur and Kanda and land is being purchased for ITIs Pokhra, Barkot and Askot in the current year's plan. Construction work for ITIs at Shalt Mahadeo and Karan Prayag will be started during the year 1980-81. For the purchase of Land and construction of 2 ITIs in plains and for construction of 7 ITIs buildings in hills, an outlay of Rs. 107.87 lakhs is proposed during the Sixth Plan out of which Rs. 76.90 lakhs is for hills.

55. *Creations of the posts of Surveyor under Apprenticeship Training Scheme*—The Apprenticeship Act was enacted by the Government of India in 1961 and enforced in Uttar Pradesh in 1963. It is an important part of 20-point programme which provides training to apprentices in the establishments so as

to familiarise them with actual problems and working conditions and increase their practical knowledge and employability. At present there are only 7 posts of Surveyor. In order to achieve this object, it is proposed to have the surveyor in each zone and four surveyors (including 2 senior surveyors) at headquarter. Thus 8 posts of Surveyors and two posts of senior surveyors will be required during the Sixth Five Year Plan for which an outlay of Rs. 6.93 lakhs has been included out of which Rs. 1.60 lakhs is for hills.

56. *Provision of stipend and examination fee under Apprenticeship Training Scheme*—According to the Act, stipend of Rs. 130 to Rs. 200 per month is given by the employer to each apprentice. State Government bears 50 per cent of the expenditure on the apprentices who are ITI trained and work in the establishment having less than 500 employees and bears full expenditure on the examination conducted after completion of the training. Accordingly, an outlay of Rs. 8.00 lakhs is proposed for this scheme in the Sixth Plan, the whole amount being for the hill region.

### (3) EMPLOYMENT SERVICES

57. The basic aim of employment service is to establish effective liaison between the job seekers and employers, so that unutilised manpower resources may be utilised in the best interest of the nation. At present there are 81 employment offices in the State, catering to the need of job seekers and employers. The details are as under:—

1. Regional Employment Exchange ..	13
2. District Employment exchange ..	43
3. Town Employment Exchange	12
4. Special Employment Exchange for Physically Handicapped (Kanpur).	1
5. Special Employment Exchange for Scheduled Tribes at Dudhi (Mirzapur).	1
6. Professional and Executive Employment Office at Directorate of Training and Employment, U.P., Lucknow.	1
7. University Employment Information and Guidance Bureau.	10
Total ..	81

58. In addition to the aforesaid offices, 6 Job Development units have been set-up at Allahabad, Kanpur, Agra, Gorakhpur, Ghaziabad and Dehra Dun, which are engaged in the placement of special categories of applicants, and assessment of the future manpower requirements in industries and other projects. To arrest the evasion of Notification of Vacancies Act as also to collect data regarding employment and shortages in manpower, 6 Enforcement Units have also been set-up at Agra, Allahabad, Meerut, Lucknow, Bareilly and Kanpur so that the provision of the Employment Exchanges (Compulsory Notification of Vacancies) Act, 1959 may be implemented vigorously.

59. The important function of the Employment Services in the State is the placement of all categories of employment seekers and undertaking of collection, compilation, analysis and interpretation of statistical data relating to employment and unemployment in the State which is vital for any kind of manpower planning. The Employment Service by providing vocational guidance and employment counselling, occupational research and employment market information etc. endeavours to strike an equilibrium in the demand and the supply of manpower. In the sphere of placement, with adherence to the principle of "right man for the right job" constant efforts are made to provide the weaker section of the society with their due.

60. During the Sixth Plan employment information and placement systems have to be strengthened in 1980-85 plan period in the context of the provision of employment being the basic objective of the Plan. In the Plan-frame prepared by the Planning Commission for the National Draft Plan 1980-85, the issue of the unemployment among the educated has been highlighted and a decentralised approach has been suggested indicating district development centres as focal point for employment planning. Accordingly, it has been considered necessary to set up at the district level an Employment Generation Council consisting of people's representatives, concerned Gov-

ernment functionaries and representatives of credit institutions and of professional and academic bodies in the district. This Council should prepare an integrated district employment plan which will help to provide jobs in the industrial, agricultural and service sectors and which will also ensure that the district employment plan and the district credit plan are mutually supportive of each other. In the district employment plan, there should be special component plans for Scheduled Castes, Scheduled Tribes, backward classes and women.

61. In view of the position stated above, the emphasis will be laid on the following :

(i) To set-up district manpower, planning and employment generation councils in each district.

(ii) To provide employment assistance to all categories of applicants seeking wage employment.

(iii) To place applicants belonging to special categories *viz.* physically handicapped persons, ex-servicemen, disabled soldiers, dependents of freedom fighters, Scheduled Castes, Scheduled Tribes and Backward communities.

(iv) To provide vocational guidance to applicants on the basis of their educational qualifications, interest, aptitude, personality traits etc.

(v) To conduct surveys on manpower under Job Development programme.

(vi) To publish career pamphlets, other occupational literature for the benefit of applicants and the publications of Monthly Rozgar Patrika.

(vii) To make available qualified trained eligible candidates to employers according to their manpower requirements.

(viii) To conduct research for ascertaining the job contents of different occupations in newly set up industries and also identification of new occupations.

(ix) Running the coaching-cum-guidance centres for Scheduled Caste/Schedules tribes also and backward communities applicants in order to enhance their employability.

(x) To take up effective steps for the proper implementation of Employment Exchanges (Compulsory Notification of Vacancies) Act, 1959.

(xi) To help in providing loans, equipment, machines, land and building etc. to such applicants who are interested in taking up self-employment and to ensure that they are suitably self-employed through the mechanism of district employment generation councils.

62. An outlay of Rs. 69.00 lakhs has been proposed for the Sixth Five Year Plan with an allocation of Rs. 5.00 lakhs for the hill region. With a view to achieving the objectives set forth above for Employment Service, it is proposed to implement the following schemes during the Sixth Five Year Plan period.

63. *Expansion of the National Employment Service to the uncovered areas*—Conglomeration of industries at various places in the State with increasing demand of manpower intake has necessitates the setting-up of Employment Exchange, in towns with enhanced industrial activity. It is, therefore, proposed to set-up 6 Town Employment Exchanges during the Sixth Plan period. An outlay of Rs. 7.11 lakhs has been proposed for this scheme in the Sixth Plan.

64. *Setting-up of University Employment Information and Guidance Bureaux*—In order to provide vocational guidance and counselling to the students and alumni of the Universities in the campus itself, it is proposed to set up 4 University Employment Information and Guidance Bureaux at Avadh University, Faizabad, Rohilkhand University, Bareilly, Bundelkhand University, Jhansi and Kashi Vidyapeeth, Varanasi. An outlay of Rs. 5.62 lakhs has been proposed for this scheme in the Sixth Plan.

65. *Setting-up of Parapactetic teams*—By and large Employment Exchanges in the State are stationed at the district headquarters with the result that the applicants residing in far-flung areas of the district stand handicapped in availing the facilities. In order to tide over this difficulty as also to take the services of the exchanges to the grassroot level, setting-up of Mobile Units is the need of the hour. It is therefore, proposed to set-up 7 parapactetic teams in the State which will entail an expenditure of Rs. 11.24 lakhs over the entire Plan period.

66. *Setting-up of Coaching-cum-Guidance Centres for Scheduled Castes Scheduled Tribes and Backward Classes in rural areas of the State*—The applicants from the rural areas, particularly those belonging to the weaker sections of the society, generally find it difficult to avail of the facilities which usually accrue to the applicants residing in urban areas. In order, therefore, to improve their employability and to prepare them for competitive examinations, it is proposed to set-up 10 Coaching-cum-Guidance Centres with an expenditure of Rs. 13.05 lakhs over the entire plan period.

67. *Setting-up of Special Employment Exchange for Physically Handicapped at Gorakhpur*—Uttar Pradesh is the most populous State of the country and the number of disabled is also commensurately high. The existing one Special Employment Exchange for Physically Handicapped at Kanpur is hardly sufficient to cater to the employment needs of the disabled in the State. It is, therefore, proposed to have one more special Employment Exchange for physically handicapped which will entail an expenditure of Rs. 3.32 lakhs during the Plan period.

68. *Upgrading of two District Employment Exchange to the status of Regional Employment Exchanges*—In order to have closer supervision and control over district and town employment exchanges, it is necessary that area of regions should be reduced by increasing the number of regional employment exchanges.

Accordingly it is proposed to create two more regions by upgrading the existing District Employment Exchanges of Faizabad and Mathura. This will entail an expenditure of Rs.2.68 lakhs during the Plan period.

69. *Strengthening of existing University Employment Information and Guidance Bureaux*—These Bureaux deal with the highly qualified clientele. It is an of repeated demand endorsed by various high level committees and University Grants Commission that bureaux should be strengthened to cop up with the rush obtaining at the campus. It is therefore, proposed to strengthen the existing Bureaux of the State which will involve an expenditure of Rs. 1.17 akhs over the entire Plan period.

70. *Setting-up of Employment Market Information Units*—All the districts in U. P. excepting Uttar Kashi, Chamoli and Pithoragarh are having Employment Market Information Units for timely collection of data on quarterly intervals. In order to have uniformity in the level of collection of the said data, it is proposed to set-up 3 Units in aforesaid districts which will entail an expenditure of Rs. 1.49 lakhs.

71. *Setting-up of Enforcement Units*—The existing 6 Enforcement Units are inadequate to ensure the proper implementation of the provisions of Employment Exchanges (Compulsory Notification of Vacancies) Act, 1959 with the result that good number of employers in the Public and Private sectors are evading the provisions of the said Act. It is, therefore, proposed to set-up 6 more Enforcement Units during the Sixth Plan period which will entail an expenditure of Rs. 3.54 lakhs.

72. *Setting-up of Job Development Units*—In order to assess the future manpower requirements of various industries of the State so as to tailor the training facilities accordingly, it is necessary to have more Job Development Units in the State. This view has also been endorsed in Labour Ministers' Conference held at New Delhi. It is, therefore, proposed to set-up 4 Job Development Units which will entail an expenditure of Rs. 3.68 lakhs during the entire Plan period.

73. *Strengthening of Self-Employment cell*—In order that more accurate information regarding self-employment may be collected and disseminated and more effective control may be exercised on the field units, it is essential that the Self-Employment Cell at the headquarters may be strengthened. The strengthening of the self-employment Cell will entail an expenditure of Rs. 1.35 lakhs during the Plan period.

74. *Construction of buildings for Employment Exchanges*—At present, only 7 Employment Exchanges have their own buildings. Rest of the exchanges are housed in private buildings which are not commensurate to the norms laid down by the Central Government. The buildings usually do not have sufficient accommodation for the proper functioning of the employment exchanges. It is, therefore, proposed to construct one building, to begin with, which will entail an expenditure of Rs. 5.00 lakhs.

75. *Furniture and equipment for Employment Exchanges*—In order to increase the efficiency of the staff it is necessary that adequate tools and equipment may be provided. This will require an expenditure of Rs.3.42 lakhs in the plan period.

(3) WELFARE OF SCHEDULED CASTES, SCHEDULED TRIBES AND OTHER BACKWARD CLASSES.

76. Great emphasis is being laid on the Socio-economic betterment of weaker sections of society particularly. Scheduled castes, Scheduled tribes, denotified tribes and other backward classes. Uttar Pradesh has got highest number of Scheduled caste population which account for about 25 per cent of the total Scheduled caste population of India and about 21 per cent of the total population in the State. There are 66 Scheduled castes, 5 Scheduled Tribes, 70 denotified Tribes and Nomadic Tribes and 58 backward castes in the State.

77. The welfare schemes undertaken by this State for amelioration of conditions of Scheduled castes, Scheduled tribes etc. fall mainly into the following three important groups :

- (1) Education.
- (2) Economic Development.

(3) Health, Housing and other Schemes.

In this sector priority is continued to be assigned to educational Schemes including grant of Scholarships, non-recurring assistance for purchase of books, re-imburement of fees and establishment of Ashram type schools.

78. Programme for grant of subsidy for development of agriculture, horticulture, and cottage industries, and so also for grant of subsidy to graduates trained in Medical and law etc. enabling them to establish themselves in their respective professions full under the group economic development. Programme for health, housing and other schemes consists of free legal aid to backward classes, subsidy for construction of houses and general development of Bhotias and koles etc.

79. The following table shows the group-wise expenditure incurred during previous plans :

(In lakh Rupees)

Plan period	Expenditure on :		
	Education	Economic Development	Health, Housing etc.
1	2	3	4
I Plan .. .. .	245	33	42
II Plan .. .. .	455	35	50
III Plan .. .. .	281	176	103
IV Plan .. .. .	389	141	199
V Plan (1974—79) .. .. .	1707	505	443
1979-80 .. .. .	405	176	117
1980-81 .. .. .	327	197	121

80. Apart four Social disabilities, economic status of Scheduled castes, and Scheduled tribes in the State is also below State per capita average and 50 per cent to 60 per cent people fall below poverty line. In the case of backward castes, though no specific data is available in regard to their economic status

but the national average of 40 per cent below the poverty line would apply to them, as well.

81. In pursuance of the provisions of constitution of India for removing disabilities and to improve Socio-economic conditions of these classes,

State government proposes to take special measures during Sixth Plan by making adequate provisions as well as, mobilising other development departments to earmark as much resources from the divisible outlay as possible in the Special Component Plan for Scheduled castes.

82. *Objectives and strategies for sixth plan*—The proposed plan schemes in this sector aim at bringing socially and economically backward scheduled castes, scheduled tribes, denotified tribes and other backward classes to the economic and social level of other people of the State. The general objectives are—

(i) to help 50 per cent of Scheduled caste families to cross the

the poverty line by providing economic assistance through family oriented programmes;

(ii) to remove backwardness in the educational level of the scheduled castes so that they may be brought to the level of general population;

(iii) to bring about significant improvement in their working and living conditions by removing educational, social and economic inequalities to general self reliance.

83. With a view to achieving these objectives an outlay of Rs. 85 crores has been proposed for Sixth Plan. Category-wise outlays are as under :

(In lakh Rupees)

Category	Education	Economic Develop- Yent	Health housing etc.	Total
1	2	3	4	5
1. Scheduled castes .. .. .	2941	1637	2678	7256
2. Scheduled tribes .. .. .	160	239	298	697
3. Denotified tribes .. .. .	112	165	30	307
4. Other backward classes .. .. .	140	..	..	140
5. Non-Scheduled tribes .. .. .	..	100	..	100
Total .. .. .	3353	2141	300	8500

84. *Education*—The aim is to raise their level of literacy and educational status through increase in coverage in pre-matric classes improving the quality of education and introducing in centres to prevent drop outs at primary, junior High School and high school levels and provision of hostels in each district. In the context of rising prices, the scholarships in Class VI to X are proposed to be increased as below.

Class	Existing rates (Rs.)	Proposed rates p.m. (Rs.)
1	2	3
VI .. .. .	9	15
VII—VIII	12	20
IX—X	18	25

85. The following important Schemes are proposed to be included in Sixth plan :

Schemes	Outlay for Sixth Plan
(In crore Rupees)	
(1) Increase in the rate of pre-matric Scholarship.	2.10
(2) Scholarships in Classes IV and V (One in each Class @ Rs.5 p.m.)	4.50
(3) Special award of prizes to students obtaining Ist Division in High School.	0.07
(4) Opportunity Cost to 40,000 Scheduled casts families @ Rs.15 p.m.	3.00
(5) Coaching to the students of classes X—XII.	2.50

86. *Economic Development*—The aim is to divert people to non-traditional occupations for better employment opportunities. To achieve this objective it is necessary to identify and assist the families by giving them subsidies for rehabilitation in agriculture and allied agricultural occupations as well as in small scale cottage industries. Outlays proposed for some of the important Schemes are noted below :

Schemes	Outlays for Sixth Plan	
	(Rs. in Crores)	
	Scheduled Castes	
(1) Scheduled caste finance and development corporation		3.40
(2) Subsidy for development of horticulture and agriculture		2.60
(3) Subsidy for development of small and cottage industries		8.58
(4) Subsidy for purchase of agricultural land to landless labourers		1.00
(5) Construction of shops		0.20
(6) Increase in the rate of scholarships to the students of ITI's TTCs (from Rs.37.50 to Rs.50 per month)		0.20

The Scheduled caste finance and Development Corporation will provide margin money loans @ 4 per cent interest on the bank finances for the Schemes having recurring cost up to Rs.6,000 to those scheduled castes who are below poverty line and whose annual income does not exceed Rs.3,000 in rural areas and Rs.4,300 in urban areas.

87. *Health Housing and other Schemes*—It is proposed to provide some what better residential accommodation, free legal assistance and considerable relief through integrated tribal development project (Kheri and Gonda) in respect of Tribal people. In addition strengthening of monitoring aspects of various schemes and undertaking research on alternate methodologies and strategies is also proposed.

88. Important schemes proposed to be included in the Sixth Plan are :

Schemes	Outlay for Sixth Plan	
	(In Crore)	
(1) Subsidy for construction of Houses		20.00
(2) Strengthening of administrative setup.		2.50
(3) Development of Koles		0.80
(4) Development of Houses sites		2.50
(5) Integrated Tribal Development Project.		1.60

89. *Strengthening of administrative setup*—The organisational set up at the Directorate and district level is inadequate to cope up with the increased work and problems pertaining to these castes. It is therefore proposed to strengthen the present set up of district by creating additional posts at Headquarters and district level :

Fifty six Assistant District Harijan and Social Welfare Officers in the districts. The accounts section at headquarters will also be suitably strengthened so that proper audit of crores of rupees could be ensured.

90. Outlays proposed for the welfare of the Scheduled castes Scheduled tribes, denotified tribes and other backward classes are summarised below.

	(in crores)	
1. Scheduled Castes	..	72.56
2. Scheduled tribes	..	6.97
3. Denotified tribes		3.07
4. Other backward classes		1.40
5. Non-Scheduled tribes		1.00
		85.00

91. *Support from non-plan*—Scholarships in post and pre-matric classes are given upto the level of Fifth Plan expenditure. Out of 24 Ashram type schools, 21 are being maintained on non-plan side. Expansion programme is being covered from plan side. The level of

non-plan expenditure during 1978-79 to 1980-81 has been as follows :

	(Rs. in crores)
1978-79	10.96
1979-80	17.71
1980-81	23.71

92. *Physical Programme* : Physical achievements in major areas of welfare activities during 1979-80, 1980-81 and targets for the Sixth Plan are noted below :

Item	(No. in hundreds)		
	Achievements		Targets
	1979-80	1980-81	for 1980-85
(1) <i>Scholarships</i> :			
(a) Pre-matric	778	821	4467
(b) Primary	..	1500	7500
(2) <i>Other Incentives</i>			
(a) Pre-matric	178	169	1020
(b) Post matric	38	24	142
(3) Subsidies for Agri- culture and cart- tage Industries (Families).	30	28	576
(4) House Sites	..	..	500
(5) House Constructions	47	10	680

93. *Centrally sponsored Schemes*—Some Schemes are also being run under Centrally sponsored sector for which a provision of Rs.313.79 lakhs has been made during 1980-81. The outlay proposed for the Sixth Plan is Rs.1,218.21 lakhs. Grant of scholarship at the post graduate level is main scheme which is entirely financed by Government of India.

94. *Outlays for hills*—An expenditure of Rs.65.99 lakhs was incurred on similar programmes taken up in plains during 1979-80. The estimated expenditure during 1980-81 is 75 lakhs. An outlay of Rs.750 lakhs has been proposed for 1980---85. The programme-wise details for hills for 1980—85 are noted below :

Programme	(In lakhs Rupees)			
	Education	Economic Development	Health, housing etc.	Total
	2	3	4	5
Scheduled castes	..	..	..	..
Scheduled tribes	..	..	..	..
Other Backward Classes	..	..	..	..
Total	..	..	..	..
	313	298	139	750

#### (4) SOCIAL WELFARE:

95. In a welfare State, it is primary duty of State to provide adequate social security to all its citizens, specially to poorest and the most vulnerable sections of the society. Social welfare programmes basically aims at making socially and physically handicapped persons in the society self-reliant and to provide security to those who need it most. A review of the social welfare activities in the previous plans reveals that in Second Five Year Plan more stress was laid towards developing institutional services for catering to specific needs of handicapped persons, children,

destitute women and beggars. During Third Five Year Plan, the strategy was revised and equal emphasis was laid on development of institutional, as well as, non-institutional services for social upliftment of neglected and handicapped persons. During three annual plans of 1966—69, this programme could not keep pace with growing problem and expansion of activities were restricted owing to financial constraints. However, during Fifth Five-Year Plan 1974—78) emphasis on social welfare programme was greatly increased. Several institutions were established for physically handicapped, baggers and financially delinquents. More juvenile courts were established for speedy trial



of juvenile offenders. Grants-in-aid and financial assistance to poor, destitute and handicapped persons were increased. A scheme for emancipation and ultimate rehabilitation of women who were forced by circumstances to resort to the immoral traffic, was started. Measures were also undertaken to prevent children from falling into clutches of organised lawlessness and unlawful activities on account of their economic conditions.

96. The welfare schemes undertaken by the Government for the benefit of the weakest section of the society fall mainly in to the following groups:

- (1) Education and welfare of handicapped,
- (2) Family and child welfare,
- (3) Welfare of poor and destitute,
- (4) Correctional Homes.

97. Financial performance during 1978-79, 1979-80 and anticipated achievements for 1980-81 are tabulated as under :

(in lakhs Rs.)

Year	Actual expenditure	
	Plan	Non-plan
1978-79	41.85	166.57
1979-80	70.88	218.73
1980-81	134.64	221.00

98. In view of importance to productive and earmarked sectors, adequate outlays could not be provided for this important sector in the previous Plans.

99. The programme suffered on account of continuous rise in prices, which adversely affected proper maintenance of inmates, similarly lack of scientific Planning and implementation of Programme due to inadequate organisation at the District and Directorate levels for research, monitoring, survey, evaluation and guidance were also responsible for slow pace in this vital programme.

100. The strategy for Sixth Plan 1980-85 is to attach greater importance to publicity of Programme as a large number of rural and urban populations are unaware about nature and extent

of welfare services available, and of the various types of welfare programmes administered by Social welfare department. Main objectives of the Social Welfare Programme during Sixth Plan 1980-85 will be as under :

(1) To promote integrated child development services in the rural and urban areas keeping in view the health, Educational and nutritional needs of the children.

(2) Establishment of Bal Sadans and Bal Niketans in poverty stricken districts of Eastern U.P., to cater to the needs of destitute children.

(3) To establish Mahila Kalyan Sadans, to impart training in various crafts to women with a view to making them self-reliant.

(4) To establish protective homes for women to safeguard them from evils of urbanisation and industrialisation.

(5) To make adequate preparations for celebration of International year for physically handicapped persons during 1981-82.

101. Considering continued past neglect, an outlay of Rs.1600.00 lakhs is proposed for Sixth Five-Year Plan to achieve above mentioned objectives. Some of the important schemes proposed in Sixth Plan are as hereunder :

(1) *I. C. D. S. Projects*—An outlay of Rs.498.00 lakhs has been proposed in the Sixth five year Plan. About 21 projects in State sector and 40 in centrally sponsored sector will be started.

(2) *Mahila Kalyan Sadans*—It is proposed to establish 40 Mahila Kalyan Sadans at a cost of Rs.150.00 lakhs.

(3) For establishment of additional Government approved schools and extension of existing approved schools, an outlay of Rs. 64.52 lakhs has been proposed.

(4) Due to price rise, maintenance cost of inmates has considerably increased. To rationalise the enhanced cost of the departmental institutions, a sum of Rs.85.50 lacs has been proposed.

(5) Most of the institution and homes are at present in hired building, which are not of the required specification. It is, therefore, proposed to construct departmental buildings for this purpose at a cost of Rs. 75.00 lakhs.

(6) It is also proposed to establish 11 Regional Rehabilitation centre for physically handicapped persons at a cost of Rs.52.50 lakhs during the Sixth Plan.

(7) Two Additional Sishu Sadans and 7 Model Children homes for destitute boys are proposed to be established during the plan period at a cost of Rs.36.54 lakhs and Rs. 45.00 lakhs respectively.

(8) The implementation of Central Probation Act will be extended to 20 more districts so as to reach a level of 35 districts by the end of Sixth Plan at a cost of Rs.64.74 lakhs.

(9) It is also proposed to establish additional after care homes at a cost of Rs.60.00 lakhs during 1980—85.

(10) It is felt that with the present expansion of the welfare programmes for Scheduled castes, Scheduled tribes and Backward classes, the present organisational set up is inadequate to implement welfare schemes of social welfare sector properly at district and headquarters levels. It is, therefore, proposed to establish a separate Directorate for Social Welfare at a cost of Rs.40.00 lakhs. This also envisages establishment of research evaluation, survey and monitoring organisation.

#### (5) NUTRITION :

102. Mal-nutrition is a serious problem specially with the weaker sections of the society and as such nutrition programme has been included in the Minimum Needs Programme. The objectives of the programme are two-fold. Under the mid-day meals programme, meals of calorie content of about 300 and protein content of about 15 grams are provided to children in age-group 6—11 for about 200 days in a year. The supplementary nutrition programme covers pre-school children in age-group 0—6 and expectant and nursing mothers belonging to weaker sections. Under the programme, supplementary nutrition of about 200 to 300 calories with about 8 to 12 grams of proteins is provided per pre-school child per day for about 300 days in a year. For expectant and nursing mothers 500 calories and about 25 grams of protein for about 300 days in a year are provided.

103. This programme is being operated by three departments of the State Government. Rural Development Department runs supplementary feeding programme (Special Nutrition Programme) in the rural areas while Education Department looks after the mid-day meal programme for school-going children as also the supplementary feeding programme for pre-school going children and expectant and nursing mothers in urban slums. The Social Welfare Department has taken up the supplementary feeding programme under 'Integrated Child Development Service Programme' in selected areas.

104. The outlays and expenditure for these programmes for the Fifth Year Plan and Annual Plans for 1978-79, 1979-80 and 1980-81 and anticipated expenditure is given below:

(Rs. in lakhs)

Serial no.	Department	Fifth Plan		Actual Expenditure		1980-81	
		1974—78		1978-79	1979-80	Outlay	Anticipated Expenditure
		Outlay	Expenditure				
1	2	3	4	5	6	7	8
1	Education ..	280.00	348.00	119.00	42.66	55.00	50.00
2	Rural Development Department ..	280.00	79.50	64.45	42.72	66.00	65.00
3	Social Welfare .. ..	420.00	33.95	19.00	62.00	40.00	40.00

105. The level of coverage of the nutrition programme by end of 1979-80 (In lakh no)

and proposed during 1980-81 is as here under :

Serial no.	Programme	Fifth Plan 1974-79 (Cumulative)	1979-80	1980-81 (Anticipated)
<i>1 Education Department :</i>				
	(a) Mid-day meal programme	4.700	0.50	0.60
	(b) Special nutrition programme- pre-School going children (0-6 years).	1.85	0.07	0.126
<i>2 Rural Development Department :</i>				
	Special Nutrition Programme	0.231	0.204	0.300
<i>3 Social Welfare Department :</i>				
	Supplementary nutrition programme through ICDS Projects	0.211	0.638	0.460

(i) EDUCATION DEPARTMENT :

106. This department provides balanced nutrition to children of primary schools through mid-day meals and of supplementary feeding for pre-school children and lactating mothers belonging to economically weaker sections of the society. The programme for mid-day meals for primary school children in rural and urban areas and supplementary feeding programme (Special Nutrition Programme) for pre-school going children and lactating mothers in slum areas of towns are also looked after by Education Department. The Mid-day meals programme (Balahr Yojna) is being implemented in 47 districts and Special Nutrition Programme in 20 districts of the State. Out of the 47 districts covered under Mid-day meals programme, 36 districts receive food from CARE free of cost and the remaining 11 districts are supplied food for distribution amongst children of selected Primary Schools from the funds made available by the State Government.

107. During the Sixth Plan it is proposed to provide nutritious food to 2.80 lakhs school children and 0.127 lakhs pre-school going children, pregnant

and lactating mothers. During 1979-80 the programme of Mid-day meals was extended to 5 more districts bringing the total number of districts to 47. It is proposed to bring 9 new districts under the programme during the Sixth Five Year Plan. Thus by end of 1980-85 the Mid-day meals programme will be covering selected schools located in areas inhabited by weaker sections of society of all the 56 districts of the State.

108. Special Nutrition Programme of Education Department is at present being implemented in urban areas of 20 districts of the State to benefit pre-school going children, pregnant and lactating mothers.

109 During Sixth Plan (1980-85) the programme will continue to be maintained in 20 districts of the State. Four new districts will be taken under World Food Programme Scheme.

110. Beneficiaries up to 1978-79 have been brought under the non-plan scheme. As per norms laid down by Government of India, 20 paise per child and 25 paise per mother are being spent on the purchase of nutritious food.

## Financial

(In lakh Rs.)

Serial no.	Name of Scheme	1980-81	1981-82	1982-83	1983-84	1984-85	Total
(1)	Mid-day Meals .. ..	37.50	66.50	150.00	173.00	200.50	627.00
(2)	Special Nutrition Programme ..	12.50	13.50	20.50	22.50	24.00	93.00

## Physical Targets

(In lakh nos.)

(1)	Mid-day meals .. ..	0.60	1.20	2.40	2.40	2.80	9.40
(2)	Special Nutrition Programme ..	0.127	0.127	0.127	0.127	0.127	0.635

## (ii) RURAL DEVELOPMENT DEPARTMENT :

111. Special Nutrition Programme will be implemented in 147 blocks during the plan period. Under this programme supplementary food will be given to vulnerable groups at the rate of 25 paise per beneficiary. Food will be prepared at local level by a member of mahila mandal who will be given Rs.50 per month for processing food. An expenditure of 5 paise per beneficiary will be spent on transport and conveyance etc. Total number of children between the ages 0—6 years and pregnant and nursing mothers who will be benefitted from the scheme will be 6,48,500.

112. Other programme of the Rural Development Department is applied Nutrition Programme. This will be implemented in 152 blocks during plan period. It aims at improving nutritional value of the children in particular and the rural community in general. To achieve this objective rural women are helped to organise themselves and from Mahila mandals. They are assisted to run Balbari classes to educate pre-schoolers between the age 3—6 years. Nutrition education is imparted to officials and non-officials. During Sixth plan period 32,400 persons will be trained, 48,560 women and youth will be assisted to take up nutrition production activities such as poultry,

goat and pig rearing. Seven hundred and fifty five Associate organisations will be helped for taking up environmental sanitation and income generating programme. Eight hundred and sixty six Mahila mandals will be organised in 288 blocks. Through the agency of these Mahila mandals educational and nutrition programme for pre-schoolers will be conducted. Women will be encouraged to actively participate in raising their income level by acquiring better skills and engaging in profitable activities. An outlay of Rs.480.00 lakhs is proposed for Sixth Five Year Plan (1980—85).

113. *Special Component*—During plan period of 1980—85 against an outlay of Rs.480.00 lakhs it is proposed to earmark Rs.288.20 lakhs for Special component.

114. *Applied Nutrition Programme*—During plan period 1980—85 against an outlay of Rs.175.000 lakhs, Rs.87.00 lakhs will be spent on Special component.

## (iii) SOCIAL WELFARE DEPARTMENT :

115. Social Welfare Department is operating nutrition programme through Integrated Child Development Services Projects. There were 14 such projects by end of 1979-80. Four additional projects are being established during 1980-81. It is proposed to add another 50 projects by end of Sixth Plan 1984-85.

Under these projects supplementary nutrition is given to children below six years of age and to nursing and expectant mothers from low income families according to guide-lines about selection of beneficiaries. Special attention is given in providing supplementary nutrition to children below 3 years of age. Amount of nutrition varies according to the age of child. Similarly type of food depends upon local availability, type of beneficiary, location of the project and administrative facility. Supplementary nutrition is given for 300 days in a year. Average cost of food per beneficiary is estimated at 25 paise per child. To specially mal-nutritious children average cost per beneficiary is further raised to 60 paise on specific medical advice.

116. Ratio of coverage of a project with a population of one lakh is 40 per cent for children and 40 per cent for nursing and expectant mothers. The tribal projects with a population of 35,000 cover 75 per cent children and 75 per cent nursing and expectant mothers. The ratio in the tribal projects with a population of 35,000 is 75 : 75 for children and nursing and expectant mothers. Following table

will indicate physical targets and achievements :

Year	0—6 years children	Pregnant and nursing mothers	Total
1	2	3	4
1978-79	0.35	0.15	0.50
1979-80	0.70	0.40	1.10
1980-81	0.35	0.10	0.45
1981-82	0.31	0.08	0.39
1982-83	0.35	0.10	0.45
1983-84	0.35	0.10	0.45
1984-85	0.39	0.12	0.51
Total	2.80	1.05	3.85

117. An outlay of Rs.200.00 lakhs is proposed for Sixth Five Year Plan (1980—85) and 50 more ICDS projects would be established by end of 1984-85. It may be pointed out that ICDS projects have mostly been established in the areas where Scheduled caste and Scheduled tribe population is concentrated. It is expected that during the plan period 1980—85 benefits to the tune of Rs.80 lakhs will be given to the Backward class sector.

## ANNEXURE—I

*Inspection and prosecution cases launched by machinery by the enforcement machinery*

Years	1970		1975		1977		1978		1979	
	Insp- ection	Prose- cution	Insp- ection	Prose- cution	Insp- ection	Prose- cution	Insp- ection	Prose- cution	Insp- ection	Prose- cution
1	2	3	4	5	6	7	8	9	10	11
1. Factories Act, '48	4350	834	7332	1540	9216	1778	8711	1755	8587	1475
2. Payment of Wages Act, 1936	2868	54	3615	48	4910	27	5356	38	5348	5
3. U. P. Shops and Commercial Establishment Act 1962.	150693	6310	121064	15516	108425	12925	115483	17667	143302	17728
4. Minimum Wages Act, 1948.	23113	267	42923	3444	47377	3971	49023	3997	46460	3515
5. Payment of Bonus Act.	3687	13	3753	41	3640	54	4220	48	3090	20
6. Industrial Employment (Standing Orders) Act 1946.)	1529	1	1187	4	1504	13	2878	31	2294	24
7. Motor Transport Workers Act. 1961.	544	6	885	17	2400	92	2308	494	2133	374
8. Bidi and Cigar Workers (Condition of Service Act, 1966).	..	..	1082	23	881	51	1177	148	2487	287

## CHAPTER 16

### ECONOMIC SERVICES

#### I. MACHINERY FOR PLANNING

The Indian planning process as it has evolved over the years essentially consists of conscious state intervention to induce and create the infrastructure for development, in order to fulfil well defined social goods. There is often a tendency among those involved in the implementation of programmes and projects to relegate the objectives of poverty amelioration, employment generation and redistributive justice to a secondary position. Sometimes, the planners themselves falter on this score. It is most essential for the planning machinery to devise methodology and to create viable and effective institutions which would provide support for helping to keep the planning process on the right track.

2. State planning activity involves collective deliberation and action by relevant planning and funding agencies and development departments at the centre and their counter-parts in States. In any State, the Planning department and its allied organisations have to play a pivotal role in the whole planning exercise. This department has to function as a plan co-ordinator and a policy maker, as a motivator and a monitor. The State planning machinery to discharge the responsibilities devolving upon it, must have the capacity to :

(a) keep a watch on economic trends, demand projections, development and utilization of capacity and other environmental factors for the country as a whole,

(b) assist other departments and lower level planning and development agencies in decision making by formulating policy framework and hierarchies of priorities from time to time,

(c) undertake, monitoring, concurrent appraisal and evaluation of individual sectors as well as of the State's economy as a whole,

(d) appraise institutional and organisational potentials and constraints, especially from the point of view of the delivery of services and resources to the poorer and unorganised sections of society,

(e) help in the formulation as well extent economic and financial appraisal of shelves of projects,

(f) conduct diagnostic and exploratory studies, and undertake pre-testing of new technologies as well as new programmes through pilot projects implemented in field conditions,

(g) develop techniques for the continuous monitoring of intra-State imbalances, and planning at the regional, district and block levels and thereafter, to provide logistic support for the planning function at these levels.

(h) ensure that arrangements exist for training of officers concerned with sectoral projects and area planning,

(i) function as a channel for the development departments and various spatial planning units for obtaining services of experts belonging to various disciplines on consultancy basis,

(j) establish and maintain rapport with various organisations, financing institutions, and knowledgeable individuals, particularly technologists and social scientists whose advice and assistance would be useful for formulating and implementing policies, and programmes for development, and also for getting a feedback about their impact in the field.

3. The State of Uttar Pradesh has been making progress towards the creation with the help of the centre, of a viable planning structure capable of discharging the various functions enumerated above. The planning set up

as it exists at a present consists of the planning department, functioning in close collaboration with :]

- (a) State Planning Commission as an apex body for policy as well as plan making functions;
- (b) the State Planning Institute consisting of ;
  - (i) Economics and Statistics Division.
  - (ii) Planning Research and Action Division.
  - (iii) Evaluation and Training Division.
  - (iv) Perspective Planning Division.
  - (v) Man-Power Planning Division.
  - (vi) Area Planning Division.
  - (vii) Plan Monitoring and Cost Management Division.
  - (viii) Project Formulation and Appraisal Division.

4. The objectives, structure, on-going activities and future programmes of various organs of State Planning Machinery are presented in the paragraphs that follow :

#### (1) STATE PLANNING COMMISSION

5. *State Planning Commission*—The State Planning Commission is the apex planning body of the State headed by the Chief Minister with the Planning Minister as its Vice Chairman, all Cabinet Ministers, and Secretaries of major development departments as its members. Economists, experts, industrialists etc. are also appointed as members from time to time. The Commission was set up with the following object :

- (i) to make an assessment of the State resources and formulate plans for the most effective and balanced utilization of these resources ;
- (ii) to assist in determining plan priorities of the State within the framework of the priorities of the national Plan ;

(iii) to assist district authorities in formulating their development plans within the spheres in which such planning is considered useful and feasible and to co-ordinate these plans with State Plan ;

(iv) to identify factors which tend to retard economic and social development of the State and determine conditions to be established for successful execution of plans ;

(v) to review the progress of implementation of the plan programmes and recommend such adjustments in policies and measures as the review may indicate ;

6. The Planning department performs the secretariat functions of the State Planning Commission. A new section has been added for this purpose. Expenditure incurred in such strengthening as also for the addition of new divisions of the State Planning Institute is shared between the State Government and the Central Government in the ratio of 1:2. Under the arrangement intimated by the Government of India, the expenditure involved on the creation of machinery till the end of March, 1979 will in future be borne entirely out of State budget and only the expenditure incurred in connection with further strengthening after March, 1979 will continue to be shared in the above proportion during the Sixth Plan period.

7. The State Planning Commission needs to fill up some gaps in expertise and a vehicle is also badly needed. This will call for an outlay of Rs. 190.00 lakhs during the five years of the Sixth Plan.

#### (2) STATE PLANNING INSTITUTE

8. (A) *Planning Institute for Hills*—At present there is no provision of an adequate machinery for plan formulation, monitoring and evaluation in the Hill development department. This matter was considered by a high level working group headed by Agriculture Production Commissioner of the State and it has been decided that a separate planning institute be established for hills to perform the function of regional planning. This would help to provide necessary research and development support for proper plan formulation, monitoring



and evaluation of programmes suitable to the needs of hill areas. This institute will be a wing of the main State planning institute. It is also envisaged that this institute may be located in hills with adequate staff, building and necessary feed-back. An outlay of Rs. 100 lakhs is proposed for the Sixth Plan, 1980-85 for this institute. The details of modalities are being worked out.

9. (b) *State Planning Institute*—The Institute was established in 1971 with the Secretary Planning department as its chairman. It incorporated the pre-existing, Directorate of Economics and Statistics, Planning Research and Action Institute, and the State Evaluation Organisation as separate divisions. Five new divisions were created over the years.

10. *Economics and Statistics Division*—The traditional function of the Directorate of Economics and Statistics has been that of collection and processing of primary data by conducting regular field surveys from time to time. Some secondary data is also collected from various departments and agencies. Based on the material collected, a large number of reports are periodically brought out. The role of the division has, however, been enlarged in recent years. A beginning has been made to provide statistical support at block and district levels, as a step towards preparation of local plans. In 1979-80, schemes introduced included those for strengthening of the data base by setting up a powerful data bank, strengthening of statistical and plan formulation machinery at the district level, creation of statistical and plan formulation machinery at the divisional level, and strengthening of economics and statistics division at the headquarters. These schemes have to be continued during the Sixth Plan period. Besides, two important schemes of installation of computer in the accommodation available in its computer Bhawan and construction of Yojna Bhawan are also in hand and will be completed respectively in 1981-82 and 1982-83. Provisions for these schemes have been made in the Sixth Plan.

11. *New Schemes*—As the State economy expands, the data base must necessarily be improved. New fields have also to be covered in view of the recommendations made by the Central Statistical Organisations. The schemes proposed to be taken up during the Sixth Plan are indicated below ;

12. *Improvement of Industrial Statistics*—The Industrial Statistics pertaining to all registered factories are collected by the State Government in collaboration with the Government of India through annual survey of industries. The work relating to the collections of data from the factories is managed by the normal staff available in the District Statistics Offices. But the work load in some districts, particularly in Kanpur, Agra, Ghaziabad, Saharanpur, Meerut, Aligarh, Lucknow, Varanasi, Bijnor, Muzaffarnagar, Muradabad and Allahabad is so heavy that it is difficult to cope with it in time with staff as at present. Further, the number of registered factories from which the information is obtained either by the Government of India or State Government has increased from 3429 in 1967 to 5919 in 1977-78. It is proposed to strengthen the district level machinery in districts having more than 50 factories.

13. *Creation of regional accounts and capital formation cell at State headquarters*—With a view to provide an overall insight into the changes in various sectors of the State's economy, break up of regional and lower level estimates of various accounts, expenditure, capital formation and savings of the State Government, local bodies, their departmental and non-departmental enterprises and also of private sectors is essential. The Committee on Regional Accounts appointed by Government of India for building up regional accounts, has in fact, suggested some standard supporting and supplementary tables in this behalf for all the States on uniform and comparable concepts and methodology. It is proposed to create a cell on "Regional Accounts and Capital Formation" to be managed by one Joint Director

and adequate supporting staff. The main objective of the cell would be to thrash out several conceptual, methodological and data problems and to generate tables on regional accounts and Capital formation in the light of the final report of the Committee on Regional Accounts.

14. *Setting up of a Training unit at the State Headquarters*—With a view to ensure the reliability of data and results thrown up by surveys or otherwise, it is essential that the statistical personnel, engaged in collection, compilation and analysis of statistical information, should have a sound background of the statistical techniques, and be enabled to update their knowledge periodically. Therefore, the job-training of statistical personnel is a must. Training facilities for senior level and middle level professional workers are provided by Central Statistical Organisation. A short duration (say 6 weeks) training programme for lower level professional, computing staff and field staff needs to be organised by the Economics and Statistics Division. The Fourth Joint Conference of Central and State Statistical Organisations held in Lucknow and also the Central Statistical Organisation, Government of India have emphasized the need for training programmes of Statistical personnel and have suggested the setting up of a training unit in the State Statistical Bureau.

15. *Origin-destination survey of goods traffic by road*—The data on road transport is required for estimating the State Income for trade and transport sectors as well as for economic and transport policy making and plan formulation. There is, however, a serious gap in data of road transport. The road transport industry is primarily controlled by single truck operators who are not obliged to maintain records or submit reports of annual performance. Considering the importance of road transport data, and also keeping in view the recommendations of the Central Statistical Organisation in this behalf, it is proposed to launch "Origin Destination Surveys of Goods Traffic by Road" during the Sixth Plan period in the years 1981-82 and 1983-84 in all the plain districts of the State.

The survey in the field will be conducted by the existing staff posted in the districts but for processing the data thus collected and preparation of the report, it is suggested to create some new posts.

16. *Strengthening of administrative machinery of Economics and Statistics Division at headquarters*—With a view to preparing formulating the State's development schemes on scientific lines and to provide them with sound data base and analysis, the strength of gazetted and subordinate technical services of the Economics and Statistics Division has been increased by about 34 per cent during the last 5 years. But the increase in the administrative and accounts staff during this period has not been commensurate with the increased administrative load created by the increase in the technical staff. Besides, the work of maintaining G. P. F. records of about 2000 employees has also been fallen over from the A. G. For timely disposal of the increased quantum of work due to increase in the technical staff and budget allocations, the administrative and accounts machinery at the State Headquarters need be strengthened.

17. *Strengthening of statistical plan formulation machinery at the divisional headquarters*—For providing guidance and support to the district units in the matter of formulation of district and block plans and for effective monitoring of various development programmes and projects at the divisional level, a start has been done by providing one Deputy Director at each divisional headquarter. These units have to be made more functional as government emphasis on regional level co-ordination of planning activities has increased for policy reasons. These units have to be provided transport also.

18. *Strengthening of administrative machinery for statistical and plan formulation work at the district level*—With the growing need of maintaining various types of statistics at the local level, and to provide a data base for the preparation of block and district plans, the staff of the district statistical units will need strengthening. While detailed

decisions will have to be taken in the light of the situation about decentralisation of planning function any as it develops and for which no estimate has yet been prepared, some immediate needs have to be catered for.

19. *Creation of a separate cadre of punchers and verifier operators and punch supervisors at State Headquarters*—With a view to obtaining quick results from collected data, a well equipped mechanical tabulation section (M T D) already exists. Punching/verification is a specialised type of 'job' which requires 2-3 months training but there is no separate cadre of punch/verifier operators, with the result that they are very often transferred due to promotion or other reasons and in this way the punching unit is deprived of the efficiency and experience gained on account of transfers of punchers/verifiers.

20. The above schemes, both continuing and need a total outlay of Rs. 1500.00 lakhs for the Sixth Plan, including Rs. 131.00 lakhs for 1981-82.

21. *Planning Research and Action Division*—The Planning Research and Action Institute (PRAI) was established in 1954 mainly with a view to furnish the community development programme with new ideas, methodologies and technologies suitable for widespread adoption in the rural area. The Institute had a number of very significant achievements to its credit in the field of rural development and when after the foundation of the State Planning Institute in 1971, PRAI became one of its divisions with the name of Planning Research and Action Division (PRAD) its structure as also the methodology of its working were largely kept unaltered.

22. PRAD is the premier group working in the field of renewable energy sources. It has established itself as the foremost institution in the country for development of low-cost biogas digesters and other gadgets. Research work will be continued on the development of mixed feed, including water hyacinth, for generation of methane in order to reduce the present dependence upon cattle dung. Experiments will be continued on further reduction

of cost of family-sized digesters, and reducing their susceptibility to temperature variations.

23. The division is also a participant in the All India coordinated project of the Department of Science and Technology with focus on development of economical large-sized community biogas plants. These plants will be constructed by the PRAD in the northern States under different climatological, social and economic conditions. National Council of Applied Economic Research will be associated with base line survey and periodic evaluation. Further, experimental plants in different regions of U. P. have been proposed under a new scheme for community biogas.

24. The division has done valuable work in the field of appropriate technologies for industry. The following schemes will be continued in the areas of (a) a mini sugar plants to make further improvement in efficiency of furnances using wet bagasse and increase in expeller efficiency ; (b) appropriate technologies engineering and drawings to support to industrial projects ; (c) potteries, for greater diversification by small scale units; (d) Ashmoh cement by use of rice husk, experimental plant of which is likely to start production of cementitious materials in 1980-81.

25. Other schemes which will be undertaken includes :

(a) in minor irrigation research work on hydrams aimed at improving technical efficiency and reducing costs; in addition, works on :

- (i) reduction in conveyance losses in field channels,
- (ii) low cost tanks in Bundelkhand and hill areas,
- (iii) low cost small reservoir on minor streams in Bundelkhand and hill areas,
- (iv) improving efficiency of low horse-power diesel pumping sets.

(b) in rural health and sanitation—the Division inservice training centre at Banthra, and health and sanitation project, Mal Block, Lucknow

with UNICEF assistance for complete coverage of particular villages with sanitation measures like PRAI type latrines, hand pumps, improved drinking water wells, use of pot chlorinator etc. The provision of State share for this project has been made in the Medical and Health plan outlay. Staff support for the project and work of concurrent evaluation is done by the PRAD.

(c) in co-operation and panchayats, to continue field testing of performance of the State first co-operative hospital opened at Neema-gaon in district Lakhimpur Kheri, and arranging training of groups of farmers in management of domestic milch cattle units. In addition, under the Panchayat Samagra Vikas Yojna to promote all round development of ten gram panchayats in Block Sarojnagar (district Lucknow).

*Training and Extension*—This has been an important activity of PRAD since its inception and ideas developed in the programmes conducted by PRAD have been adopted in rural development work through-out the State. At present the activity is restricted to its own staff from integrated area development project. The Division would continue promotion of new promising projects for rural development under the scheme of "Research activities of PRAD". This scheme provides the umbrella for field and action research activities of PRAD and will continue in the sixth plan period.

#### *New Schemes*

26. The following new schemes are proposed in priority areas of adoptive research :

(i) *Research and Extension Works on new energy sources*—The entire country is faced with grim prospects of energy availability. It is proposed to extend the scope of work in this field during the period 1980-85 with a view to presenting field tested technologies suitable for operation in different regions of the State having varied climatological and infra-

structural environment. The programmes are :

(a) *Rural Energy Surveys*—Surveys would be conducted in different parts of the State which would aim at assessment of rural energy needs for various uses such as fuel, domestic lighting, agricultural operations and transport. The studies would involve making future projections of energy needs with different scenarios.

(b) *Community biogas*—Community biogas digesters which would supply cooking gas to all families of a small village irrespective of the individual family's contribution of cattle dung have to be tried out in field conditions in different regions and used also as a base for purposes of demonstration and training local workmen. The two main aspects in these large digesters and reduction in initial construction and installation costs and the creation of conditions which would lead to long term operation of the installation on the basis of economic self-sufficiency and without the necessity of continuing State's subsidies. Provision for Construction and field testing of ten biogas digesters every year during the period 1981-85 has been made.

(c) *Solar energy*—Utilisation of solar energy by known devices is costly and inconvenient and efforts are necessary to develop techniques and gadgets which would enable its economical and effective utilisation. The division will primarily aim at development of low cost technology specially for low cost irrigation pumping and rural water supply. The use of solar energy for optimising biogas production under conditions of low temperature will also be attempted.

(d) *Wind energy*—Areas for all the year round utilisation of wind energy in the State are limited and are mainly confined to the sub-mountainous river valleys.

In these areas, however, wind energy could play a substantial role in lifting of water to high terraces and in threshing and flour milling. Advantage will be taken of the substantial work being done in this area in Karnataka and Maharashtra and adapting the same to condition in U. P.

(e) *Mini-hydel Schemes*—The hills of U. P. have a very large hydro-electric potential some of which can be developed only through mini-hydel schemes. It is intended to involve and test modifications in design and layout of mini-hydel schemes.

(ii) The following schemes are proposed in rural industries area :

(a) *Improved sugar expeller*—Further improvement in the sugar expeller developed by the division needs to be done to lower power consumption and increase availability of cane juice. This work is proposed to be continued in cooperation with Appropriate Technology Development Association.

(b) *Development of liquid sugar from molasse*—At present substantial amount of sugar present in molasses is being wasted. This sugar cannot be crystallised and has, therefore, to be used in liquid form. It has, however, to be made palatable and attractive in order to gain market acceptance. The process of extraction has also to be made economical. Work in this area is proposed to be done during the Sixth Plan period.

(iii) The following schemes are proposed in rural sanitation :

(a) *Oxidation Ponds*—The division has done pioneering work in rural sanitation in the past. One of the difficulties now being encountered in villages where—in small sewerage system has been laid is in the disposal of sewerage and sullage. It is not possible

to put in costly treatment plants in rural area. Provision of suitably designed oxidation ponds could help in safe disposal of village effluents. Cost effective technologies in this area are proposed to be developed through field trials during Sixth plan period.

(b) *Health Sanitation and Nutrition Project, Etawah*—It is proposed to take up a project wider in scope than the Mal Block Project in Lucknow district to include nutrition and some essential social services in a project for three development blocks in district Etawah. This project will be assisted by the UNICEF, with State contribution being provided by P. R. A. D.

The Outlay for continuing schemes for the Sixth Plan 1980-85 has been proposed at Rs. 157.00 lakhs and for new schemes at Rs. 343.00 lakhs, giving a total of Rs. 500.00 lakhs.

27. *Integrated Area Development Projects*—A write-up on these projects has been given in the section on Area Development in chapter 7. It is not at all necessary have to go out that ground again. The State Government has taken up three pilot projects, one each in the eastern, central and western zones, for integrated development of limited and specified areas wherein developmental methodologies, innovations in technologies and processes and measures for ensuring more effective public participation could be evolved and pre-tested in actual field conditions before being recommended for adoption in different zones of the State. Apart from these ongoing projects that will be continued in the Sixth Plan, a tribal area development project Nainital will be started in 1981-82 for the integrated economic development of backward Tharu and Buxa tribes without, of course, causing any disturbance in their socio-cultural heritage.

28. The Sixth Plan outlay for Integrated Area Development Projects would be Rs. 1350.00 lakhs, which includes Rs. 650.00 lakhs earmarked for UNICEF assisted IDPD—projects.

29. *Evaluation and Training Division*—Recognising the importance of evaluation in the planning and development process, the Government of India set up a “Working Group on Evaluation in the State” in 1964. On the basis of the recommendations made by this Group, Evaluation Organisations as separate entities started coming into being in different States of the Union from the year 1965 onwards. In U. P., the Directorate of Evaluation was established in the year 1965 with some nucleus staff. Later on, with the gradual expansion of activities, more staff was added. At present six teams are carrying out evaluation of various development programmes in the State. In the year 1972 with the reorganisation of the State Planning Machinery, the Evaluation Directorate was integrated into the State Planning Institute as one of its Divisions. At the same time, training in various aspects of development administration was also added to the existing functions of the Division. The main idea of linking up the training functions with programme evaluation was primarily for the reason that feed-back available from various evaluation studies would be able to provide much needed input of varieties of operation to make such training programmes more result-oriented.

30. Of late both at national and the State levels, increasing emphasis is being laid on evaluation. Planning Commission has brought out a report on the strengthening of Central and State Evaluation Organizations, which is the result of deliberations of an expert Working Group set up by the Planning Commission in 1978. With all round expansion of development efforts, it is but natural that there would be growing demand for evaluation of various programmes by development departments as well as international funding bodies. The World Bank supported Social Forestry Project in U. P. has made provision for concurrent and ex-post facto evaluation of this vast programme by providing a special cell for this purpose, which is to operate under the aegis of this Division. Similarly, the Hill Development of the State Government has proposed setting up of a special evalua-

tion unit for taking up evaluation of diverse development programmes being currently implemented in the hill region of the State. The total budgetary provision for this purpose for the Sixth Five Year Plan period is Rs. 25 lakhs.

31. The Division has completed about 130 studies since its inception up to the year 1979-80. All these Studies have contributed substantially to the planning process in the State by identifying shortcomings in formulation and implementation and by suggesting corrective measures for obtaining better results. It may also be stated that evaluation of various programmes have created a general consciousness among the development departments about the need of better formulation and implementation of the projects/programmes/schemes. In the years to come it is felt that the Division will be called upon to carry out a large number of evaluation studies including quick studies and type studies in various sectors of Development. The annual output of the short and quick analytical studies may reach 30 in the near future. A list of studies brought out or in hand in 1980-81 is appended\*.

32. To carry out evaluation studies is not enough by itself. Implementation of recommendations of such studies is important for bringing about desired improvements in implementation. For this purpose close liaison is maintained with the concerned department in the course of carrying out evaluation studies. The departments are consulted at the time of formulating the design of study and the draft report is sent to the department before it is finalised. The report is then presented to the Economic Advisory Council chaired by the Chief Minister. On the basis of discussions in the Economic Advisory Council a report is finalised. There is an Implementation Sub-committee of the Economic Advisory Council which closely follows up the implementation of various suggestions and recommendations contained in the evaluation reports.

33. The State Evaluation Organization maintains links with the Programme Evaluation Organisation of the Planning

Commission. In June, 1980 a regional seminar was organized for supervisory level workers engaged in the evaluation work from the north-eastern, eastern and central regions of the country.

34. It is proposed to strengthen the Division during the Sixth Five Year Plan so as to increase its capability in coping with increasing demands from various development departments of the State. The case of Forest and Hill Developments have already been indicated above wherein they are going to place separate units to be borne on their own budget to function under the full control of this Division. In addition the Education Department has placed a team under the technical and administrative control of this Division for the evaluation of National Adult Education Programme. At present the immediate supervision and guidance of these seven teams is being provided by one Joint Director. With increase in the volume and range of activities the Division will have to be strengthened.

35. It is also envisaged that the training function will also have to be strengthened and newer disciplines like management science, computer science, etc. will have to be brought into the faculty.

36. During the Sixth Five Year Plan, it is also proposed to strengthen the existing nucleus Library and Documentation Centre of the Division as well as the hostel administration. With the all round increase in the tempo of activities it is natural that some strengthening in the administrative side of the Division will also be required. Provision has also to be made for supporting staff and machines, fixtures, furnitures etc. to meet the requirements of additional staff. A sum of Rs.50.00 lakhs has been proposed in the Sixth Plan to meet the expansion needs indicated above.

37. *Perspective Planning Division*—The Perspective Planning Division of the State Planning Institute was established in the second half of 1972-73. The basic function of the Division is to

formulate a long-term perspective of the State's economy, against the background of which the pattern of short-term growth of the economy may be visualised. In conformity with the aforesaid objectives, the Division is concerned mainly with the studies that would held in developing and applying projective techniques relating to investment, income generation and employment for the various sectors of the economy.

38. The above objectives necessitated the Division to undertake a number of fundamental studies, which were not done earlier in the State. A list of studies completed so far by the division is appended\*.

39. The work of Perspective Planning Division, can broadly, be categorised in three parts ;

(i) Studies relating to consumption pattern and level of living ;

(ii) Studies relating to agriculture, industrial and tertiary sectors, providing projective techniques for long-term planning. This will *inter-alia*, include building up of input-output co-efficients, labour and capital co-efficients, consistency and other models, etc.,

(iii) Studies relating to financial aspects, such as capital formation, savings, resources, export-import policy, etc.

40. A number of studies with a view to (i) revising and making up-to-date estimates, already built up in the studies completed by the Division, (ii) covering those aspects, which were left untouched in the earlier studies, (iii) completing studies in hand in time and, (iv) initiating extensive and in depth studies in the new areas during the Sixth Plan period.

41. The above mentioned categories of work require specialised deep knowledge, and mature thinking. All this necessitates adequate strengthening of the Division with experts of requisite calibre.

\*Annexure II.

42. *Manpower Planning Division*—

The division was created as part of the State Planning Institute in 1971 to conduct studies on manpower aspects. The division has conducted a number of studies on demand and supply of trained manpower for different plan periods; their stock, utilisation and wastage; estimation of likely absorption of technical and professional manpower and such other aspects.

43. These studies provide valuable information to the policy planners for initiating suitable manpower and employment policies.

44. In each succeeding year, the Division has enlarged its activities and has covered new dimensions. An idea of the area covered so far by the division can be had from the list of studies conducted which is appended\*. This division will now have to further diversify its activities and lay more emphasis on quantification and structural analysis of unemployment in different sectors; study the impact of different levels of technology on the generation of employment; measures the spread effect of investment and suggest policies as well as specific measures to be taken for the generation, diversification and regional distribution of employment opportunities.

45. During the year 1979-80, an exercise relating to an over-all assessment was made for the annual plan 1980-81 which showed that the growth of labour force outpaced employment generation. During the exercises relating to the Sixth Plan 1980-85, it has been estimated that an employment growth rate of 3.5 per cent would be needed for providing employment to all the unemployed persons. The other areas covered during the year pertain to demand and supply of manpower trends, employment in the organised sector, drop-out, at primary and junior levels, wastage in agriculture education, pattern of posting of I.A.S. and other officers, rural-urban distribution of workers etc. A new dimension has also been added by comparing the cost structures of industrial units in U.P. and Punjab.

\*Annexure III.

These studies provide very interesting results for the purpose of policy planning.

46. In the context of new requirements of the Sixth Plan 1980-85, the division would have to shoulder new responsibilities. An attempt would be made to develop a working methodology for estimating employment. Suitable studies relating to the nature and radiation of employment through development programmes would be taken up to assess the impact of the programmes, especially pertaining to construction and special employment programmes.

47. The existing staff of the division would, however, fall far short of our requirements for undertaking new studies. It would need adequate strengthening of the division, so that the division could play an effective role in the planning process. As the division would be involved in conducting field studies a matador van is being proposed for survey work.

48. *Area Planning Division*—The Area Planning Division will continue to be engaged in operationalizing the concept of multi-level planning in the State and in assisting in identification and creation of the divisible pool of Plan funds.

49. The Division has been called upon to prepare district plans in 13 selected districts for the UNICEF assisted IDPD projects. In the first phase, the division will formulate the programmes of concentrated delivery of social inputs in these districts. In the second phase, the whole district plans, including productive and infrastructural sectors, will be formulated. The division will also conduct studies which would help in developing suitable mechanisms, in a multi-level planning framework, for better implementation, monitoring and evaluation of developmental programmes. The division will remain responsible as hitherto for providing methodological inputs to various field functionaries engaged in the work of block/district planning. In addition, the division is expected to play a pivotal role in any process of decentralised planning.



50. In view of the increased work load which is likely to be generated as a result of the above functions and research studies, it would be necessary to strengthen the Area Planning Division suitably. A lump sum provision of Rs.100.00 lakhs has been included in the plan outlay of P.R.A.D. set apart for integrated area development projects.

51. *Monitoring and Cost management Division* The monitoring and Cost Management Division of State Planning Institute was set up in 1972 as Monitoring Information and Scientific Management Division in the State Planning Institute which was later reorganised as Monitoring and Cost Management Division of the S.P.I.

52. Monitoring Division's main role has been to analyse data on status and bottlenecks of major projects specially of irrigation and power sector and to present to the government a picture which would help in overcoming bottlenecks and ensure speedy execution of schemes. It also provides basic project inputs to the Planning Department to assist the various technical department, corporation in developing scientific management techniques.

53. During the last eight years, the division has broadly carried out monitoring of major selected projects of irrigation, power, agriculture, milk development, intensive cattle development, housing and urban development, water supply and sewerage, forests and P.W.D. In addition, monitoring of some State Corporations has been done. Besides, it has also taken up the preparation of cost indices of various projects so as to facilitate a rational assessment of revised costs as a result of price escalation for expeditious approval of revised estimates by the administrative and finance department. The studies conducted by this division are appended.

54. With the introduction of monitoring at State level and its working during last some years, the impact of monitoring has been felt and certain steps have been taken by the govern-

ment on the advice of the division for instance.

(i) sizeable strengthening of survey, investigation and project planning organization in irrigation, power, and water supply sectors.

(ii) organisational development, structuring and placement of monitoring system at project level in some departments.

(iii) importance of project formulation and appraisal, manned by specialists and experts had been realised by several departments.

(iv) it helps the development departments to take advantage of available experience of bottlenecks and problems of earlier projects in taking advance remedial measures for new schemes.

(v) appreciation of the need for adoption of PERT/CPM techniques for time and cost control by systematic planning and sequencing of various activities of project management.

(vi) awareness of the need for optimum utilization of the available scarce resources within realistic time and cost limitation.

(vii) introduction of Management Information System (MIS) there by improving consciousness of potential of computerisation in aid of their development programmes.

55. In the Sixth Plan period the scope of work of Monitoring Division is proposed to be extended to the following :

(a) undertaking sectoral monitoring of selected project of major sector like, irrigation, power, agriculture, transport and communication, water supply and sewerage, industries and the like.

(b) establishment of Management Information System (MIS) in as many sectors as possible to streamline plan implementation.

(c) taking up detailed studies at the project management and supervisory levels as well as at decision making and policy levels so as to indentify areas of various functional responsibility requiring strengthening.

(d) monitoring of construction equipment in various departments owing heavy fleet of equipment, review of their purchases, deployment planning inventory of spare parts and disposal of surplus beyond economic repairs equipment for presenting the information to 'High Power Committee' at Government level.

(e) monitoring of Food for Work, programme.

(f) undertaking a comparative study of building construction procedures, cost and systems of P.W.D., Housing Board, Rajkiya Nirman Nigam and other departments.

(g) development of cost indices for different types of constuction projects in power, irrigation, roads, bridges, buildings and water supply sectors, for providing assistance in sanctioning of revised project estimates due to price escalation.

(h) assisting departments in establishing data bank in various departments and in use of computers by large organisations in the public sector.

56. An outlay of Rs.1.40 lakhs was allocated for the year 1979-80. The schemes/projects being monitored will continue in subsequent years. During 1980—85 the Division is poposed to be strengthened in order to meet the growing requirements of monitoring of important sectoral programmes.

57. *Project Formulation and Appraisal Division*—Project Formulation and Appraisal Division was created in 1973-74 within the overall setup of the State Planning Institute with the main objectives of undertaking ex-ante appraisal of large projects/programmes, from the technical, financial, economic and social

points of view and to motivate various development departments to move towards a shelf of projects approach, preparing guidelines for various development departments for formulation of carefully conceived and detailed project reports.

58. The Division is responsible for appraising investment proposals for the consideration of Public Investment Board, Expenditure Finance Committee, Local Level Planning Committee and other miscellaneous projects. The Public Investment Board is charged with the function of appraising all proposals of Public Sector Enterprises involving an investment, of Rs. one crore or more in the case of projects funded wholly by State and institutional resources. The Project Formulation and Appraisal Division functions as the Secretariat for the Public Investment Board. In case of joint sector projects, reference to the Board has to be made in cases in which government resources employed are Rs.50 lakhs or more. For Expenditure Finance Committee, the Division appraises all departmental projects whose non-recurring expenditure is one crore rupees or more. Local level projects costing above Rs. 5 lakhs are also invariably appraised by the division.

59. To enhance the project formulation capabilities of various development departments and state corporations, the Division prepares and issues guidelines model projects, manuals and research studies.

60. At Present, due to the paucity of staff, the Division is not in a position to take up actual project formulation work on an adequate scale and is concentrating mainly upon appraisal. In fact, the existing staff is not even adequate for the fast-increasing work load of appraisal of projects for Public Investment Board what to speak of advice to other bodies mentioned above. The Division needs strengthening and upgrading of some of the existing posts. For effective functioning, the division is not yet fully equipped with adequate transport communication facilities, typewriters and calculators.

61. It would be observed from above narration that the five new divisions of the State Planning Institute have to be further strengthened in view of growing importance of applied research in socio-economic matters. This would need an outlay of Rs.300 lakhs for the entire plan period, and Rs.38.00 lakhs for the year 1981-82.

## II. BUREAU OF PUBLIC ENTERPRISES

62. The Bureau of State Enterprises was established in 1974 with the aim of :—

1. Furnishing periodical reports to the Legislature and the administrative departments on the working of the state enterprises.

2. Assisting the administrative department in—

(a) making appointments to the Board of Directors and other senior posts in the enterprises.

(b) scrutinising in an expert manner feasibility reports, project estimates, etc.

3. Acting as a data bank for all the enterprises in matters of personnel policies, service matters etc.

4. Assisting enterprises, wherever advice is sought, areas such as project formulation, information systems etc.

5. Regular monitoring of the activities of the State enterprises.

63. The above functions do cover a fairly wide range of activities, yet the Bureau in order to be effective and to render appropriate help has long been attempting not only to increase its functional role but also to make itself more effective and useful. Of late, the Bureau has entered, or is attempting to enter into new fields, viz. :

(1) selection of top personnel through Selection Boards.

(2) organising training programmes for officers of various cadres who would be expected to take up assignments in corporations in future.

(3) to organise seminar of practising managers of State enterprises.

(4) to undertake detailed studies of corporations, on a regular basis.

(5) to evaluate projects (costing than Rs.1 crore) which would not be put up to the Public Investment Board.

(6) to render management consultancy in areas such as MIS, corporate planning, material management, and manpower planning, etc.

(7) to set up a data bank containing up-to-date information in all respects about State enterprises.

64. The rapidly increasing volume of work, as presented briefly above points to the necessity of strengthening the Bureau by providing additional expertise of desired quality.

65. In order to be more effective, it is proposed that the Bureau would be declared a Directorate. It is also proposed to strengthen the personnel, financial and general management wings, and add project formulation and appraisal wing, selection committee wing, and information/research/data bank wing. Care will be taken to ensure that the area of responsibility of the Bureau remains demarcated, so as to avoid duplication of agencies.

66. The plan outlay for the Sixth Plan 1980—85 earmarked for the Bureau is Rs.35 lakhs. An outlay of Rs.6 lakhs has been proposed for the year 1981-82.

## III. METRIC WEIGHTS AND MEASURES

67. The scheme of Metric Weights and Measures was introduced in the State during the year 1958-59. The departmental activities began in the same year with the enforcement of the U.P. Weights and Measures (Enforcement) Act, 1959. By the end of the Fifth Five-Year Plan, the following laboratories were functioning in the State.:

(1) Central Precision Lab., Lucknow.	1
(2) Secondary Laboratories at regional headquarters.	4
(3) Working standards labs.	104
(4) Mobile squad	2

68. There are fields such as petrol meters, taxi meters, thermometers and other that have not yet been effectively brought within the ambit of the enforcement provision of law. A detailed scheme bringing such establishments within the purview of law is under active consideration of the State Government. For the time being, keeping in view overall financial constraints a provision of Rs.15.00 lakhs has been made in the Sixth Plan 1980—85.

#### IV. PRINTING AND STATIONERY

69. Government Press, Allahabad and Government Press, Aishbagh Lucknow including its Hazratganj Branch were established long back. Government Press, Roorkee was established about twenty years back by way of take over of the University Press. These presses had become incapable of coping with the ever increasing printing work and hence a programme of establishing additional capacity was taken up and items relating to Printing and Stationery was included in the Plan for the first time in year 1974-75. The programme was to expand the capacity of Roorkee Press and to set up two new presses at Rampur and Varanasi. The total cost was then estimated at about Rs.7 crores to be spent during Fifth Five Year Plan period. However, due to financial constraints, requisite allocations were not made and the total expenditure up to March, 1980 has been only Rs.305.63 lakhs.

70. In view of the increasing volume of work and inability of the Government presses to cope with it, it has also now been decided to expand the existing Hazratganj Branch of the Government Press, Lucknow. Construction of a suitable building for this branch press is in progress. The Government press at Rampur started production in June, 1976 and the other Government Press at Varanasi has gone into production in April, 1979, but due to insufficient outlay for the requisite plant and equipment they are still working much below the proposed capacity.

71. There has been a steep rise in the various cost elements over this period. Owing to this, the revised cost of the

aforsaid work has now increased from Rs.700 lakhs to Rs.1305 lakhs. Out of which an amount of Rs.305 lakhs has already been provided upto the end of 1979-80. As such, the remaining amount of Rs. 1000 lakhs will be required during the Sixth Plan period (1980—85) to complete the entire work. This includes cost of machines, building and establishment etc.

72. A provision of Rs. 110 lakhs has been made in the year 1980-81 and outlays of R.150 lakhs, Rs.300 lakhs, Rs.250 lakhs and Rs.190 lakhs have been proposed for the years 1981-82, 1982-83, 1983-84 and 1984-85.

#### V. TRAINING INSTITUTES

73. *Administrative Training Institute, Naini Tal*--The A.T.I., Naini Tal, which was established in the year 1972 is engaged in imparting foundational training to officers of State Services, professional training to the I.A.S. officers allotted to U.P., officers of the U.P. Civil (Executive) Service, U.P. Civil (Judicial) Service and U.P. Finance and Accounts Service. Besides training courses for other services and refresher courses are also organized from time to time.

74. The Institute is housed in the Ardwal barracks. There are only 35 rooms for residential use of trainee officers. This accommodation is quite insufficient in view of the increasing activities of the Institute. The library is housed in a small room and for want of accommodation it has not been possible either to expand it or to provide a separate reading room. The Institute has neither an auditorium nor a separate room for holding seminars. There is only one main class room. The Institute is able to cater to the residential requirements of only a handful of its staff because of constraint of such accommodation.

75. For organizing the various training courses efficiently the Institute is in great need of lecture halls, library, auditorium, seminar room, hostel and residential quarter, the buildings which are essential to be constructed immediately are :

- (1) the main building comprising of four lecture halls, a library, a seminar room and an auditorium ;

(2) a hostel building having 100 rooms for trainee officers, and

(3) residential quarters for officers and staff.

76. The estimated cost of these buildings works out to be Rs.60.16 lakhs. The provision of Rs.60.00 lakhs in the Sixth Plan 1980—85 is, therefore, a must.

76 *Institute of Management Development, Uttar Pradesh*—With the economic development of the State the industrial and administrative structure is becoming more and more complex. It has become necessary to take systematic steps to develop class of professional managers with the requisite technical, managerial and financial expertise and provide effective man-power inputs to the State's public sector. The Institute of Management Development, Uttar Pradesh was founded on 19th March, 1975. It was registered under the Societies Registration Act, 1860.

77. There are in all 54 Corporations in the State with 37 subsidiaries. These undertakings have about 171 Chief Executive, 3500 Senior Executive and 2500 Middle Level Executive. The Institute would endeavour to meet the training requirements of these undertakings by carefully designed programmes in the various fields of management of short-term and middle-terms duration. These courses are generally conducted by highly skilled professionally trained faculty in the various field of management all over India. To meet the requirements of various public undertakings 12 to 16 weeks medium-term, whole-time management development courses are being organised by the Institute through which the State Government officers at executive level are trained with the latest management techniques relevant to U.P.'s public sector requirements.

78. Looking into the immense necessity of providing short-term *ad hoc* consultancy from time to time to the various public sector undertakings and considering that this facility is not available easily, the Institute proposes to develop a modest consultancy

wing also. The Institute would engage part-time/whole-time consultants who could advise State government corporations on various issues after making a proper study and analysis.

79. The institute has neither a building of its own nor any facility for the stay of faculty and other outstation participants. The minimum needs of a training institute of this type should include one big training hall, one small seminar hall and other rooms for the administrative block and library and 10 rooms for guest house-cum-hostel meant for the faculty members and outstation participants.

80. The outlay proposed by the Institute over the remaining years of the sixth plan is given below :

		(Rupees in lakhs)
Item		
1. Training of officers of U.P. Government	12.40	
2. Training of executives of Public sector Undertakings.	4.00	
3. Consultancy services	..	1.60
4. Land and building	..	20.00
5. Equipment for training and library	..	2.00
	Total	.. 40.00

## VI. REGIONAL RURAL BANKS

81. Regional Rural Banks are established under the directions of the Government of India issued on the basis of recommendations made by the Reserve Bank of India under the Regional Banks Act, 1976. The Importance of these banks lies in the fact that they provide credit facilities exclusively to persons belonging to rural areas, mainly the small and marginal farmers and agricultural labourers. There were only ten regional rural banks till recently, fifteen more banks have been opened in the year 1979-80.

82. The paid up share capital of Regional Rural Bank is Rs.25.00 lakhs which is contributed by the Central Government, State Government and the sponsoring bank respectively at the rate of 50%, 15% and 35%. The State

Government share of paid up capital for the establishment of 15 banks in 1979-80 was Rs.56.25 lakhs and provision was made for that year accordingly in the state budget. It is proposed to establish 5 more rural banks in the year 1980-81. An amount of Rs.18.75 lakhs is required for the purchase of shares of these banks which is expected to be released soon.

83. The schemes for opening of Regional Rural Banks during remaining years of the Sixth Plan are in the formulation/estimation stage. Directions of Government of India are being sought for the opening of these banks in the hill areas and western Uttar Pradesh during subsequent years. A provision of Rs.75.00 lakhs will be necessary for the purpose during the Sixth Plan, 1980—85.

#### VII. U. P. DEVELOPMENT SYSTEMS CORPORATION :

84. The U. P. Development Systems Corporations Ltd. is State undertaking which was incorporated in 1976 with a view to provide consultancy services to Government departments and agencies. The Corporation has achieved phenomenal growth in its business which is an indication of its value in meeting a gap which had existed in this planning system.

85. The authorised share Capital of U. P. D. E. S. C.O. is Rs.100.00 lakhs,

of which Rs.60.00 lakhs is paid up. A sum of Rs.20.00 lakhs is being provided in the Sixth Plan for purchase of shares. For 1981-82 however, a small provision of Rs. 4 lakhs had been earmarked.

#### VIII. SECRETARIAT ADMINISTRATION :

86. *Strengthening of the technical Cell and establishment of a monitoring Cell for hills at State level*—With a view to equip hill development department with technical staff (research officer, research assistants and other supporting staff) for plan co-ordination and review of programmes of hill areas, a technical cell was established during the Fifth Plan period. During 1979-80, this cell was strengthened by providing one post of senior research officer. During the Sixth Plan, 1980—85 period, a monitoring cell is proposed to be established for proper appraisal and monitoring of plan programmes of hill areas. An outlay of Rs.15.00 lakhs is proposed for 1980—85. Necessary staff for monitoring cell is under consideration of the State Government.

87. *U.P., State Employee's Welfare Corporation*—It is proposed to suitably strengthen the U. P. Employee's Welfare Corporation with an outlay of Rs. 10 lakhs during the Sixth Plan including Rs. 2 lakhs for 1981-82, with a view to providing better facilities to the employees.

## ANNEXURE-I

### *List of Evaluation studies for the year 1980-81*

1. Evaluation study of the working of Sub-Centre of Health Department.
2. A Comparative evaluation study of the estimated and actual benefits and achievements of Dalmau and Bhopali Pump Canals.
3. Gobar Gas Programme.
4. Evaluation Study of modernization Scheme of Handloom Societies in 1979-80.
5. Evaluation Study of allotment of cost free land for construction of hygienic houses to Scheduled Caste/Scheduled Tribes / Shilpkars/other Agricultural labourers.
6. Evaluation Study of arrangement of double-system in selected Government Higher Secondary Schools.
7. Evaluation Study of Slum Improvement Programmes.
8. Evaluation Study of Training and visit Programme in Ram Ganga and Sharda Sahayak Command Area District Faizabad / Varanasi / Kanpur/ Mainpuri Districts.
9. Evaluation Study of Pilot Project in Gandak, Ramganga, Sharda Sahayak Command Area.
10. Evaluation Study of Bonded labour problems.
11. Evaluation Study of production of Akharot and Badam for export purposes.
12. Evaluation Study of Antodaya Programme.
13. Evaluation Study of Area Development Programme in Pauri, Tehri Garhwal.
14. Evaluation Study of Utilization of sanctioned funds for local level planning
15. Evaluation study of impact of programme for grants to small farmers for Potash and Phosphoric fertilizers.
16. D.P.A.P. Areas.
17. Evaluation Study of allotment of culturable Gaur Sabha land to Scheduled Caste, Scheduled Tribes and other landless labourers and small farmers under 20-point programme.
18. Evaluation Study of Development of Civil and Soyam Forests;
19. Evaluation Study of Pilot Project of Dry Farming Programme.
20. Evaluation Study of Drinking Water Scheme of Jal Nigam in Hill Areas.
21. Evaluation Study of Soil Conservation Programme of Agriculture Department in Hill Areas.
22. Evaluation study of establishment of Model Archers for distribution of seeds among the Fruit-growers.
23. Detailed Study of Ganga-Ghawipur and Ken-Bandha Bridges.

## ANNEXURE-II

### *List of Studies of Perspective Planning Division*

1. Structure of the Economy of Uttar Pradesh, 1970-71.
2. Household Consumption and Demand Analysis for Uttar Pradesh (in 3 parts).
3. Investment in Uttar Pradesh during the Fourth Plan.
4. Capital Formation in Uttar Pradesh during the Fifth Plan.
5. Labour and Capital Productivity in Organised Industrial Sector of Uttar Pradesh.
6. Labour Co-efficients and Labour Productivity in the Unorganised Industries of Uttar Pradesh.
7. Perspective of Development of Uttar Pradesh (1974-75 to 1988-89) : A Frame. ¶
8. Strategy for Industrial Development of Organised Sector.
9. Estimation of Labour Co-efficients for different Sectors of the Economy of Uttar Pradesh.
10. Goods Traffic survey by Road of Uttar Pradesh (in 2 parts).
11. Incremental Capital-output Ratios of the Uttar Pradesh Economy.
12. Capital output Ratio in Unorganised Industries of U.P.
13. Capital Formation in the Economy of Uttar Pradesh : A study of development headwise estimates : 1969-70 to 1978-79.
14. Agricultural Statistics of U.P. and other States.
15. Computation of Labour coefficients for 64 Sectors of Input-Output table (1970-71).
16. Perspective of Development of Uttar Pradesh (1978-79 to 1987-88) : A tentative framework for policy Planning. ¶
17. Pattern and Performance of Sugar Industry in U.P. : 1971—76.
18. Strategy for Development for 1978—83 in the Context of Long-Term Perspective-case for alternatives.
19. State's Minimum Plan size to meet National Objectives.
20. Perspective of Economy of Uttar Pradesh : 1978—88 Implications of Reduced Plan Outlay.
21. Some Inter States Statistics and the State's Annual Plan for 1979-80.
22. Estimation of Domestic Saving during the Fourth and Fifth Plan periods. (Draft Report).
23. Material Balances for key Agricultural and Industrial Commodities part-I.



## ANNEXURE-III

### List of Studies completed by the Manpower Planning Division

#### I. STOCK UTILIZATION, DEMAND AND SUPPLY OF TECHNICAL AND PROFESSIONAL MAN-POWER.

##### (1) All Sectors

पंचवर्षीय योजना अवधि (1978-83) में प्रमुख श्रेणी के तकनीकी कामिकों की मांग एवं पूर्ति की स्थिति ।

##### (2) Agriculture

(i) उत्तर प्रदेश में पांचवीं योजनाकाल में कृषि कामिकों की आवश्यकता और उपलब्धता (1974-79)

(ii) उत्तर प्रदेश में पांचवीं योजना अवधि में कृषि कामिकों की आवश्यकता और उपलब्धता (अध्ययन) ।

(iii) Stock and utilization of agricultural manpower in Uttar Pradesh (1975).

##### (3) Animal Husbandry

(i) पांचवीं योजना अवधि में पशु चिकित्सा स्नातकों एवं अन्य कामिकों की आवश्यकता और उपलब्धता ।

(ii) पांचवीं योजनाकाल में पशु चिकित्सा कामिकों की मांग एवं पूर्ति विषयक अध्ययन का अद्यतन (अपडेटिंग) (1974-79) ।

(iii) Stock and utilization of Veterinary Graduates in U. P. in 1976.

##### (4) Dairying and Milk Supply

पांचवीं योजना अवधि में डेरिंग कामिकों की आवश्यकताओं की तुलना में उनकी उपलब्धता ।

##### (5) Engineering

(i) पांचवीं योजना अवधि में विभिन्न श्रेणी के अभियन्ताओं की आवश्यकताओं की तुलना में उपलब्धता (1974-79) ।

(ii) Likely absorption of technical/professional manpower during the period 1978-83 in Uttar Pradesh.

(iii) Demand and Supply of important categories of degree and diploma engineers during the Plan 1978-83.

(iv) उत्तर प्रदेश में चयनित बहुधंधी संस्थाओं में संचालित प्रशिक्षण युक्त उत्पादन केंद्रों के कार्यों में अध्ययनरत छात्रों का योगदान ।

##### (6) Education

(i) उत्तर प्रदेश में पांचवीं योजना अवधि में विभिन्न श्रेणी के शिक्षकों की आवश्यकताओं की तुलना में उनकी उपलब्धता ।

(ii) उत्तर प्रदेश में पांचवीं योजना अवधि में विभिन्न श्रेणी के शिक्षकों की आवश्यकताओं की तुलना में उनकी उपलब्धता (अद्यतन) ।

##### (7) Medical

उत्तर प्रदेश में पांचवीं योजना अवधि में एलोपैथिक डाक्टरों तथा पैरा मेडिकल कामिकों की आवश्यकताओं के संदर्भ में उपलब्ध का तुलनात्मक अध्ययन (1974-79)

उत्तर प्रदेश में पांचवीं योजना अवधि में एलोपैथिक डाक्टरों तथा पैरा मेडिकल कामिकों की आवश्यकताओं के संदर्भ में उपलब्ध विषयक अध्ययन का अद्यतन (अपडेटिंग) 1974-79 ।

(iii) Availability of allopathic doctors in Uttar Pradesh 1974-83.

(iv) Stock and spatial distribution of allopathic doctors in Uttar Pradesh.

#### II. WASTAGE AND STAGNATION

उत्तर प्रदेश में कृषि शिक्षा में अपव्यय (वेस्टेज) तथा पाठ्यक्रम पूरा करने में समय के अपव्यय (स्टन-गेशन, के आकार एवं रूप का अध्ययन) ।

(ii) Wastage and Stagnation in Veterinary education at graduate level in U.P. (1966-70).

(iii) Wastage in engineering education at graduate and diploma levels in Uttar Pradesh.

(iv) Wastage at the graduate level of education in medical colleges of Uttar Pradesh.

(v) Wastage at the graduate level of education in medical colleges of U.P. (Undating) 1978.

(vi) Drop outs at the Primary and Junior levels of Education.

#### III. TRAINING FACILITIES AND UTILIZATION

उत्तर प्रदेश में सेवारत प्रशिक्षण सुविधायें ।

प्रमुख विभागों के प्रशिक्षित अधिकारियों का उपयोग (1967-71) ।

(iii) A documentation of service training facilities in Uttar Pradesh.

(iv) Utilization of training of I.A.S. Officers on post training assignments.

(v) Training needs of power sector in the perspective of 10 years (1974—84).

#### IV. EMPLOYMENT AND UNEMPLOYMENT

पांचवीं योजना अवधि के प्रथम तीन वर्षों में तकनीकी जनशक्ति के अन्तर्गत प्रमुख श्रेणी के डिग्री एवं डिप्लोमा इंजीनियरों के लिये राजकीय क्षेत्र में योजना के प्रारम्भ में अनुमानित आवश्यकताओं की तुलना में रोजगार के वास्तविक अवसरों का सृजन।

(ii) Size and structure of un-employment in Uttar Pradesh in 1976.

(iii) Size and pattern of female employment in Uttar Pradesh.

(iv) Size and pattern of employment in central sector in U.P.

(v) Employment generation in the small scale industrial sector during 1974-75 and 1975-76.

(vi) Size and structure of employment generation in the state public sector during Fourth Five-Year Plan period (1969—74).

(vii) Structure of labour force and working force in U. P.

(viii) Employment in the organised sector in U. P.

#### V. OTHER STUDIES

(i) प्रदेश में तवीन औद्योगिक प्रशिक्षण संस्थान खोलने के औचित्य का अध्ययन।

(ii) शिक्षा विभाग की कार्यानुभव अग्रगामी योजना की प्रगति समीक्षा।

(iii) Integration of Garhwal University Courses with job opportunities in the Garhwal region.

(iv) District Fact Book on manpower, District Lucknow 1974.

(v) Attrition and employment in the State sector Volume-I and Volume-II.

(vi) Projections of structure of population of Uttar Pradesh up to 1986 A.D.

(vii) Approach, pattern and priorities of sectoral investments in order to ensure the most productive utilization of available manpower during the Sixth Plan period.

(viii) A review in retrospect and prospect of Agro service Centres established with the aid of Agro Industrial Corporation.

(ix) A study of the activity pattern of Nursing personnel in two hospitals of Uttar Pradesh.

(x) A comparative case study of the Cost per unit of Industrial output in factories set up in U.P. and Punjab.

(xi) भारतीय प्रशासनिक सेवा के अधिकारियों की सत्र और नियुक्ति अवधि।

## ANNEXURE-IV

### *List of studies of Monitoring Division.*

#### (a) One time studies completed :

1. Cost of delay in decision making.
2. Analysis of factors responsible for cost increase (Irrigation and power projects).
3. Equipment performance in Irrigation department.
4. Surplus equipment in Irrigation department.
5. Equipment performance in P. W. D. and U. P. Rajkiya Nirman Nigam.
6. Report on Power Development in U. P.
7. Comparative study on performance of Lucknow Co-operative Electric Society and U. P. State Electricity Board.
8. Detailed paper on performance budgeting.
9. Study on Turpentine and Rosin Company, Bareilly.
10. Appraisal Reports of Chhata (Mathura) and Maulganj Sugar Factories.
11. Reports on Working of U. P. State Public Sector Undertakings for the year 1973-74 and 1974-75.
12. Detailed status reports on Irrigation and Power Projects as and when desired by the Government.
13. Handbook of Public Sector Undertakings.
14. Report on 'Monitoring System in U. P.
15. Papers on Management Information System and Monitoring and Rural Development Programme.
16. Requirement of important scarce materials during 1975-76, 1976-77 and 1977-78.

17. Cost index for Multipurpose Projects.

18. Cost index for bridges, approaches and protection works.

19. Cost index for various types of roads.

20. Cost index for various types of buildings.

21. Cost index for major irrigation project.

22. Cost index for thermal power projects.

#### (b) *Regular and Continuing reports ;*

1. Monthly Flash Report of Irrigation Projects.

2. Monthly Flash Report of Generation Projects.

3. Monthly Monitoring Report of Major Irrigation Projects.

4. Monthly Monitoring Report of Generation Projects.

5. Monthly Monitoring Report of Multipurpose Projects.

6. Monthly Monitoring Report of Transmission Lines and Sub-Stations (220 kV and above).

7. Monthly Monitoring Report of S. P. I. Division.

8. Quarterly Report of Major selected Bridges.

9. Quarterly Report of Major Jal Nigam Schemes.

10. Quarterly Report of selected Housing Schemes.

11. Quarterly Report of Milk Development Programme.

12. Quarterly Report of Animal Husbandry Programme.

13. Quarterly Report of Government Tubewells.

14. Selected Schemes of 27 Corporations.

15. Inventory Control Report of P. W. D.

16. Inventory Control Report of UPSEB.

17. Inventory Control Report of Housing Board.

*Half Yearly ;*

18. Agriculture Report of Hardoi District--Rabi.

19. Agriculture Report of Hardoi District--Kharif.

20. Agriculture Report of Moradabad District--Rabi.

21. Agriculture Report of Moradabad District--Kharif.

*Studies in hand*

**One time studies**

1. Development of MIS for Irrigation Projects.

2. Comperative Economics of different dairies in U. I.

3. Case study of Ram Ganga Project.

4. Drinking Water Supply in Bundelkhand Region.

5. Study on working of the U.P. Public Sector Undertakings.

6. Per Day Cost of Delay to U. P. Government.

7. Study of rise and cost of power to consumers.

8. Monitoring of Equipment Management at Tehri Dam Project.

9. Indepth study of Anpara Thermal, Power Project.

10. Continuing and regular reports.

Ministry of Systems and  
 Ministry of Education  
 No. ....  
 Date .....