



DRAFT

EIGHTH

**FIVE YEAR PLAN
(1990-95)
AND**

**ANNUAL PLAN
1991-92**

VOL. II

UTTAR PRADESH

DRAFT
EIGHTH
FIVE YEAR PLAN
(1990-95)
AND
ANNUAL PLAN
1991-92

SECTORAL PROFILE

NIEPA DC



D05881

GOVT OF UTTAR PRADESH
PLANNING DEPARTMENT

NOVEMBER, 1990

Director, Systems Unit
National Institute of Education
Planning and Administration
11, Connaught Place, New Delhi-110016
DOC. No. D-5861
Date 26-2-91

This draft-plan is presented in three volumes.
Volume-I consists of general reviews,
Volume-II is of sectoral reviews and
Volume-III of statements

Printed By
Director Printing Stationery
U. P. at the Govt. Press, Rampur.

CONTENTS

		<u>Page No.</u>
Chapter I	Agriculture and Allied Activities	
	1.1 Crop Husbandry	.....1
	1.2 Soil and waater Conservation	....26
	1.3 Animal husbandry	....35
	1.4 Dairy Development	....39
	1.5 Fisheries	....46
	1.6 Forestry and Wild Life	....48
	1.7 Food, Storage and Warehousing	....59
	1.8 Agriculture, Research and Education	....60
	1.9 Agricultural Financial Instituions	....63
	1.10 Co-operation	....65
	1.11 Other Agricultural Programmes	....70
Chapter-II	Rural Development	
	2.1 Special Programme for Rural Development	..75
	2.2 Rural Employment	....81
	2.3 Land Reforms	....83
	2.4 Other Rulral Development Programmes	....89
Chapter-III	Special Area Programmes	
	3.1 Other Special Area Programmes	.... 94
Chapter-IV	Irrigation and Flood Control	
	4.1 Major and Medium Irrigation	.... 100
	4.2 Minor Irrigation	.... 110
	4.3 Command Area Development	.... 133
	4.4 Flood Control and Drainage	.... 137
Chapter- V	Energy	
	5.1 Power	.... 326
	5.2 Non-Conventional Sources of Energy	.... 341
Chapter-VI	Industry and Minerals	.... 142
	6.1 Village and Small Industries	... 146
	6.2 Industries	.... 162
	6.3 Mining	.... 174
Chapter-VII	Transport	
	7.1 Civil Aviation	.... 185
	7.2 Roads and Bridges	.... 186
	7.3 Road Transport	.... 191
Chapter-VIII	Communication (No programme in the State Plan)	
Chapter-IX	Science, Technology and Environment	
	9.1 Science and Technology	.... 197
	9.2 Ecology and Environment	.... 199

Chapter-X	General Economic Services	
	10.1 Secretariat Economic Services	.... 204
	10.2 Tourism	.... 214
	10.3 Surveys and Statistics	.... 216
	10.4 Civil Supplies	.... 220
	10.5 Other General Economics Services	.... 221
Chapter-XI	Education	
	11.1 General Education	... 223
	11.2 Technical Education	.....236
	11.3 Sports and Youth Welfare	.....242
	11.4 Art and Culture	.....247
Chapter-XII	Medical and Public Health	
	12.1 Medical and Public Health	.....254
Chapter-XIII	Water Supply, Sanitation, Housing and Urban Development	
	13.1 Water supply and Sanitation	.....264
	13.2 Housing	.....275
	13.3 Urban Development	.....287
Chapter-XIV	Information and Publicity	
	14.1 Information and Publicity	.....298
Chapter-XV	Welfare of Scheduled Castes Denotified Tribes and other Backward Classes	
	15.1 Welfare of Schedule Castes Denotified Tribes and other Backward Classes	.....300
Chapter-XVI	Labour and Employment	
	16.1 Labour and Employment	.....307
Chapter-XVII	Social Security, Welfare and Nutrition	
	17.1 Social Security and Welfare	.....315
	17.2 Nutrition	.....321
Chapter-XVIII	General Services	
	18.1 Jails	.....322
	18.2 Stationery and Printing	.....322
	18.3 Public Works	.....322

CHAPTER-I

AGRICULTURE AND ALLIED ACTIVITIES

1.1 Crop Husbandry

Uttar Pradesh is the largest State having a total population of about 11.01 Crore with a density of 2.49 lakh per square km. The State has about 14 per cent of gross cropped area accounting for 21 per cent of foodgrain production in the country. Nearly 75 per cent of the total workforce is engaged in various agricultural activities contributing 44 per cent of state income at constant prices of 1980. This shows that agriculture is still a dominant factor in state's economy.

1.1.2 On the basis of the experience gained during Fifth and Sixth five year plan, growth rate of food grain production was calculated at 4.7 per cent and a target of 425 lakh tonnes of foodgrain production was set for the Seventh five year plan. The average production of 319.10 lakh tonnes was achieved as against the 269.72 lakh tonnes during Sixth five year plan with growth rate of 3.4 per cent per annum. The level of production of foodgrains during Seventh Plan is given in the table below :-

Table - 1.1.1

Seventh Five Year Plan - Level of Production

(000 'M. Tonnes)

Year	Total foodgrain production	Total oilseed production
1	2	3
1985-86	31426	872
1986-87	30300	800
1987-88	28696	859
1988-89	35435	1160
1989-90	33695	1181

1.1.3 In spite of the fact that state had been hit by natural calamities, the above production was possible by stepping up of distribution of certified seeds, fertilizers, plant protection chemicals, plant protection and improved agricultural implements, proper use of water harvesting technology and making available required credit support. The quantum of distribution of important inputs are given in table 1.1.2 :-

Table 1.1.2

Seventh Five Year Plan - Distribution of inputs

Year	Seed Distribution (000' qtls.)	Fertilizer Distribution (000' M.T.)	Plant Protection (Technical Grade Material) (000' M.T.)
1	2	3	4
1985-86	583	1709	6.01
1986-87	523	1678	6.65
1987-88	523	1598	6.92
1988-89	480	2136	8.48
1989-90	662	2092	8.91

1.1.4 Although the production of foodgrains during the preceeding five year plan has been encouraging the unprecedented increase in population demands a fresh look into the strategy of agriculture planning. The eight five year plan aims at not only on increasing production but also on generating sufficient employment in the farming activity. It also envisages steps to boost the quality of life of farmers having small holdings and very few or none resources of improving their economic condition. The strategy to achieve these aims during, the eighth five year plan, has broadly been framed as below :-

- (i) Emphasis on bringing user and ravinous areas under cultivation.
- (ii) Optimise the use of agricultural inputs like seeds, fertilizer, plant protection chemicals and improved agricultural implements.
- (iii) Adopt water harvesting technology and judicious use of irrigation water.
- (iv) Continuous flow of credit to farmers.
- (v) Concentration on dry land farming considering the characteristics of various agro-climatic zones so as to reduce if not remove the regional disparities and imbalances.
- (vi) Quality seed is vital in increasing production but the state is facing shortage of certified seeds of pulses, oilseeds and coarse grains. Agricultural universities, research institutions and seed corporation will be made responsible to fulfill the requirements of certified seeds.

1.1.5 Food grain production : The growth rate of food grain production during the Seventh Five Year Plan was 3.4 per cent per annum. Against this background a growth rate of 4.02 per cent per annum has been proposed for the eight five year plan. A target of 430.00 lakh tonnes of food grains production has been proposed for the Eight Five Year Plan. The cropwise details are given below :

Table 1.1.3
Eight five year plan and annual plan 1991-92
food grain production target (000'M.T.)

Crop	Proposed Target Eight Five Year Plan (1990-95)	Proposed Target (1991-92)
(1)	(2)	(3)
1. Rice	11600	10400
2. Jowar	600	500
3. Bajra	1100	900
4. Maize	1800	1600
5. Kharif Pulses	300	200
6. Others	400	350
Total Kharif Foodgrains	15800	13950
7. Wheat	22700	21500
8. Barley	800	750
9. Gram	1600	1300
10. Pea	600	500
11. Arhar	900	700
12. Masoor	600	500
Total Rabi Foodgrains	27200	25250
Total Foodgrains	43000	39200
Oilseeds	1500	1350

1.1.6. The State has launched various programmes to accelerate the pace of agricultural production. A brief introduction of major ongoing schemes as well as new schemes is given in the succeeding paragraphs.

1.1.7. Integrated programme for rice development : This programme is being launched in 37 districts of the state from the year 1990-91. The 11 districts selected for executive production of 'Basmati' are also included in the programme. Under this programme subsidy is being provided on agricultural inputs so as to increase the productivity of rice in these areas.

1.1.8. Special food production programme (SFFP) : Under this programme production of Maize, Jowar, Bajra, Ragi, Wheat, pulses crops like (Urad, Moong, Arhar, Gram, Peas, Lentil, Rajma) have been selected. To increase the productivity of these crops, districts having potential for these crops have been identified for intensive cultivation. Since the pulses crops are highly sensitive to pests and diseases, the need for plant protection programming has also been emphasised in the proposed plan. Besides, the programme of Technology Mission on Pulses are also going to be implemented.

1.1.9. Oilseed production programme : Previously two separate schemes (NODP and OTP) were operated in the state. Now these two schemes have been merged into one (O.P.P.) scheme, covering 41 districts. In this programme districts have been identified for each oilseed crop.

1.1.10. The programme of technology mission on oilseed has been introduced in the state. An integrated approach has been adopted under which supply of inputs, technological and marketing aspects are being taken up.

1.1.11. Agricultural extension project(T&V System : To promote the effective transfer of technology of improved agricultural practices, this programme was started in limited number of districts in the year 1985-86. The programme now has been expanded to all the districts in plains. Under the programme scientific know how about farming is being given to the farmers through Kisan Sahayak and other specialists of Agricultural Universities and regional testing and demonstration centres.

1.1.12. New Programmes : Besides the schemes stated earlier following new schemes are being proposed during the year 1991-92.

1.1.13. Integrated scheme for strengthening fertilizers, quality control, soil survey, testing and rhizobium laboratories : For achieving the food grain production targets it is imperative to increase the usage of balanced doses of fertilizers, pesticides according to the soil texture. Similarly, for increasing production of pulses appropriate rhizobium culture in the soil and fertilizer is needed. In order to maintain quality of fertilizer, strengthening of existing laboratories and establishment of 3 new laboratories in Bareilly, Faizabad and Gorakhpur is proposed. This will increase the annual analysing capacity from 4000 samples 10,000 in fertilizer and 1500 to 5500 in pesticides.

1.1.19 Under this scheme soil survey and soil testing laboratories are proposed to be combined in all the 44 district in plains so that each laboratory will analyse 10000 samples, survey 20000 Ha. and prepare 20000 rhizobium culture packets per year. Thus in total 6.05 lakh soil samples will be tested, 11 lakh Ha. land will be surveyed and 11 lakh rhizobium culture packets will be prepared.

1.1.20 Strengthening of departmental agricultural training centres : The agriculture management institute, Rahman Khara imparts training to departmental officers while 3 agricultural schools and 4 soil conservation training centres and one Usar reclamation training centres at Raibareli imparts training to sub-ordinate field staff.

1.1.21. In view of the rapid advancement of technology, it is essential that entire supervisory staff and field staff be equipped with latest know how of farming techniques. It is proposed to expand the existing training facilities so that 2700 cultivators, 318 officer, 9100 S A S staff could be trained in this way each officer and staff will receive training after 3 years. It is proposed to organized Kisan Mela's , work shops, seminars and demonstration in the vicinity of institutes during each cropping season.

1.1.22 Scheme for strengthening of agricultural statistics in U.P. : During 1991-92 it is proposed to launch the above scheme to provide estimates of productivity below tehsil level. Besides collecting data, studies and research activities will be carried out to establish linkages of various factor and develop management information system for agriculture at district level with the help of NIC microvave linkage system.

1.1.23 In Seventh Plan an outlay of Rs.12312 lakh including Rs.850 lakh for hills was approved to carry out various crop husbandry programmes. Against this outlay an expenditure of Rs.17630.87 lakh including Rs.883.43 lakh in hills was incurred. For the draft Eight Five Year Plan (1990-95) and annual plan 1991-92 an outlay Rs.29100 lakh and Rs.5350 lakh have respectively being proposed.

CANE DEVELOPMENT

1.1.24 . The sugar economy in this State has been, consistently, improving owing to better performance of cane development programmes in the State. During the Seventh Plan period (1985-90), the targets fixed for increasing sugarcane area, its per-hectare productivity, & overall production have almost been achieved.

1.1.25 The role of cane co-operatives is significant as they have marketed sugarcane worth crores of rupees and made available cane seed finance to its member-cane growers. They also supply chemical fertilizers to its member growers according to their needs.

1.1.26 Against the Seventh Plan target of 990.00 lakh tonnes of cane production, 1016.86 lakh tonnes cane was produced in 1989-90. The Eighth Five Year Plan target for sugarcane production has been fixed at 1075 lakh tonnes. It is proposed to produce 1018 lakh tonnes in 1990-91 and 1019 lakh tonnes of sugarcane in 1991-92.

The proposed target for sugarcane production is to be achieved by adopting the following strategy :-

1. Use of improved, healthy & fresh seed material in sowing of sugarcane crop.
2. Better care of ratoon cane crop.
3. Application of adequate doses of fertilizers.
4. Adequate protective measures against various pests & diseases.
5. Provision for other infra-structural facilities.
6. Provision for adequate irrigation of sugarcane crop and utilising underground water.
7. Effectively orienting role of sugarcane research towards long & short term problems of sugarcane cultivation and also towards evolution, testing & multiplication of new and high yielding sugarcane varieties and its quality seed material.

1.1.27 During the year 1991-92, an outlay of Rs.469.00 lakhs under State sector and Rs. 253 lakhs including Rs.22.00 lakhs for Hills has been proposed under district sector. Similarly, for Eight Plan period an outlay of Rs.3020.00 lakhs including Rs.150.00 lakhs for Hill region has been proposed for cane development in the State.

1.1.28 Following new schemes are proposed to be taken up during Eighth Plan period.

1.1.29 Distribution of improved agricultural implements : Under this scheme cane growers will be provided with improved implements, animal or power driven-such as cane planters, ridge makers, stubble shavers, sett cutters etc. so that they can grow sugarcane in a scientific manner and will also be saving undue labour costs. The rate of subsidy on such improved implements is proposed to be at par with that of other departments being 50% of costs to small and marginal farmers.

1.1.30 Development of Ratoon cane crop : Sugarcane ratoon crop accounts for more than 50% of total cane area but the growers in this State are not able to adopt sufficient inputs and technique required for better and scientific maintenance of ratoon crop. The per-hectare productivity of ratoon cane crop is very low which has to be increased to improve the average yield of sugarcane of the State. Under this programme, stubble shaving, dismantling of ridges, gap filling and higher number of irrigations, adequate doses of fertilizers & repeated pesticide application will be taken up.

1.1.31 Publicity & propaganda with mass education & its evaluation: The farmers need to be informed about the improved techniques in cultivation besides the new improved varieties and best central measures. Achievements in research have to be implemented in the field. The focus of this scheme therefore will be an extension through 'Audio', 'Visual' propaganda, publicity and training.

1.1.32 Popularising early maturing high yielding sugar varieties : In U.P., maturity in sugarcane starts when the temperature starts falling in the month of October. Thus the crop finds comparatively less growth period. This is also one of the reason for late start of sugar factories, which get very low sugar recovery. The growers also get low yield and poor returns from their cane crop. In order to save both, the cane growers as well as sugar factories, it is imperative to increase the area under early maturing and high sugar varieties. Such early varieties must provide sufficient feed to sugar mills at least for two months in the beginning of the crushing season. This will yield increased sugarcane as well as sugar production and will save the growers & sugar factories from incurring losses.

1.1.33 Scheme for cane competitions : At present, the average yield of sugarcane per ha. is about 54 tonnes while in cane competitions it has gone up to 292 tonnes per ha. Thus there is marked gap between old & new cultivation techniques. The scheme envisages large participation of competitors at various competition levels. Under the scheme, zonal, regional, State and All-India level competition in plant as well as ratoon crop is

proposed for encouraging the farmers to have higher yield of sugarcane and increasing thereby the per hectare productivity of the State.

SMALL AND MARGINAL FARMERS PROGRAMME

1.1.34 This programme a centrally sponsored one, started in the year 1983-84 in the State was previously known as SMFP and now as SFPP.

1.1.35 Following are the salient features of the scheme:-

1. The expenditure in this scheme is shared by State/Central Government in the ratio of 50:50.
2. There have been three components in this scheme-Minor Irrigation, Land Development and Minikits.
3. Central Government in, its guide-lines stipulated that an amount of Rs.5.00 lacks would be released for each block. (However for the last four years Central Government assistance releases have not been to this extent.).
4. Subsidy at the rate of Rs.3000/- to small farmers, Rs.4000/- to marginal farmers and Rs. 5000/- to Scheduled Caste/Scheduled Tribes beneficiaries of this category is given for boring. Average rate of subsidy per beneficiary comes out to be Rs.3800/- with an assumption that 25% of the total no. of beneficiaries are small farmers. However, the costs are likely to rise in coming period. Subsidy is also given for pumpsets by State Government.

1.1.36 Owing to the limited financial resources of the State Government it was decided to reduce the unit cost of pumpsets to Rs. 6000/- for consumption of subsidy which has been made admissible at the rate of 25% and 33 1/3 % to small and marginal farmers respectively.

1.1.37 This scheme will be continued in the year 1990-91. For the Eighth plan a target of 10 lakh shallow tubewells under special food grains production programme has been agreed upon. The amount sanctioned under SFPP is on a similar pattern as SMFP.

1.1.38 In the current year the subsidy on one lakh pumpsets would be borne under IRDP and one lakh under SMFP from state plan outlay. During the current year no funds are being given for minikits.

1.1.39 In the seventh plan (1985-90) the outlay of Rs. 22024.00 lakh was allotted. During the year 1985-89 Rs.12002.77 lakh were spent. In 1989-90 the actual expenditure was Rs. 5965.72 lakh and in the current year 1990-91, it is expected to be Rs. 5720.00 lakh including Rs. 223.00 lakh for hills.

1.1.40 In the year 1990-91 construction of two lakh shallow tubewells is proposed out of ten lakh shallow tubewells envisaged for Eighth plan period.

1.1.41 For the year 1991-92 an outlay of Rs.7423.00 lakh has been allotted out of which Rs.223.00 lakh has been proposed for hill development.

Horticulture:

1.1.35 The varying soil and agro-climatic conditions of the State present immense scope for the development of Horticulture. Horticulture crops viz., fruits, vegetables, tuber crops (Potato, Sweet Potato, Colocasia etc.) flowering, ornamental and essential oil bearing plants, spices, plants of medicinal value etc. are labour intensive, (requiring 230 to 250 mandays as against 100 mandays required for cereal crops) and provide more returns per unit area thereby utilising the natural resources more productively. These crops can be grown even on waste lands and are specially suitable for cultivation by small and marginal farmers. Apart from the above mentioned crops, processing of fruits and vegetables, bee-keeping, mushroom and piper betel cultivation are also important components of Horticulture.

Past Achievements:

1.1.36 Improvement in Horticulture farming can be brought about by providing necessary crop production technology and various inputs like quality seeds and planting materials, fertilizers, plant protection chemicals etc. to the growers. Various schemes have been launched during different plan periods to explore to the maximum possible extent, the natural resources of men and material for ensuring a better life to the people of the State. As a result of this, production of fruits, vegetables and potato, which was only 5.00, 10.00 and 0.78 lakh tonnes before 1951, has touched the level of 56.60, 108.40 and 61.78 lakh tonnes by the end of 1989-90. The plan wise achievements are shown in table 1.1.4.

Table - 1.1.4
Plan wise Achievement

Plan Period	Fruit		Vegetable		Potato	
	Area lakh ha.	Production (M.T.)	Area lakh ha.	Production (M.T.)	Area lakh ha.	Production (M.T.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. First Plan (1951-56)	1.00	5.00	1.00	10.00	0.97	6.86
2. Second Plan (1956-61)	1.50	9.00	1.50	15.00	1.13	7.99
3. Third Plan (1961-66)	2.99	17.99	2.43	27.13	1.47	13.41
4. Fourth Plan (1969-74)	3.49	21.79	3.07	36.08	1.87	17.20
5. Fifth Plan (1974-79)	5.23	28.15	4.94	55.25	3.00	45.00
6. Sixth Plan (1980-85)	5.80	33.39	7.41	89.92	3.05	52.56
7. Seventh Plan (1985-90)	6.98	56.60	8.30	108.40	3.37	61.78
8. (1990-91) (Anticipated)	7.18	58.30	8.50	112.00	3.20	65.10

Supply of Planting Material
Plants and Seeds:

1.1.37 The department is supplying fruit plants, vegetable and potato seeds to the growers on no profit no loss basis. Stress is being laid on the production of grafted plants, so that the plantation of seedlings is minimised and productivity could be increased.

The details of production of different units is shown in table no. 1.1.5 :

Table - 1.1.5
Activities of Production Unit

Name of Unit	No. of units	Remarks
(1)	(2)	(3)
A. Production Units		
1. Nurseries	151	About 75 lakh fruit plants
2. Vegetable Seed Multiplication farms	13	55000 Qtls. foundation Seed of potato, 2000 qtls. certified vegetable seed is produced every year at these units.
3. Potato Seed Multiplication farms	22	
4. Multi-purpose farm	1	Apart from this betel vine cutting is also produced.
5. Govt. Gardens	9	Various experiments are conducted for control of insect and pests, nutritional requirement and cultural practices.
6. Progency Orchards	9	
7. Experiment and Training Centre	5	
8. Betel vine experiment Centre	1	
Total	211	
9. Private Sector Nurseries	803	About 70 lakh fruit plants are being produced every year.
B. Other Units		
1. Fruit Preservation Centres.	95	About 10.89 kgs. fruit and vegetables are preserved every year at these units. Apart from this 32,872 persons in 15 days fruit preservation, 259 persons in one year food craft trade and various persons in mushroom production are being trained every year. Post Graduate Diploma Course is also being conducted.
2. Food Craft Institutes	10	
3. Fruit Preservation and Community Canning Institute.	1	
4. Bee-Keeping Centre	2	Bee-Colonies and training in bee-keeping are given to interested persons.
5. Bee-keeping Sub-centre	7	
6. Private Cold Storages	725	The total storage capacity is 32d.96 lakh tonnes.
7. Govt. Cold Storages	3	
8. Cold Storage of Co-operative Section	81	

Financial Achievement:

1.1.38 An outlay of Rs. 20.50 crores was allotted for the Seventh Plan period. Against this outlay an expenditure of Rs. 38.23 crores was made during the Seventh Plan. During 1990-91, an expenditure of Rs. 5.45 crores is estimated.

Production:

1.1.39 Target for fruit production for Eighth Plan is proposed to be 78 lakh tonnes, while the target for Seventh Plan was set at 54 lakh tonnes, which was achieved fully.

1.1.40 A target of 106 lakh tonnes of vegetables was set for Seventh Plan. Vegetable production increased to over 108 lakh tonnes, thus exceeding the target. Similarly target of 61 lakh tonnes set for Seventh Plan, has been fully achieved in production of potatoes.

1.1.41 For Eighth Plan the targets for production of vegetables and potato are proposed to be at 142.5 and 72 lakh tonnes.

1.1.42 **OBJECTIVES** : The main objectives are to fully exploit the potential of horticulture by increasing production and productivity of horticultural crops, through supply of good quality, true to type planting material, transfer of technology through demonstrations and training, plant protection measures and introduction of quality planting material.

1.1.43 **STRATEGY** : At present the productivity of fruits, vegetables and potato is 8.10, 13.06 and 18.32 tonnes per hectare. During eighth plan it is proposed to increase the productivity of fruits, vegetables and potatoes to 10.0, 15.0 and 23.5 tonnes per hectare.

1.1.44 Expansion of area under fruit trees of outstanding merits, high yielding variety of vegetables, spices, betel vine, flowers and ornamental gardening.

1.1.45 Educating the farmers, through training camps and demonstrations to adopt improved techniques of cultivation.

1.1.46 **PHYSICAL TARGET FOR EIGHTH PLAN** : The targets fixed for eighth plan are as under :

Table : 1.1.5
Eighth Five Year Plan - Targets

Item	Unit	Targets					
		89-90 level	90-91	91-92	92-93	93-94	94-95
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Fruit							
(a)Area	Lakh ha.	6.98	7.18	7.35	7.50	7.65	7.80
(b)Production	Lakh tonnes	56.60	58.30	62.47	67.50	72.67	78.00
(c)Productivity	Tonne per ha.	8.10	8.12	8.50	9.00	9.50	10.00
2. Vegetable							
(a)Area	Lakh ha.	8.30	8.50	8.75	9.08	9.25	9.50
(b)Production	Lakh tonnes	108.40	112.00	118.00	126.00	134.00	142.50
(c)Productivity	Tonne per ha.	13.06	13.17	13.50	14.00	14.50	15.00

Table : 1.1.5(Concl'd.)

Item	Unit	Targets					
		89-90 level	90-91	91-92	92-93	93-94	94-95
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
3. <u>Potato</u>							
(a) Area	Lakh	3.37	3.20	3.20	3.20	3.20	3.20
	ha.						
(b) Production	Lakh tonnes	61.78	65.10	66.65	68.20	70.40	72.00
(c) Productivity	Tonne per ha.	18.32	20.34	20.83	21.31	22.00	22.50

1.1.17 SCHEMES PROPOSED: During 1989-90, which was the last year of Seventh Plan, it was decided that all the on going 15 schemes should be reviewed and clubbed on the basis of their nature and programmes. It was done and 8 schemes under new names were proposed for 1990-91. For the rest four years of eighth plan it is decided that horticultural schemes should be classified as follows :

1. Scheme for fruit development
2. Scheme for vegetable & spices development
3. Scheme for potato development
4. scheme for development of ornamental gardening, flowers and scented plants.
5. Scheme for Food Processing.
6. Scheme for Betel-vine development.
7. Scheme for Bee-keeping.
8. Special component Plan.
9. Reorganization of horticulture development.

1.1.18 The schemewise details of the development of fruit vegetable and spices are described in the following paragraphs :

1.1.19 production of following fruits are being done on a commercial basis in the state.

- | | | | |
|-----------------|----------|----------|------------------|
| 1. Mango | 2. Guava | 3. Aonla | 4. Kela (Banana) |
| 5. Citrus fruit | 6. Grape | 7. Ber | 8. Papaya |

1.1.20. For increasing the fruit production in the State, different programmes were implemented. The resultant progress is as under :

Table : 1.1.6
Target and achievement of fruit development

I t e m	Achievement		Anticipated	Target
	1988-89	1989-90	achievement 1990-91	1991-92
(1)	(2)	(3)	(4)	(5)
Area (lakh ha.)	6.75	6.98	7.18	7.35
Production (lakh tonnes)	52.61	56.60	58.30	62.47
Productivity	7.79	8.10	8.12	8.50

1.1.51 For increasing fruit production in the State following important programmes are being implemented.

1.1.52 Coordinated development of special fruits in fruit belts and Selected areas: The following districts are famous for special fruits noted against each therefore, intensive development of these fruits in the respective area is to be undertaken to maintain their qualities. The above programme has been taken up since 1987-88.

	Name of District	Name of Special Furits
1.	Varansasi	Mango Langra
2.	Lucknow	Mango Dashehari, Safeda & Chausa
3.	Allahabad	Guava
4.	Pratapgarh	Aonla
5.	Aligarh	Ber
6.	Basti/Gorakhpur	Banana
7.	Saharanpur/ Bulandshar	Mango-Phajli, Dashahari and Langra

1.1.53 The following facilities are being provided to the orchardists :

1. To declare special fruit belts in the above district.
2. To provide loan to Small and Marginal orchardist for establishment of orchards from Land Development Bank on less interest.
3. To provide 50% subsidy on plant protection chemicals and sprayers.
4. To provide planting material of improved varieties.
5. Training and demonstration.

1.1.54 Under the above programme, during the year 1989-90, an area of about 2668 ha. was brought under new orchards and 5.49 lakh fruit plants were supplied. Plant protection work has been carried out in an area of about 2879 hect. and rejuvenation of old orchards was also done in an area of about 1558 hectare. Besides, the training on new modern technique has also been given to 1350 farmers.

1.1.55 So far mango and guava are concerned fruit belts have been declared in five districts namely Lucknow, Bulandshahar, Pratapgarh, Saharanpur and Allahabad and efforts are being made to establish new fruit belts in Faizabad, Varansasi, Farrukhabad and Meerut districts.

1.1.56 Establishment of nurseries in private sector at Block level : This programme has been started with a view to provide planting materials, locally to the farmers of that area, though there are 151 Government nurseries and 803 private nurseries are established but there are inadequate or no block level nurseries. This programme is being carried out since 1987-88 to cope with the demand. Nurseries are located in the following 23 districts :

Gorakhpur, Azamgarh, Allahabad, Pratapgarh, Etawah, Ghaziabad, Muzaffarnagar, Mainpuri, Aligarh, Moradabad, Bijnore, Pilibhit, Shahjahanpur, Bahraich, Mirzapur, Ghazipur, Unnao, Raebarely, Jhansi, Jalaun, Banda, Jamirpur and Lalitpur.

1.1.57 It is proposed to give one month training together with honorarium of Rs.1000/- to the selected nurseryman at Saharanpur, Basti and Lucknow.

1.1.58 To provide plant protection equipments, pesticides and planting material on 55% subsidy.

1.1.59 This programme was started in 1987-88 and since then 92 block level nurseries, each having an area of one hect. has been established in private Sector under technical supervision of the Horticulture Department and 50 mother plants of mango, guava, citrus and Aonla have been supplied to each of them in special fruit areas. The above programmes is being continued in the year 1990-91.

1.1.60 Development of Citrus Cultivation in Bundelkhand Region: As is well known, the climate of Bundelkhand region is suitable for cultivation of citrus fruits i.e Santra, Kinno, Kagzi Lime, Malta, Moosambi etc. In view of the above fact the programme for development of citrus fruit cultivation has been launched in the year 1987-88 in all the five districts of that Region.

Facilities

1. To provide planting material and pesticides on 50% subsidy.
2. To provide 50% subsidy for the purchase of pumping sets in Lalitpur district and in other district of the region from other departments.
3. To provide technical advice to the cultivators on fields.

1.1.61 To provide technical advice to the cultivators on fields. So far 140 lacs citrus plants have been supplied covering an area of about 627.32 hect. to new orchards during 1989-90 582 farmers were benefitted by providing a subsidy of Rs.2.551 lakh. The above programme is being continued in the year 1990-91.

1.1.62 Establishment of Experiment & Training Centres at Lucknow, Allahabad and Jhansi : The climate of these cities is suitable not only for different horticultural crops but also suited to qualitative production of Mango, Guava and Citrus fruit respectively. To maintain quality of these fruits this programme is being carried out since 1987-88. The study and survey work on proper doses of fertilizer on plants and its quantity, method of its use and time, quantity of chemicals and its use and to control the pests and diseases are being made at these centres. Cultivating and training in modern techniques of horticultural activities, selection of varieties, plant protection measures and also to increase per unit production. Besides it the Departmental Officers/officials are also being given in-service training in these centres.

1.1.63 Besides the above, the following programme will also be included in the State Plan during 1991-92.

1.1.64 Establishment of Plant receipt and Multiplication (PRAM) and Varietal improvement Source area (VISA) Centres : With a view to produce the mother plants of exported and selected clones, 5 PRAM and 22 VISA centres will be established during the Eighth Plan period. During the year 1991-92, 5 PRAM and 11 VISA centres have been proposed to be established. In these centres the collection, selection and multiplication experiment work will be conducted and selected clones will be carried out and the clones found best by experiments will be supplied to the Gardens/Nurseries for further multiplication and propagation. Afterwards these plants will be distributed to the cultivators.

1.1.65 Establishment of Model Orchards/Nurseries: Provision has been made to modernized 22 nurseries (2 each in a Region) out of 151 so that in these nurseries training programme may be carried out areas.

1.1.66 Establishment of new Nurseries: There is a programme to bring an area of about 82,000 hectares under new orchards and also to rejuvenate old orchards having an area of about 32,000 hect. In order to provide planting material to the cultivators locally, there is also a programme to establish 100 block level nurseries in 8th plan period.

1.1.67 Demonstration, Training and publicity Extension Programmes: There is a programme to provide latest know-how to the growers of fruit belt and compact fruit growing areas through demonstration and training. Two demonstrations will be conducted in each district every year, on the grower's fields. The inputs like plants, fertilizers and plant protection chemicals along with technical know-how will be given to the growers free of cost.

1.1.68 Scheme for development of Vegetables and Spices : Vegetables are being grown in all the three seasons i.e., Rabi Zaid and Kharif in the State on commercial scale. Tomato, cauliflower, cabbage, methi, spinach, pea and Brinjal etc. during Rabi season, ladyfinger, lobia, cucurbits and Parwal etc. during Zaid season and Ladyfinger, bitter gourd, colocasia, spinach, parwal, Brinjal, and cucurbits etc. are being mainly grown in Kharif season.

1.1.69 The department is making available improved vegetable seeds to the growers along with technical literature, training, vegetable seed minikits, vegetable seedlings, vegetable demonstrations and technical know-how, through various schemes running presently. As a result of this progress made in vegetable development is mentioned below :

Item	1988-89 Achievements	1989-90 Achievements	1990-91 Anticipated achievement	1991-92 Targets
(1)	(2)	(3)	(4)	(5)
Area (lakh ha.)	8.24	8.30	8.50	8.75
Production (lakh tonnes)	105.24	108.40	112.00	118.00
Productivity (tonnes/ha.)	12.77	13.06	13.17	13.50

1.1.70 The following programmes are being implemented for the vegetable development.

1.1.71 Vegetable & Spices Quality Seed Production: Keeping in view the importance of Seed in vegetable production, the department is making efforts to increase the present seed replacement rate i.e. 0.6% to 2%.

1. During training period (7 days), the growers are being provided stipend at the rate of Rs.25/- per day. Apart from this upto Rs.100/- actual travel expenses are also given.
2. Free technical literature.
3. Demonstrations of new varieties.

1.1.72 During 1989-90 about 3337. qtls. vegetable seed was distributed among the growers, which was produced in 13 departmental vegetable seed production farms. During 1990-91 a target of 4100 qtls. vegetable seed distribution is fixed which is in progress.

1.1.73 Establishment of Vegetable and Spices Experiment and Training Centre: It is proposed to establish a vegetable experiment centre at Mahmoodabad (Sitapur) and a spices experiment centre at Sargatia (Deoria).

1.1.74 Vegetable and Spices Demonstration : Under this programme 5000 demonstrations will be done every year in the State Among these 500 demonstration of hybrid vegetables (Capsicum, tomato, cabbage, Brinjal and ladyfinger) 2500 demonstrations of improved varieties (pea, Tomato, cauliflower, cabbage, Brinjal and ladyfinger) and 2000 demonstration of spices corriender Methi, Saunf, chlies and onion) will be conducted. Each demonstration will be done on the field of Small and Marginal growers on 0.05 ha. (500 sq. meter) area. The required seed, fertilizers and insecticides will be provided free of cost to the growers.

1.1.75 Development of Vegetable Cultivation around big cities: It is proposed to develop vegetable cultivation near big cities by providing hybrid/improved seeds, fertilizers, plant protection chemicals on subsidized rates to small and marginal farmers along with necessary technical guidance.

1.1.76 Distribution of Vegetable Seedlings : It is proposed to distribute free of cost vegetable seedlings among the growers in rural areas.

1.1.77 Free of cost technical literature and guidance : During eighth plan it is proposed to provide free technical guidance and literature to the vegetable growers of the State.

1.1.78 It is proposed to establish seed Village, along with intensive vegetable cultivation programme in the Village of each block headquarters and each block of district headquarter.

1.1.79 Scheme for Potato Development: At presentn about 45% of the total potato production of the country is produced in U.P. The progress in this regard is mentioned in Table'1.1.8 :

Table : 1.1.8

<u>Progress of Potato Production</u>				
Item	1988-89 Achieve- ments	1989-90 Achieve- ments	1990-91 Targets	1991-92 Targets
(1)	(2)	(3)	(4)	(5)
Area (lakh ha.)	3.33	3.37	3.20	3.20
Production (lakh tonnes)	61.22	61.78	65.10	66.65
Productivity (tonnes/ha.)	18.40	18.30	20.34	20.83

1.1.80 During Eighth Plan, it is proposed to increase the production by increasing productivity per unit area rather than increasing the area under potato cultivation. At present following programmes are being implemented.

1.1.81 Scheme for quality potato Seed production : To meet the requirement of improved seed, potato seed production programme is being implemented in the Government Farms of Agriculture Department. Farmers of major potato producing districts - Farrukhabad, Mainpuri, Etawah, Meerut, Jaunpur etc. are being trained in Seed Plant technique for certified seed production.

Facilities

1. Supply of foundation potato Seed
2. Training and technical literature
3. Storage
4. Help in marketing

1.1.82 During 1989-90 about 70561 qtl. certified and foundation potato seed was produced in 22 departmental potato seed production farms, Agriculture farms and in the field of growers of Tarai Development Corporation. This seed was distributed among the needy growers. During 1988-89 about 70,261 qtls. potato seed was distributed among the growers. At present 809 cold storages with a capacity of 32.96 lakh tonnes are working to facilitate the potato growers. For the benefit of potato growers Cold Storage Act, 1976 has been enacted by the State Government. During 1990-91, these programmes are on progress. During 1991-92, following new programmes are also proposed.

1.1.83 Seeds : About 12 lakh tonnes potato seed is needed for sowing in the State, against this only 5000 tonnes seed is available, which is only 0.4% of the total demand. To increase the Seed replacement to 4% by the end of 1992, a programme has been made and will be implemented effectively.

1.1.84 Demonstration : To motivate the farmers for adopting modern cultural practices and using recommended dose of seed, fertilizers and plant protection operations in potato cultivation, it is proposed to perform 2000 demonstrations at small and marginal fields during Eighth plan. The demonstrations will be conducted on 0.05 ha. (500 sq. meter) area, and potato seed, fertilizers and plant protection chemicals will also be provided free of cost as per requirement.

1.1.85 Establishment of Experiment and training centre : For solving the various problems related to potato cultivation, two experiment and training centres for western and eastern region each at Babugarh (Ghaziabad) and Belhara (Barabanki) are proposed to be established during 1991-92. It is also proposed to provide plant protection chemicals and equipment to the growers on 50% subsidized cost. Growers will also be provided free of cost technical literature and training for the development of potato cultivation. It is proposed to establish 2 potato farms during every year of Eighth Plan period.

1.1.86 Scheme for development of ornamental gardening and flower production : To meet the demand of flowers and ornamental plants a programme for production of flowers seeds, gladiolis, tuberoses and lillies bulbs along with the land scaping and conservation of plants, is being taken up at Government Garden, Lucknow. For development of gladioli and other cut flowers a programme in big cities like Lucknow, Kanpur, Ghaziabad, Agra, Varansasi and Farrukhabad is being implemented. Under this programmes gladiolus bulbs are provided to the farmers on subsidized rates. Apart from this to develop the cultivation of rose and other flowers, a separate programme is being taken up in Aligarh, Mainpuri, Ghazipur, Mirzapur, Moradabad and Faizabad.

1.1.87 Scheme for betal vine development : For development of betal vine a separate experiment and training centre is running at Mahoba (Hamirpur). This centre has performed 21 trials related to betal vine cultivation, trained 900 growers, surveyed in the fields of 1150 betal vine growers and guided 1600 cultivators during 1989-90. Apart from this centre has distributed 36,000 cuttings of betal vine and planted 1,05,000 cuttings thus adding on area of 10 hectares to existing betal cultivation. Plant protection operations were also taken up in 550 hectares .

1.1.88 Apart from all the above programmes it is proposed to strengthen the experiment centre at Mahoba and establish two sub-centres at Sandila (Hardoi) and Sultanpur respectively. These centres will perform collection, selection, multiplication and distribution of betel vine varieties suitable to their areas along with solving other problems related to betel vine cultivation.

1.1.89 Scheme for development of Food Processing : To minimise the losses occurring between harvesting and marketing, cultivators are being trained in harvesting and packaging methods. To use low grade fruits and vegetables, 95 fruit preservation centres are running in the plains of U.P. These centres have trained 32,940 persons in preservation, while about 8.748 lakh kgs. of fruits/vegetables was preserved during 89-90. Apart from this to create the job avenues in various trades of food processing like cookery, bakery etc. 10 Food Science training centres are also working. These programmes are in progress and are proposed to be continued during 1991-92 along with following new programmes.

1.1.90 Expansion and Strengthening of Fruit preservation and Community Canning Institute, Lucknow : For running experiment and training programmes effectively, it is proposed to upgrade various sections of the institutes to post-graduate level. Similarly 11 new sections like Meat, Egg, Fish, Pulses, Rice, Wheat and Millets, which are the source of proteins and other minerals, are also proposed to be established during 1991-92

1.1.91 Mushroom, experiment and training : It is proposed to train the mushroom growers in making compost and spawn. During Eighth plan 500 persons will be trained and 25,000 spawn bottles will be prepared.

1.1.92 Upgradation of Food Science training Centre : It is proposed to conduct two year Diploma Course in place of present one year course during Eight plan. Apart from this, it is also proposed to open a new section to teach dehydration of fruits and vegetables in each food Science Centre for the facility of public.

1.1.93 Establishment and Strengthening of fruit preservation Centres : During Eight plan, it is proposed to modernise present centres by providing them suitable buildings, apparatus and machinery. Some new centres will also be established in new districts and other potential areas. Apart from this establishment of Food Processing mobile team is also proposed.

1.1.94 Establishment of horticulture based processing industries : To establish and promote horticulture produce based industries in private sector, it is proposed to establish food processing advisory service cells in Lucknow, Agra, Meerut, Allahabad, Moradabad and Faizabad during Eight plan. Out of these, three cells will be started from 1991-92.

1.1.95 Scheme for Bee-keeping : It is a useful and subsidiary agricultural cottage industry. The yield of fruit and vegetables is also increased by 10 to 40% through bees, as they help in cross-pollination. There are two centres and 7

sub-centres working in the plains of U.P. to promote this programme. During 1989-90, 1126 persons were trained and 169 kgs. of honey was produced.

1.1.96 Italian variety of bees *Apis mellifera* has also been introduced, as it is more productive and resistant to diseases. All the on going programme along with the following new programmes, are proposed to be undertaken from 1991-92.

1. Establishment of Experiment and training centre.
2. Establishment of 9 new training centres, 44 sub-centres and strengthening of present centres.

1.1.97 Scheme for reorganisation of Horticulture and Food Processing Department : At present horticultural technical staff is posted in only 126 developmental block out of about 806 blocks of the plains of U.P. Therefore, it is proposed to appoint one Group-II technical staff in 500 blocks during Eight plan.

1.1.98 Scheme of Special Component plan : At present this scheme is operated in 22 districts of the State. Scheduled Caste and Scheduled tribe farmers are being benefitted by providing planting material i.e. plants and seeds, fertilizers and pesticides on subsidized rates. During eighth plan it is proposed to cover other districts/blocks also under this scheme.

1.1.99 Training Demonstration and publicity : For effective implementation of horticultural scheme, free demonstration programmes in each development block for fruit, vegetable and potato will be under taken on farmers field. Likewise massive training programmes for distribution of free literature and organisation of seminars, film shows and fairs are also proposed to educate the farmers in various fields of horticulture development.

1.1.100 Formation of horticulture Cooperative Societies : To help the growers in getting good returns for their produce horticultural cooperative societies will be formed in major fruit/vegetable producing areas. These societies will also provide collection, packing and transportation facilities to the growers and will get 50% assistance from National Horticulture Board, and 25% from State Government as share money.

1.1.101 Horticultural Training : There is a programme to train the farmers/educated unemployed/in-service staff in various trades of horticulture. Therefore, it is proposed to establish a State Horticultural Training Institute at Lucknow. Apart from this, it is also proposed, to start one year Gardener training course at experiment and training centre Basti, Saharanpur, Allahabad (Lucknow) and Jhansi. Beside this, tissue-culture laboratory at each experiment and training centre for multiplication of planting material will also be established during Eighth plan period.

1.1.102 Coordination with Agricultural Universities : Breeder/hybrid planting material plays an important role in increasing production and productivity of horticultural crops. There is a great demand of good quality planting material in

State. Therefore, it is proposed to help the agricultural universities in producing hybrid/breeder planting material by providing them necessary facilities.

1.1.103 Export of Horticultural Produce : Horticultural crops like-Mango, Parwal, Ladyfinger, Brinjal, garlic, onion and cucumber are being grown extensively in the plains of U.P. There is a wide scope for exporting these horticultural produce to middle east and Gulf countries. Therefore, it is proposed to export these produce outside the country by providing necessary assistance and technical guidance to the growers through cooperative societies during Eighth plan. This will help in increasing the qualitative horticultural production in the State and in earning much needed foreign exchange.

1.1.104 Apart from this, it is also proposed to export scent/essence oil of Indian rose, Jasmine (Bela, Juhí and Chameli) and mentha.

HORTICULTURE HILL

1.1.105 The hill region has been bestowed by nature with wide range of climatic and geographical conditions suitable for growing most of the fruits, vegetables, potato and other horticultural crops. To explore these potentialities and making best use of facilities, for improving the economic conditions of the hill people, various schemes of horticulture development were launched during past five years. Cultivation of horticultural crops has been found more beneficial in comparison to other crops. Apart from this, horticultural crops are also helpful in maintaining the ecological balance besides providing essential ingredients of human diet.

1.1.106 As a result of successful implementation of various horticultural schemes, there has been remarkable increase in area and production under fruit which was estimated to be about 1.66 lakh hectares and production about 3.97 lakh metric tons by the end of 1989-90. Similarly area under vegetable and potato is estimated about 0.489 lakh and 0.156 lakh hectares, respectively and production of vegetables and potato is estimated to be 2.38 and 3.03 lakh metric tons by the end of Eighth plan. Presently the productivity of fruits, vegetables and potato is 3.41, 4.50 and 19.44 metric tons per hectare (Productivity of apple is 4.50 M.T. per hectare). During the Eighth plan period, it is proposed to develop 50,000 hectares under fruits, 21000 hectares under vegetables and 5,000 hectares under potato and to increase the productivity of fruits, vegetables and potato to 5.4, 6.5 and 20.50 M.T. per hectare, respectively by transfer of advanced technology through extension, training and demonstrations, timely supply of horticultural inputs and encouraging growers for their scientific application, import, production and distribution of planting material of high yielding varieties of different horticultural crops, area based development of specific fruits and vegetables according to block of excellence.

1.1.107 With the objective of exploring area specific potentialities and to fulfil local needs, schemes of timely supply of horticultural inputs, encouragement of growers for adoption of latest production technology for accelerated development, intensive training, demonstrations, specific fruit and vegetable production in selected blocks, production of

offseason vegetables, flowers, mushroom, bee-keeping, encouraging growers for establishment of nurseries, construction of cold storages for storing of horticultural crops, development of processing and marketing facilities to ensure reasonable prices to the growers and encouraging schedule caste/tribal people for production of horticultural crops etc. have been included under district sector schemes during eighth plan.

1.1.108 In order to ensure fulfilment of various programmes proposed under district sector and to expand horticulture development, various schemes have been included under State sector viz., scheme for strengthening infrastructural facilities for production of planting material of imported varieties of fruits, vegetable seeds, potato, flowers, expansion of fruit preservation services, transfer of technology from lab to land, development of departmental units as PRAM, VISA, Model Orchards, Government Nurseries under Integrated Horticultural Development Project with the World Bank Assistance, establishment of bee-keeping centres, mushroom seed (spawn) production centre, establishment of polygreen houses, drip irrigation and mist chambers at experimental stations, research on apple, peach with the assistance of I.C.A.R., strengthening of horticulture training and experiment station, Chaubattia, establishment of medicinal plant research and production facility at Chaubattia (Almora) with the assistance of Medicinal Plant Research Station, Lucknow, and building works. A brief description of the schemes proposed for plan is given below:

1.1.109 Subsidy on transportation of fruit plants, vegetable seeds, seedlings and potato seed, control of pest and diseases including white grubs, distribution of horticultural implements and long term horticultural loans: Under this scheme 100% subsidy is being provided for the transportation of fruit plants, vegetable seeds, seedlings, potato seed, while 50% subsidy is being given to the growers on the cost of various pesticides and fungicides, horticultural tools, gladioli, ginger and turmeric seed. 75% subsidy is being given for the control of white grubs. For creating irrigation facilities 50% subsidy for construction of water tanks and drip irrigation and subsidy on A.R.C. loan and also on interest accrued on loan distributed by U.P. State Cooperative Agricultural and Rural Development Bank.

1.1.110 Encouragement of intensive fruit and vegetable crops in tribal blocks: In order to encourage tribal people for fruit and vegetable production, free of cost vegetable demonstrations on growers fields are being conducted in 12 tribal blocks of six hill districts. During eighth plan this will be intensified and fruit production will also be popularised. The distribution details of tribal blocks are given below:

1.	Nainital	Khatima, Sitarganj, Bajpur
2.	Pithoragarh	Munsiyari, Dharchula
3.	Dehradun	Chakrata, Kalsi
4.	Uttarkashi	Naogaon, Purola, Mori
5.	Tehri	Jaunpur
6.	Chamoli	Joshimath

1.1.111 Scheme of horticulture development for production of quality planting material: Under this programme strengthening of various farms/orchards and nurseries is proposed to be done by providing them required facilities like fencing, tractor,

irrigational facilities etc. with a view to produce healthy and disease free planting material. Apart from this development of mango and 'litchi' belt is also included in this scheme.

1.1.112 Horticulture training to fruit growers and in-service personnel: In order to familiarise growers with latest techniques of production, three days, one month and one year 'Mali' training is being given to the growers on stipend basis. In service training to supervisory staff is also imparted.

1.1.113 Encouragement for establishment of nurseries in private sector: To make available planting material locally, the orchardists are encouraged to establish their own nurseries by providing mother plants as well as horticultural tools on 50% subsidy and training on nursery practices will also be imparted.

1.1.114 Scheme for mushroom production and training: Scheme for development of mushroom cultivation with Dutch assistance is being implemented at Jeolikote (Nainital) where pasteurized compost and spawn will be prepared for distribution to the growers. A separate compost pasteurization plant will also be established at Dehradun. Growers are also trained in techniques of mushroom production. Mushroom growers societies will be formed for marketing of mushrooms.

1.1.115 Integrated Horticulture Development with the help of World Bank: To improve the productivity of horticultural crops by introducing new genetic planting material (varieties of excellence to be imported from abroad) improved orcharding and land management techniques, programmes have been included to provide following facilities with the World Bank Assistance:

- (i) Establishment of Varietal Improvement and Source Area Stations (VISA);
- (ii) Development of Model Orchards (M.O).
- (iii) Development of /government Nurseries (G.N);
- (iv) Establishment of Vegetable Seed, Potato Breeder Seed and Flowers planting material multiplication centres;
- (v) Construction of Rope-ways (gravity & motorised)
- (vi) Establishment of 20 forwarding centres;
- (vii) Creation of additional marketing facilities at Haldwani Mandi;
- (viii) Construction of link roads;

1.1.116 VISA stations would be responsible for field multiplication of plants. It will be the most important source of improved planting material for both private and public sector nurseries. Model orchards will be developed as demonstration and technology training centre. Government nurseries are proposed to be improved for multiplication of planting material of selected varieties. It is proposed to construct gravity and motorised rop-ways for transporting horticultural produce from remote areas and forwarding centres in intensive horticulture areas. Two vegetable seed multiplication centres are proposed to be strengthened for making available quality and exotic type of seeds to the growers. To develop flower industry in U.P. hills, it is proposed to develop 5 Govt. farms as planting material multiplication centres. For market development, facilities at Haldwani Mandi i.e., (a) construction of a cold storage, (b) establishment of a temperature controlled (air-conditioned)

auction shed and (c) construction of a guest house for the growers, have been proposed. In order to make available smooth transportation from orchard areas to main roads, it is proposed to construct 100 Kms of new link roads in orchard areas of eight hill districts.

1.1.117 For successful implementation of aforesaid programmes, the following centres have been selected for the year 1990-91.

TABLE 1.19
Selected Centres

District	VISA Station	M.O. (Model Orch)	G.N. (Govt. Nursery)
(1)	(2)	(3)	(4)
Almora	Dunagiri	Dole	Bageshwar
Nainital	Satbunga Rudrapur	Ramgarh	Ramnagar
Pithoragarh	Gaina	Bhatka	Ancholi
Pauri	Khirsu	Chamali Khandusain	Khumbhichaur
Chamoli	Gwaldam Kothiyalsain	Gairasain	-
Uttarkashi	Jarmola	Dharoli	-
Dehradun	Dhakrani Barotha	Chausal	-

1.1.118 Vegetable Seed Multiplication centres: Matela (District Almora) and Dhakrani (Dehradun) have been proposed.

1.1.119 Potato breeder seed multiplication centre at Gagar (Nainital) has been proposed.

1.1.120 For flowers planting material multiplication centres- Supi, jeolikote and Kaladhungi in district Nainital and Logi garden, Musoorie and Circuit House (Dehradun) and the following link roads are proposed :-

District		
Almora-	Chaubattia-Kunelakhet-	4 Kms
Nainital-	Pramsi-Tipulia	- 2 Kms
Pithoragarh-	Khetikhan- Topnival	- 6 Kms
Pauri	Khirsu- Rabikhal	- 3 Kms
Tehri	Nagtibba- Pantbari	- 15 Kms
Chamoli	Barasu- Siyari	- 10 Kms
Uttarkashi	Purola- Dharoli	- 10 Kms
Dehradun	Bosan- Kalsi	- 2 Kms

1.1.121 Horticulture development under special component plan: In order to encourage scheduled caste/tribe people for taking up fruit orchard establishment and potato cultivation, it is proposed to make available planting material and potato seed on 50% subsidy. Technical guidance will be given by departmental extension staff.

1.1.122 Development and expansion of improved/suitable varieties of different fruits in selected blocks: In order to get higher yields by planting improved varieties of various fruits in the areas which are climatically most suitable for their production, it is proposed to encourage growers by making available planting material and fertilizers on 50 per cent subsidy. The orchards will be laid out under the supervision of technical staff and digging of pits will also be 50% subsidised. The district-wise details of selected fruits/blocks for the year

1990-91 are given below:

<u>Name of fruits</u>	<u>Name of selected block/Distt.</u>
Apple	Lamgarha (Almora) Ramgarh (Nainital) Naogaon (Uttarkashi)
Pear	Dwarahat (Almora) Purola (Uttarkashi)
Almond	Garur (Almora) Dunda (Uttarkashi)
Citrus	Didihat (Pithoragarh) Dasholi (Chamoli) Dunda (Uttarkashi) Kotabagh (Nainital)
Mango/Litchi	Ramnagar (Nainital) Yamkeshwar (Pauri) Duggadda (Pauri)

1.1.123 Encouragement of growers for the production of off-season vegetables: Keeping in view the potentiality for growing of off-season vegetables in the hill region, it is proposed to encourage growers for taking up their cultivation by conducting 3000 demonstrations on 0.02 hectare each (2000 demonstrations of hybrid vegetable seeds and 1000 demonstrations of normal seed) in 60 selected vegetable production areas in 1990-91. This programme will be expanded during remaining years of the eighth plan.

1.1.124 Reorganisation of extension and training services: Introduction of reorganised system of extension for transfer of technology to the orchardists and farmers is the primary need to improve the productivity quality and productions which will also improve the economic conditions of local farmers and generate employment. Staff will be technically upgraded through regular training and they will visit orchardists and vegetable potato growers at regular intervals.

1.1.125 Subsidy on interest on loan distributed by U.P. State Cooperative Agriculture & Rural Development Bank: Before 1988-89 long term horticultural loan for establishing orchards was distributed by the department. From 1988-89, this loan is being distributed by U.P. State Cooperative Agricultural and Rural Development Bank. The interest rate of this is higher than the rate at which it was distributed by the department. In order to

provide loan on cheaper rate of interest to growers, it is proposed to subsidise the difference of higher rate of interest charged by the Bank.

1.1.126 Strengthening of horticultural experiments and advisory services in U.P. hills :The productivity of horticultural crops can be accelerated and increased by adoption of latest production specific technology as there is still a wide gap between the potential and actual production. The growers will be encouraged for adopting proper crop rotations, increasing crop intensity by shifting uneconomic agricultural crop production to horticultural crops of commercial importance thereby increasing income by putting land under best use. To carry out this programme, it is proposed to strengthen the horticultural extension and advisory services during eighth plan.

1.1.127 Marketing of horticultural produce through growers cooperative societies: To provide short term training in fruit preservation technique and community canning facilities to the public of three border districts of Pithoragarh, Chamoli and Uttarkashi, 3 Fruit Preservation and Community Canning Centres were established at district headquarters during Third Five Year Plan. these centres have become very popular and provide useful services to the public. In order to make available efficient services to the masses, it is proposed to strengthen these centres during 1990-91. Apart from this, two fruit preservation mobile units one each for Kumaon and Garhwal Division are also provided for making available the services in compact orchard areas.

1.1.128 Strengthening of fruit preservation centres of border districts : In order to ensure reasonable prices to the growers, it is proposed to form growers co-operative societies in compact horticultural areas. This programme will be implemented in co-operation with co-operative department.

1.1.129 Construction of cold storages and building works in departmental units: In order to provide storage facilities to growers for their produce, 4 cold storages are being constructed one each in Almora, Nainital, Pithoragarh and Uttarkashi. In addition, provision of residential/non-residential buildings in departmental units has been made in the Eighth Plan.

State sector schemes

1.1.130 Scheme for Horticultural Experiments and Training:: Strengthening and reorganization of various Experiment & Training Centres and sub-centres has been proposed for providing effective experimental support to horticultural programmes and to impart training through these centres to farmers and departmental staff. Apart from this, programme of multiplication of improved varieties at Gaina (Pithoragarh) has also been included.

1.1.131 Integrated horticulture development with the assistance of World Bank: Under this scheme, it is proposed to establish PRAN (Plant receive and multiplication station) at Horticultural Experiment and Training Centre, Chaubattia, having a laboratory, tissue culture facility, green house, shade house, cold store and pasteurized potting media preparation facilities and this station will assess the suitability and adaptability of plant material of any form received from any source throughout the world.

Besides this, this station will also have plant nutritional laboratory, post-harvest technology development and plant protection laboratory.

1.1.132 Strengthening of bee-keeping centres: In order to encourage the orchardists for keeping be-hives in their orchards for getting higher yields. It is proposed to strengthen present bee-keeping centres located at Jeolikote (Nainital) and Talwari (Chamoli). The orchardists will be trained in different aspects of bee-keeping at these centres.

1.1.133 Establishment of spawn production unit at Jeolikote (District Nainital): In order to meet the demand of Mushroom seed (spawn) of the growers, it is proposed to establish a spawn production unit at Jeolikote (Nainital) during the year 1990-91.

1.1.134 Establishment of poly green houses, drip irrigation, and mist-chamber at various experimental stations: In order to modernise the existing facilities, at various experimental stations, it is proposed to establish poly green houses, drip irrigation and mist chamber (poly green houses at chaubattia, Matela, Jeolikote, Srinagar, Kothialsain and Kotdwar, drip irrigation at Chaubattia, Gaina, Kohialsain and Dunada, mist chamber at Matela and Dhakrani)

1.1.135 Coordinated Research on apple, peach with the assistance of I.C.A.R. Under this scheme along with long term trials on various aspects of apple and peach production are being conducted at Horticultural Experiments and Training Centre, Chaubattia. It is proposed to continue these trials during the year 1990-91, also.

1.1.136 Establishment of Medicinal Plant Production and Research faculty at Chaubattia with the assistance of Institute of Medicinal Plants Research, Lucknow: In order to explore the potentialities for growing medicinal plants in the hill region and to encourage the growers for taking up their cultivation it is proposed to establish a Medicinal Plant Production and Research Faculty at Chaubattia with the assistance of Institute of Medicinal Plants Research, Lucknow, for conducting trials on various aspects of their cultivation.

1.2 Soil and Water Conservation Programme

Soil and water conservation aims at using the land as per its capability and treating as per its need for maximum production on sustained yield basis without deterioration. It involves proper management of soil-water plant relationship. The soil conservation works include the works of :-

- (i) repairing the damage already caused
- (ii) protection against further deterioration
- (iii) proper management for maximum production on sustained yield basis.

1.2.3 On the basis of data available it is estimated that out of 297.59 lakh ha. total reported area approximately 67.35 lakh hectares of agricultural land and 52.67 lakh ha of non-agricultural land i.e. 120.02 lakh ha requires intensive soil and water conservation measures for obtaining maximum yield on sustained basis. In addition to that an area to the extent of 36.74 lakh ha of cultivated land suffers from ravages of soil

erosion. Nearly 12.30 lakh hectares area suffers from gullies and ravines. Nearly 12.38 lakh ha area is under saline and alkali conditions and 18.7 lakh ha is under water logging and floods which vary from year to year depending upon the extent of the problem.

1.2.3 While going through the documents of various schemes of soil and water conservation, it is felt that agricultural production programme should be an integral part of the soil conservation programmes where in the extension agencies would be involved in agricultural production programme for which both physical and financial targets be fixed so that the agency executing soil conservation programme may also undertake agricultural production activities.

1.2.4 The progress made upto the Seventh Five Year Plan and the remaining are to be treated in different problem categories is as below :-

Table 1.2.1
Progress and Programme of Soil Conservation

(Area in ha.)

Category of problem Area	Extent of problem	Area treated upto Sixth Plan	Area treating during Seventh Plan		Total balance area of the beginning of Eighth Plan
			Actual upto March 1989	Antd. for 1989-1990	
(1)	(2)	(3)	(4)	(5)	(6)
1. Area affected with moderate to mild erosion	36.74	27.45	4.69	0.90	3.33
2. Gullies and Ravines	12.30	0.27	0.31	0.17	11.54
3. Saline and Alkali	12.38	1.06	0.27	0.17	10.99

1.2.5 Uttar Pradesh is a State having vast land resources and variety of soil erosion and land degradation problems. One soil Conservation measure may be successful in one agro-climatic zone but may prove futile for the other zone. With the past experiences it has been felt that the State should be categorised into agro-climatic zone on the basis of land terrain, geology and soil formation and other socio-economic climatic factors. The broader zones may be classified as below:-

1. Hilly districts of Himalaya comprising of Kumaon and Gharwal division of U.P.
2. Indo-Gangetic plain including Gullies and various areas of Yamuna and Chambal rivers.
3. Central plateau region of Bundelkhand and Baghelkhand region of Mirzapur districts.

1.2.6 The above broad zones will require specialised soil and water management programme.

Strategy for Proposed Programme during 1990-95

1.2.7 During Eighth Five Year Plan emphasis would be on usar reclamation programme, ravine reclamation programme and National watershed development in dry land areas with integrated approach to crop production programme, horticulture and afforestation in selected watersheds. With the ever increasing population and thereby declining man-land ratio, it has become necessary (i) to increase the productivity of the land already under agriculture and (ii) to bring additional area under productive use to meet the requirements of food, fodder, fibre, fuel as well as to maintain proper ecological harmony.

Physical and Financial Targets for Eighth Plan

1.2.8 While setting the target for the year 1991-92, it will be practical to review the present infra-structure available in the department and assess the physical capabilities on the basis of which physical targets have been proposed. Presently there are 95 working units under different State/Central Sector Schemes. The exercise has been done indicating how much problem area can be treated within 8th Five Year Plan period (1990-95). The categorywise problem area at the beginning of 1991-92 is summarised below:-

**Table 1.2.2
Categorywise Problem**

Type of problem	Total problem area	Area treated upto Sixth Plan	Area treated during Seventh Plan	Total Area treated at the end of Seventh Plan	Net problem area at the end of Seventh Plan	Proposed target for the year 91-92
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Mode-rate to soil erosion	36.74	27.45	5.86	33.31	3.33 18.36**	0.90
2. Gullied and ravinous land	12.30	0.27	0.49	0.76	11.54	0.20
3. Usar land	12.38	1.06	0.33	1.39	10.99	0.24
Total	61.42	28.78	6.68	35.46	44.22	0.24

**This is the area which was treated with contour bunding upto the end of the Fourth Five Year Plan which requires integrated treatment.

1.2.9 To provide employment to the rural masses and reclaim the usar and ravines lands, a scheme of Bhoomi Sena has been launched. During Eighth Plan, a total outlay for this Scheme is Rs.18300 lakhs out of which Rs.3700 lakhs is proposed for 1991-92.

1.2.10 World Bank aided Himalayan Watershed Management Project
The Himalayan Watershed Management Project aided by the World Bank was originally approved for Rs.63.58 crore for a period of seven years. Out of this I.D.A. loan of 46.2 million US dollars

from the World Bank was to be utilized in different years of operation. As per mid term review of this project, the revised cost is Rs.87.92 crore for a period of ten years. The area of implementation was originally extended over 3120 sq.km. covering 9 sub-watersheds (SWS) (8 in Nayar in Garhwal hills (2656 sq.km.) and one in Saryu Watershed in Kumaon hills (464 sq.km.) SWS projects were prepared for all 9 SWS to cover 83 micro-watershed (MWS), 74MWS in Garhwal hills and 9 MWS in Kumaon hills and each SWS project was phased to be carried out in five years. But subsequently after the Mid Term Review of the Projects, the project period was pro-posed to be extended upto 1992-93.

1.2.11 During seventh five year plan period an amount of Rs.47.12 crore was spent on this project, The expenditure anticipated during eighth five year plan is Rs.41.12 crore. The proposed expenditure for 1991-92 is Rs.14.22 crores.

1.2.12 European Economic Community (EEC) aided South Bhagirathi Phase-II Project : The South Bhagirathi Zone Comprises of the area lying within the Bhagirathi Watershed. It lies in Tehri District.

1.2.13 The total area of South Bhagirathi phase-II project is about 727.62 Sq.Km. The project cost is estimated to be Rs.26.62 crore against which at present a grant of 8.04 MECU has been approved by EEC. The project period is 7 years starting from 1989-90.

1.2.14 The expenditure on this project during seventh five year plan period was Rs.1.66 crore. The proposed expenditure during 8th five year plan is Rs.2.95 crore out of which Rs.4.97 crores is proposed during 1991-92.

1.2.15 Integrated Watershed Management Project was undertaken in 1983 in the Himalayan Region, with the financial assistance from World Bank and European Economic Community. The primary objective of these projects is to attempt to minimise further deterioration of the Himalayan Eco-system caused by depletion of the forest cover, overgrazing, faulty land use and careless road constructions all of which have resulted in increasing erosion in these areas.

1.2.16. At present three projects viz. Himalayan Watershed Management aided by the World Bank and South Bhagirathi Phase-II Project and Bhimtal Project aided by the EEC are being implemented.

1.2.17 Bhimtal Integrated Watershed Management Project : The project area is about 252 Sq.Km. spread over 8 micro watersheds and the estimated cost of this project is Rs.975 lakhs against which EEC has sanctioned a grant of 4.40 MECU. The project period is 7 years starting from 1990-91.

1.2.18 The proposed expenditure in this project during eighth five year plan period is Rs.754 lakhs out of which Rs.32 lakhs have been provided during 1990-91 and Rs.153 lakh is proposed for 1991-92.

**Watershed Management Projects
proposed to be financed from State Budget**

1.2.19 Micro watershed project : Micro watershed projects are proposed in selected block development area of 8 districts of U.P. Hills during Eighth Five Year Plan period. These projects will be implemented by the district authority under the guidance of block development officer.

1.2.20 The total expenditure proposed on such projects during Eighth Five Year Plan period is Rs.6950 lakhs of which 39.50 lakhs are sanctioned for 1990-91 and Rs.1899 lakh for 1991-92.

1.2.21 Mini Space Watershed Project : In each selected micro watershed, miniwatershed projects covering about 500 Ha. in each distt. will be executed through NGO's under the guidance of district authority. The total expenditure proposed on such projects during Eighth Five Year Plan period is Rs.60 lakh out of which Rs.11 lakh is sanctioned for 1990-91 and Rs.12 lakhs for 1991-92.

1.2.22 The civil & soyam forests are scattered all over the eight hills districts of the state covering 8014 sq.km. in addition to this there are about 2368 sq.km. of Panchayati forests. The districts wise area under civil, soyam and panchayati forests as per revenue records is as under :-

Table-1.2.3
Disurict-wise breakup

Forest	Districts Area in Sq.Km.	(Area in Sq.Km.)	Civil & Soyam (Panchayati Forests.)
	1	2	3
1.	Almora	1821.00	627.99
2.	Nainital	192.00	207.67
3.	Pithoragarh	1210.00	714.45
4.	Pauri Garhwal	1206.00	296.40
5.	Chamoli	1048.00	521.40
6.	Tehri	1277.74	-
7.	Uttar Kashi	147.89	-
8.	Dehradun	516.00	-
	Total	8013.63	2368.00

1.2.23 Forest department started a scheme of soil conservation works in civil & soyam forests, since 1974-75 and 5 forests division were selected under this scheme.

1.2.24 In the hills because of the heavy biotic pressure the single most important factor which contributes to the success of plantation is protection. However in past due to lack of funds it has not been possible to give adequate protection to the planted area and hence the desired success of plantation has not been achieved. Only wall fencing of the area is not sufficient for protection because these stone walls are broken by villagers & cattle. Therefore it is essential to have a Watchman on each unit. In hills generally the area made available are in small patches of 5-10 ha. which are scattered over a vast areas hence it is very essential that a watch is provided on every patch for

minimum of 10 years. In addition to this beating up i.e. replacement of dead & damaged plants in old plantation is also required.

1.2.25 During the Seventh Five Year Plan the average annual target for each division was allotted as under :-

1. New plantation 800 ha.
(2000 plants per ha.)
2. Density improvement in 300
existing open civil & (Average 1000 plants per ha.)
soyam forests with very
low density including
improvement of degraded
oak forests.
3. Density improvement of 100 ha.
old plantation prior to (Average 1000 plants per ha.)
1979-80 also.

1.2.26 Due to paucity of funds in centrally sponsored schemes it was not possible to increase the tempo of the work during seventh plan. The scheme wise details are as under :-

1.2.27 Development of Civil & Soyam Forest in Kumaon and Garhwal Region : This scheme is being implemented since 1974-75, achievement up to 1984-85 are as under :-

I. PHYSICAL :

1. Survey and demarcation (ha.)	143706
2. Afforestation/pasture development.	78088
3. Treatment of agriculture land (ha.)	188
4. Plantation of fruit trees (ha.)	199
5. Minor Engineering works (Nos.)	11521
6. Conversion of low density forests into normal density forests (ha.)	18674

II. FINANCIAL : (Rs. in lakhs) 2186.12

1.2.28 Target for seventh plan and achievement 1985-90, proposed target 1990-95, target 1990-91 likely achievement 1990-91 and proposal for Annual plan 1991-92 are as under ;

Table 1.2.4
Physical Target

Item	Target VII Plan 1985-90	Achieve- ment 1985 -90	Proposed target 1990-95	Tar- get 1990 -91	Lik- ely ach- iev- ement 1990- 91.	Prop- osed 1991- 92.
1	2	3	4	5	6	7
I PHYSICAL :						
1. Survey & dema- rcation (ha.)	313250	30092	-	6100	6100	6000
2. Afforestation/ pasture development (ha.)	20000	26005	18750	3875	3875	3870

Table 1.2.4(Concl'd.)

Item	Target VII Plan 1985-90	Achieve- ment 1985 -90	Proposed target 1990-95	Tar- get 1990	Lik- ely 1991- 91	Prop- osed 1991- 92.	ement 1990- 91.
1	2	3	4	5	6	7	
3. Treatment of Agriculture land (ha.)	-	-	-	-	-	-	-
4. Plantation of fruit trees (ha.)	-	-	-	-	-	-	-
5. Minor Engg. Works (Nos.) Worth	Rs.300.00 Lac	9273 (Nos.)	9000	2350	2350	2350	
6. Conservation of low density forests into normal density in civil & soyam/ reserved forests.	22500	30351	29000	4910	4910	4900	
7. Physical (Rs. in lakh)	2500.00	2653.64	3500.00	550.00	550.00	625.00	

1.2.29 RIVER VALLEY PROJECT IN THE CATCHMENT OF RAMGANGA (100% CENTRALLY SPONSORED SCHEME) : The scheme was started from March, 1962 to carry out soil conservation works in the catchment of Ramganga reservoir built across the river Kalagarh to check the rate of siltation of the dam through afforestation, development of pasture and treatment of agriculture land, fruit trees plantation and construction of engg. works.

1.2.30 The scheme is being proposed during the Eighth Five Year Plan also achievement upto 1984-85 are as under :-

I PHYSICAL :

1. Afforestation/pasture development(ha).	36643
2. Treatment of agriculture land (ha.)	1547
3. Plantation of fruit trees (ha.)	1017
4. Minor engineering works (Nos.)	8491

II FINANCIAL (Rs.in lakh) 2186.12

1.2.31 Target for seventh plan, achievement of 1985-90 proposed target for 1990-95, target for 1990-91, likely achievement for 1990-91 and proposals for annual plan 1991-92 are as given in table 1.2.5 :-

Table-1.2.5
Targets and Achievement

Item	Seventh Plan Target	1985-90 Achievement	Propo- Target for 1990-95	Target for 1990-91	Likely achievement 1990-91	Propos- ed tar- get 1991-92
1	2	3	4	5	6	7
PHYSICAL :						
1. Afforestation/ pasture development (ha.)	10400	7016	6000	1500	1500	1500
2. Treatment of agriculture land (ha.)	-	-	-	-	-	-
3. Pasture develop- ment (ha.)	-	-	2000	-	-	-
4. Plantation of fruit trees (ha.)	-	-	-	-	-	-
5. Minor enginee- ring works (Nos.)	25000	678	1500	L.s	L.s	L.s
6. Density improvement in forest areas (ha.)	5200	-	2000	-	-	-
7. FINANCIAL (Rs. in lakh)	995.00	406.97	1603.33	104.00	104.00	115.00

1.2.32 Integrated Soil, Tree and Water Conservation in the Himalayan Region (100% Centrally Sponsored) : This is another central sector scheme of soil conservation for hills of this state. The scheme was started in 1978-79, achievement during 1985-90 of this scheme are as under :-

Table-1.2.6

Achievements of integrated soil, tree and water conservation scheme

Item	Seventh Plan 1985-90	Achievement 1985-90
1	2	3
I PHYSICAL :		
1. Afforestation/pasture development (ha.)	20800	13569
2. Density improvement (ha.)	10400	1513
3. Treatment of agriculture land (ha.)	-	-
4. Soil conservation survey (Sq. Km.)	30000	10142
5. Engineering Works Construction (Lakh)	360	(Nos.) 1258
II FINANCIAL : (Rs. in Lakh)	2215.00	771.29

NOTE:- This scheme is included under integrated Wasteland Development Programme.

1.2.33 Integrated Watershed Management in the Catchment of Flood Prone River of Indo Gangetic Basin : This scheme is being implemented in the hills from March, 1982. The achievement upto 1984-85 (i.e. during Sixth plan period) are as under :-

Item	Achievement upto 1984-85.
1. Survey (ha.)	31279
2. Plantation & pasture development (ha.)	4269
3. Minor engineering works (Nos.)	2687
4. Road side plantation (Km.)	25
5. Nursery establishment.	3
6. Density improvement.	-

Table-1.2.7
Seventh Plan target and achievement and target for Eight Plan

Item	Seventh Plan Target 1985-90	Achievement 1985-90	Proposed Target 1990-95	Target 1990-91	Like-ly Achievement 1990-91	Proposed 1991-92
1	2	3	4	5	6	7
1. Survey (ha.)	-	-	-	-	-	-
2. Plantation & pasture development (ha.)	12800	8122	5000	2666	2666	2666
3. Minor engg. Works (Nos.)	12050	2040	1000	L.s	L.s	L.s
4. Density Improvement (ha.)	6400	656	2000	-	-	-
5. Financial Rs. in (Lakh)	1475	425.13	1224.24	113.34	113.34	125.00

1.2.34 Integrated wasteland development project. : Target for Eighth Five Year Plan 1990-95, target and anticipated achievement for 1990-91 and targets proposed for 1991-92 are given in Table No. 1.2.8 :-

Table-1.2.8
Target

Item	Target Eight Plan 1990-95	1990-91		Target Proposed for 1991-92
		Target	Anticipated Achievement	
1	2	3	4	5
I. Financial (Rs. in lakh)	1458.18	190.00	190.00	275.00
II. Physical.				
1. Plantation(ha.)	7250	1100	1100	1800
2. Pasture development (ha.)	1700	550	550	400
3. Rehabilitation of degraded forests (ha.)	1500	100	100	350
4. Density improvement (ha.)	1400	200	200	300
5. Farm forestry (ha.)	760	1900	1900	1900
Minor Engg. works (Nos.)	9450	1890	1890	1890

1.2.35 Matatila Dam Project :- In order to check siltation of the dam, plantation and minor engineering works are being done in the catchment of Matatila Dam Project which is located in Lalitpur district of Bundelkhand region on river Betwa. The total catchment area of the reservoir is 20,720 Sq. Km. out of which 1,206 Sq. Km. is under the control of State Forest Department, which is implementing soil conservation works in that area. Outside the Forest area, Agriculture Department is also doing soil conservation works. Up to the end of Sixth Plan afforestation in more than 1,954 hectare, Pasture development in over 1,070 hectares, bunding of Agriculture Land in over 855 hectares and 1,328 Minor Engineering Works have been completed at a cost of Rs.118.60 Lakh. The targets for Seventh Plan, achievements for 1985-90, Target for eighth Plan 1990-95, targets and likely achievements for 1990-91 and proposals for 1991-92 are as under :-

Year	Financial (Rs. in Lakh)	Physical Afforestation (ha.)	Minor Engineering works (In Nos.)
1	2	3	4
1. Seventh Plan Target	208.00	5000	200
2. Achievement 1985-90	79.97	1983	-
3. Eight Five Year Plan	125.00	2000	-
4. Target 1990-91	22.00	400	-
5. Likely achievement 1990-91	22.00	400	-
6. Proposed For 1991-92	23.00	400	-

1.3 Animal Husbandry

The geometrical progression in the growth of population has resulted in tremendous pressure on land. This has forced the planners to search for potential areas of gainful employment other than agriculture. Animal Husbandry is one such area. Besides economic benefits it is also a source of supplementing nutrition and deficiency in human food. Hence the need for development of live stock has become imperative. According to 1982 census the total livestock population is 624 lakhs.

1.3.2 In order to maximise the benefits of live stock and increase the live stock products various activities of health care and breed improvement have been carried out by the department during various plan periods. As a result production of milk, eggs and wool has considerably increased. The level of achievement of these products at the end of Seventh Five Year Plan (1985-90) in comparison to sixth five year plan is given in the table 1.3.1.

Table 1.3.1

Achievements during Seventh Plan

Products	Unit	Level achieved upto the end of Sixth Five Year Plan	Level achieved upto the end of Seventh Five Year Plan
1. Milk	Lakh M.T.	72.61	91.45
2. Eggs	Million	374.00	420.00
3. Wool	Lakh Kg.	16.14	18.67

1.3.3 The increase in production as shown in the above table is not sufficient to meet the requirements. The state is still far behind the average national consumption and the live stock resources have yet to be fully tapped. It has not yet been possible to expand various live stock improvement facilities as it ought to be. The number of animals per veterinary hospital (3400) and per stockman centre (20000) is still very high. Similarly breeding facilities are also lagging behind which is evident from the data given in the table below :-

Table-1.3.2

Level of Breeding Facilities in terms of Percentages

Animal	Upto the end of Sixth Plan (Percentage)	Upto the end of Seventh Plan (Percentage)
(1)	(2)	(3)
1. Cows	17.65	23.35
2. Buffaloes	11.77	16.72
3. Sheep	16.40	78.00
4. Goat	7.00	15.00
5. Pigs	8.00	15.00

1.3.4 The reason for the low level is that it has not been possible to cover up the huge population with vaccination against diseases like Rinderpest (R.P.) and Haemorrhagic Septicaemia (H.S). Besides the effects of H.S. Vaccine are short lived and require annual vaccination for prevention of these diseases. An inter state comparison of vaccine coverage is given in the table no.1.3.3.

Table -1.3.3
Interstate Comparative Vaccine Coverage

Name of State	Total cattle and buffalo population (in lakh)	Innoculable population 92.5% of total population (in lakh)	Annual production of H.S. vaccine (lakh doses)	Percentage of coverage
(1)	(2)	(3)	(4)	(5)
1. Andhra Pradesh	219.24	202.80	93.93	46.32
2. Gujrat	114.37	105.80	41.92	39.62
3. Haryana	57.11	52.83	52.92	100.00
4. Maharashtra	201.34	186.24	67.02	35.98
5. Punjab	78.53	72.82	54.92	75.60
6. West Bengal	166.25	153.18	92.40	62.32
7. Uttar Pradesh	419.37	391.25	97.37	24.89

1.3.5 In spite of the fact that maximum quantity of vaccine is produced in U.P. the coverage is only 24.89 per cent meaning there by that additional facilities will be needed to increase the coverage of vaccination in order to ensure the health of animals.

1.3.6. The main objectives of Eight Five Year Plan are given below :-

1. To create an atmosphere of viable livestock farming so as to generate more employment in rural areas.
2. To expand health cover facilities and take preventive measures against catastrophic animal diseases and to improve genetic merits of cattles.
3. To decentralise activities with minimum departmental interference in execution of programmes.
4. To give special thrust in promoting poultry development through private entrepreneurs.
5. To enhance milk production by providing better grazing facilities and green fodder.

1.3.7. The broad strategy to achieve the objectives of Eight Five Year Plan has been framed as under :-

- (i) Animal Health Care Programme shall be expanded. The diagnostic facilities shall be extended by strengthening the regional and other diagnostic laboratories.
- (ii) More vaccine shall be produced for prophylactic vaccination of live stock. An additional biological production unit shall be established.
- (iii) In order to eradicate the deadly diseases operation zero rinderpest, will be an integral part of the plan.
- (iv) Incentives shall be provided for privatisation of veterinary practices for wider coverage of animal health and to give employment to veterinarians.

- (v) Special efforts will be made to provide green fodder seeds to farmers and vigorous programme of fodder and pasture development will be launched.

1.3.8. The department is executing various programmes relating to veterinary services, cattle and buffalo development, poultry development, sheep and goat development and piggery development. Besides the programmes of feed and fodder development and research and statistics are also being carried out.

1.3.9 Apart from these programmes certain new programmes are proposed to be taken up during Eight Five Year Plan. A brief account of these programmes is given below :-

1.3.10 Animal Health Care and Veterinary Services : So far all health and veterinary services were provided by the department through its 1642 veterinary hospitals, 3 polyclinics, 258 'D' class dispensaries and 2663 veterinary aid centres in the state.

1.3.11 During the Eight Five Year Plan a new scheme of establishing Private veterinary clinics is being proposed. The scheme will be launched initially in Bulandshahar and Muzaffarnagar district. Fifty such clinics will be established in these two districts with the help of Government aid. Under the scheme Rs.2000 per month will be paid to each such clinic.

1.3.12 Cattle Development: There are 66.16 lakh breedable cows and 79.05 lakh buffaloes. By the end of Sevanth Plan the level of milk production was 92.10 lakh tonnes. A target of 140.00 lakh tonnes has been proposed for the Eight Plan.

1.3.13 Besides the ongoing programmes of artificial insemination by liquid semen through deep frozen semen technology is being adopted to improve the cattle breed. A new scheme for providing breeding facilities at the door steps of cattle owners is also being proposed.

1.3.14 Under this scheme local persons will be selected as inseminators and would be trained in the trades. Each inseminator will work in his own Nayaya Panchayat. It is proposed to give Rs.300 per month as incentive. During the Eighth Plan period 31 districts would be covered through 5500 trained inseminators. Thus substantial self employment would also be generated through this programme.

1.3.15 Poultry Development: According to the 1982 census the number of poultry birds in the state was 68 lakh. But the per capita per annum availability of eggs and poultry meat in the state is 3.5 eggs and 125 gms of poultry meat whereas the national availability is 23.5 eggs and 250 gms of poultry meat. Though there are 43 state poultry farms and 3 chik breeding centres producing 12 to 15 lakh chicks with a breeding strength of 2500 birds, it is imperative to explore the new possibilities of enhancing the production of eggs in view of the increasing demands of eggs and poultry meat.

1.3.16 For the Eighth Five Year Plan a target of 2500 million eggs has been proposed. It is estimated that 60 lakh layer chicks would be required to achieve this target. Besides strengthening the departmental programmes, it is proposed to attract private sector in poultry farming in a big way.

1.3.17 It is proposed that 4 hatcheries with 20,000 parent stock would be established in private sector. Margin money is proposed to be provided to private entrepreneurs.

1.3.18 The past experience in I.R.D.P. and other special programmes have proved that 50 to 100 layers are uneconomic. A unit of less than 500 layers is found to be unviable. Hence a new scheme of establishing Community Poultry Complex has been contemplated. Under the scheme each beneficiary having a unit of 500 layers would be housed in the complex building where constant supply of feed, water and electricity would be ensured. An individual complex will consist of 30 units with 500 layers/birds.

1.3.19 Financial assistance in capital cost of building and equipment is proposed to be given by Government and other semi-Government institutions like U.P. scheduled caste scheduled Tribes Development corporation, DRDA and NCDC. Besides under this scheme 20,000 farmers will be directly employed in raising the unit, it is estimated that nearly 1.25 lakh persons will get indirect employment.

1.3.20 Fodder, Fodderseed and Pasture Development: Green fodder is essential not only for increasing productivity of the live stock but also for upkeeping the health of animals. In order to increase the production of green fodder. Following new schemes have been proposed in the eighth five year plan.

1.3.21 Provision of subsidy on fodder seed at production source: Under this scheme fodder seeds will be distributed to farmers at reduced lesser cost by giving subsidy on certified seeds.

1.3.22 Development of grass and Fodder Trees (silvipastures) in Forest Areas: Besides developing green fodder, it is proposed to develop silvipasture in forest, usar and on available grazing land. During the eighth five year plan, it is proposed to develop 4770 hectare of forest area, 415 hectare of usar available at the departmental farms of Niblet (Barabanki) and Nilgaon (Sitapur), 140 hectare. grazing land available at Livestock Farm Bharari (Jhansi) and Saidpur (Lalitpur) is also proposed to be brought under silvipasture.

1.3.23 Apart from the above mentioned programmes it is proposed to strengthen the piggery development and Angora rabbit farming programme. In hill areas Yak and mule breeding programme is also proposed to be taken up during the eighth five year plan.

1.4 Dairy Development

Uttar Pradesh is the top milk producing State in the country. Milk Production in the State at the beginning of Seventh Five Year Plan from cows and buffaloes alone was 72.61 Lakh per annum. It increased upto 92.10 Lakh MT per annum by the end of 1989-90. Despite having enormous population pressure, per capita availability of milk in the State at the beginning of the Seventh Five Year Plan was 162 grams per day which is expected to increase upto 184 gram per day by the end of 1989-90.

1.4.2 As per the 1982 livestock census, the total population of livestock in the State was 567 lakh. There were 261.51 lakh cattle heads, of which 66.16 lakh were breedable whereas in case of buffaloes, against the total of 157.54 lakh, 79.05 lakh were breedable. The breedable population of cows and buffaloes is estimated to be 67.10 lakh and 87.00 lakh respectively in the terminal year of the Seventh Five Year Plan. (Details given in Annexure-I).

1.4.3 Average milk yield at the beginning of the seventh plan from cows and buffaloes was 1.75 kg. and 3.13 kgs. respectively which is expected to be 2.0 kgs. in the case of cows and 3.2 kgs in the case of buffaloes at the end of 1989-90.

BROAD OBJECTIVES

1.4.4 The major objectives of Dairy Development Programme are as follows :

1. Emancipation of milk producer farmers from exploitation by middlemen and paying them fair and remunerative price for their produce.
2. To provide technical inputs and services at the doorstep of the farmer.
3. To make available good quality milk to urban consumers at reasonable prices.

1.4.5 Operation Flood was launched with the assistance of World Bank which envisaged creation of farmer's organisation in Meerut and Varanasi milksheds. Under Operation Flood-I programme, Feeder Balancing Dairy at Meerut and Varanasi and a Jersey Cattle Breeding Unit at Raebareli were setup. Later, Operation Flood-II Programme was launched in October, 1979 with the assistance of the IDC and NDDB. The actual programme commenced in 1982 in 28 districts in a phased manner. The progress registered is summarised below :

1. Milk procurement increased from 64 TLPD to 325 TLPD.
2. No. of Anand Pattern societies increased from 260 to 4498, giving direct employment to approximately 22,500 persons.
3. Societies under Artificial Insemination increased from 36 to 776.
4. Farmer membership increased from 21 thousand to 267 thousand.
5. Coverage of societies under Animal Health services increased from 210 to 4,101.
6. Liquid milk sales in urban areas increased from 24 TLPD to 192 TLPD and,
7. During the terminal year milk price payment of Rs.53 crores was achieved, pumping slightly more than Rs.4 crores per month in the rural economy of the state.

1.4.6 Operation Flood-III commenced from October 87. In addition to 28 districts already taken up under O.F.-II, two more districts (Bijnor and Badaun) were added. An outlay of Rs.119 crores has been proposed and the programme is to be continued upto 1993-94. In 1989, 10 priority districts were identified for approval. Apart from this, some other districts have also been identified for capital investment. The expenditure during seventh five year plan was Rs.3179.44 lakhs.

1.4.7 As against the investments made so far, the progress in a nutshell, is as follows :-

	Status in <u>1984-85</u>	Status in <u>1989-90</u>
<u>OPERATION FLOOD AREA</u>		
1. Functional Societies	2303.00	5,316.00
2. Milk procurement (LLPD)	1.66	3.99
3. City sales of liquid milk (LLPD)	0.65	2.27
<u>NON OPERATION FLOOD (Milk Board Areas)</u>		
1. Functional Societies	372.00	1,059.00
2. Milk procurement (LLPD)	0.09	0.32
3. City sales of liquid milk (LLPD)	0.07	0.46

1.4.8 Taking into account the progress of Dairy Development in Uttar Pradesh so far, a three pronged strategy is proposed to be followed.

- (I) Consolidation of Dairy Development activities in Operation Flood districts (34) by the P.C.D.F.
- (II) Strengthening and expansion of Dairy Development programmes in Non Operation Flood areas, both Plains and Hills, in a phased manner to be undertaken by the State Milk Board, and
- (III) Extension and Upgradation of animal breeding services and Fodder Development Programmes through the Dairy Cooperatives in both the areas.

1.4.9 The proposed targets under the Eighth Five Year Plan (1990-95) have been given in Annexure-II. The important areas proposed to be covered are as follows :-

1.4.10 Development of Milk Cooperatives : Dairy Development programmes are now to be taken up in all the 63 districts as against only 44 at present. The total no. of functional societies in the State will increase to 14,435 from 6,375 presently.

1.4.11 Programme for Increasing Milk Production : This part broadly constitutes two elements. Firstly a much larger number of dairy societies are to be brought under animal health/first aid/A.I./natural bulls service, coverage and secondly a broad based fodder tree and fodder grass-cattle feed programme is to be taken in all dairy cooperatives.

1.4.12 Increase in Milk Procurement and Processing Capacity: The milk procurement is slated to increase to 11.99 LLPD by the end of the eighth plan from 4.31 LLPD at present.

1.4.13 By the end of the eighth plan milk chilling capacity in the state is expected to go to 7.93 LLPD from 3.12 LLPD at present. Milk processing capacity, likewise, is proposed to be increased to 13.55 LLPD from 5.45 LLPD.

1.4.14 Liquid Milk Marketing : The total liquid milk sales in the state is expected to reach a level of 12.25 LLPD from only 2.74 LLPD.

1.4.15 Institutional Strengthening and Training : Members, secretaries and other village level workers are proposed to be trained in the existing Training Centres. Apart from this training of AI workers, First Aid Workers, Management Committee members etc. is also to be organised on a much larger scale. For this purpose strengthening of existing training centres is considered imperative.

1.4.16 Society Level : At society level nearly 24400 new direct employment opportunities are likely to be created.

1.4.17 Transportation : In inter dairy movement of milk and transportation of milk from society to milk union, 900 additional employment opportunities are expected to be generated.

1.4.18 Liquid Milk Marketing : About 4500 employment opportunities would be created from Liquid Milk Marketing.

1.4.19 In totality, about 55000 additional employment avenues are likely to be created. Most remarkable aspect of the new employment opportunities is that it will pervade both the rural and urban areas.

PROPOSED PROGRAMMES/SCHEMES (1990-91 TO 1994-95)

1.4.20 Under the Eighth Five Year Plan, schemes have been framed in consonance with the organisational objectives and national objectives under the plan. Keeping this in view schemes which were running in the Seventh Plan are proposed to be continued in Eighth Plan and 15 new schemes have been introduced. No continuing scheme is proposed for curtailment. The important schemes are detailed below :-

1.4.21 Assistance to Individual Scheduled Caste Members of the Primary Milk Societies : In O.F. area, farmers having milch animals are made the members of the societies. These members include Scheduled Castes also. Assistance is provided to Scheduled Caste members for green fodder seeds and Fertilizers, veterinary emergency services, and Vaccination for fatal Animal Diseases.

1.4.22 Under the Eighth Five Year Plan, an amount of Rs.368.91 lakh would be needed for this programme.

1.4.23 Assistance to Primary Cooperative Milk Societies having a Majority of Scheduled Caste Members and Assistance to Individual Scheduled Caste Members : This programme is in vogue in Milk Road (Plain) and Milk Board (Hills) areas. Funds amounting to Rs. 453.96 Lakh are proposed for eighth plan period.

1.4.24 Processing Infrastructure : In O.F. chilling plants are proposed to be expanded. It is also proposed to establish multi product dairy. In addition to above, Ice-cream plant and flavored milk plants are proposed to be established. Under this head the major investment is likely to be done by N.D.D.B. and the provision for assistance is being made only for those items not likely to be financed by N.D.D.B. An outlay of Rs.249.00 lakh is proposed under this head during the plan period.

1.4.25 Animal Health and Extension Services for Increasing Milk Production : Under the technical inputs programmes animal health facilities are being provided to the societies in the O.F. area. Under this, emergency services and the first aid facilities are provided to the societies. Also, the artificial insemination services are being provided to the societies to help improve the breed of milch animals. It is necessary to improve milch animals thereby increasing milk production. Other activities under this programme are feed and fodder and extension activities like mass meetings, infertility camps, cattle shows, urea treatment etc.

1.4.26 In order to meet the expenditure on above account an outlay of Rs.154.00 lakh has been proposed.

1.4.27 Research and Development Cell : It is proposed to set up an independent R & D lab with all testing facilities so that necessary modification of existing process produce and fixing of norms etc. are taken care of in the state. An outlay of Rs.94.00 lakh has been proposed under the Eighth Five Year Plan for this purpose.

1.4.28 Assistance for Marketing Facilities : In the dairy sector the product manufacturing is done only in flush season i.e. in winter months and the products thus manufactured are sold round the year. Under the Eighth Five Year Plan with a view to cover the whole State in the marketing network and to make the products available in the farthest possible point, it is proposed to establish cold storage deep freezers and SMP Godowns in various places of the State. Funds amounting to Rs.241.00 lakh have been proposed for this facility.

1.4.29 Intensive Animal Breeding Programme : In order to improve the milch animals and to increase milk production in the State, a special animal breeding programme is proposed under the Eighth Five Year Plan. By the end of the plan period artificial insemination coverage is proposed to be increased to about 45%. Under the plan buffalo breeding centre and Frozen Semen Production centre would be established. 100% coverage of animal in all such villages covered under AI Programme would be ensured. Under the Eighth Five Year Plan period an outlay of Rs.288.95 lakh is proposed for this scheme.

1.4.30 Special Aid for Employment Programme : Under the programme it is proposed to provide direct employment to 4500 persons belonging to Schedule Caste community. Under the scheme milk booths and Riksha Trolleys would be got constructed and milk & milk products would be sold through them. Schedule Caste persons would be made the commission agents and these facilities would be provided to them. One of the major feature of the

programme is that the employment thus generated would be for all times to come. An outlay of Rs.141.10 lacs has been proposed for this scheme.

1.4.31 Direction & Administration : An outlay of Rs.566.41 lacs has been proposed for Five Year Plan which includes for Rs.442.83 lacs for Hill areas of the State.

1.4.32 Women Development, Extension and Training : This scheme includes :-

- a. Training to Secretaries of the primary cooperative milk societies.
- b. Refresher courses and training on various disciplines to the Departmental Officers, the Institutional Officers/Milk Unions staff. etc. and Training to the farmers and milk producers.
- c. Assistance to Agriculture Institute Allahabad for arranging Dairy courses in respect of manpower development.
- d. Establishment of a cooperative training centre for the hill region.
- e. To run consumer's education programme in respect of Dairy products and cattle feed.
- f. Holding of Seminars at Block and Tehsil level for educating the producers about the merit of the cooperative and their extension activities.

1.4.33 In addition to above 70 exclusive women VDC's would be organised and two Mobile training units exclusively for women are also proposed.

1.4.34 For the above mentioned activities an outlay of Rs.171.99 lacs has been proposed under the Five Year Plan which includes 71.76 lacs for hill areas of the State.

1.4.35 Revitalisation, Consolidation, Expansion and Establishment of Milk Unions/Societies : Financial assistance under this programme is proposed for purchasing land to establish new dairies/Chilling plants/Cattle feed plants, expenditure on Powerline, Tubewell, Civil Work, Processing Infrastructure for the above, assistance to maintain the trading capacity of the milk unions, assistance for organising primary cooperative societies, working capital, Technical Inputs services in the hill region, assistance for marketing facility in the hill region, Tribal sub plan for hill, Cooperative Fodder Development scheme in the hill area etc. For this purpose, outlay amounting to Rs.2500.79 lakh is proposed for the whole plan period which includes Rs.2205.88 lakh for hill areas of the state.

1.4.36 Modernisation Programme of Dairy Sector : This scheme is only for hill areas of the state. The main objective of the programme is to upgrade the working of the dairy sector by introducing new technologies, reduce cost of operation and to

keep pace with the latest developments. Under the Eight five year plan, funds amounting to Rs.129.36 lakh are proposed to carry out the above programme.

1.4.37 Establishment of Cattle Feed Plant : Looking into the growing demand of cattle feed and considering its nutritional value for the milch animals, establishment of cattle feed plant is necessary. Under the plan, cattle feed plant is proposed to be established at Nainital district in the Hill Region, which would cater to the demand of cattle feed, UMLB, by-pass feed of the whole Hill region. An amount of Rs.263.80 lakh has been proposed under the plan.

1.4.38 Under District sector (Plain), following three schemes have been introduced.

(a) Revitalisation, consolidation and expansion of milk union/societies.

(b) Land, Powerline, Tubewells and Civil Works etc. for expansion of existing dairies and chilling plants and establishment of new dairies and chilling plants.

(c) Animal Health and Extension services for increasing milk production.

1.4.39 To meet the expenditure for the above schemes, an outlay of Rs.4401.63 lakh has been proposed for the plan period.

1.4.40 Schemes are proposed under the district sector plan of hill region. Details are as under :-

1. Strengthening of milk cooperatives in the rural areas : Under this scheme financial assistance is proposed for equipments and stationary, working capital, salary of the secretary, training of the secretary, tester, farmers orientation programme, cattle crush, first aid box, managerial grant etc. for organising new societies and revitalising existing societies. A Dairy Development Centre is also proposed under this scheme alongwith an office building at district level and residential accommodation for the staff.

2. Cooperative fodder development and cattle management scheme : Under this scheme, financial assistance is proposed for fodder/grass nurseries, tree nurseries, cattle feed and fodder godowns, chaff cutter, bulls for natural service. All these programmes would be implemented through the village level societies. An outlay of Rs.516.82 lakh has been proposed under the plan.

1.5 Fisheries

Inland Fisheries is an important economic activity of the state having immense potential for fish production. It is one sector where, possibilities of employment generation at low level of investment are immense. It is evident from the fact that out of the total water area of 11.65 lakh hectares, comprising rivers, canals, irrigation reservoirs and natural lakes/ponds, only 1.82 lakh hectares (15.62%) have so far, been utilized.

1.5.2. Before the commencement of World Bank aided programme of Fish Farmers Development Agency project in Sixth Five Year Plan, the fish production level was 300 to 500 kg/ha/per year which increased to 1700 kg./ha/per year at the end of seventh five year plan. The achievements made through various schemes are given in table below :-

TABLE - 1.5.1
Seventh Five Year Plan Achievement

Item	Unit	Possibilities	Achievement
(1)	(2)	(3)	(4)
1. Water area under control of department	lakh ha.	2.83	1.42
2. Water area brought under fish culture by the department	"	1.62	0.42
3. Level of fish production in reservoirs	Kg/ha.	20.00	10.00
4. Fish production level in rural ponds	"	3000.00	1700.00
5. Level of fish production in the state through all sources	Tonnes	16500.00	93470.00
6. Requirement and availability of fish seed in the state	Lakh No.	2600.00	1704.50

1.5.3. The main objectives of the Eight Five Year Plan are given below :-

- (i) Increasing level of fish production through optimum water utilization.
- (ii) Strengthening cooperative Societies to improve economic conditions of fishermen.
- (iii) Improving marketing system for price support and fair price to consumers.
- (iv) Generating self employment.

1.5.4. In order to achieve the above objectives, following strategy for the Eight Five Year Plan is proposed to be adopted:-

1. Optimum utilization of available water for intensive fish farming.

2. Incentive to fish farmers for seed production in private sector.
3. Modernizing the existing hatcheries/farms to increase seed production.
4. Utilization of shallow and water logged areas for fish farming.
5. Creation of suitable infrastructure to develop cold water fisheries in the hills.

1.5.5 It is proposed to cover additional 30,000 Ha. water area during the plan period through the above strategy. Eleven hatcheries per year will be established in private sector. Small chinias type hatcheries will be established at existing farms.

1.5.6 Among the various schemes executed by the department Fish Farmers Development Agency Programme is the major activity. so far 54 F.F.DAS have been established. During the eighth plan period additional 30,000 hectare water area is to be brought under fish culture, giving employment to 30,000 persons. Besides the ongoing schemes, following new schemes have been proposed.

1.5.7 Hill Fish Farm Development Agency : So far such agencies were established only in the plains. Such agencies will now be established at divisional level also. Under the scheme subsidy will be provided to the fish farmers and ponds will be constructed in the hills. New hatcheries would also be established in the hills.

1.5.8 Pilot Project of Cage Fish Culture in the up land lakes

A pilot project on cage fish culture in Kumaon lakes of district Nainital has been proposed to rear fish seed for stocking and production of table fish.

1.5.9 Development of Game Fisheries : Development of game fisheries involves creation of angling facilities to attract tourist anglers in hill areas for game fishes like Trout and Mahseer. Under this scheme angling sports would be developed and necessary equipment will be made available.

1.5.10 Utilization of alkaline and water logged areas for fish culture : The degraded areas like marshy land, low lying water and water logged areas, silted lakes/ponds and other water areas which can not be utilized for agricultural purposes are proposed to be developed for fish culture. Under the scheme such areas would be converted into fisheries estates and would be allotted pisciculturists particularly those of weaker sections. During the Eighth Plan period five such estates are proposed to be developed.

1.5.11 In order to introduce latest technology of pisciculture a training programme is also proposed. About one hundred officers and officials are proposed to be trained at fisheries training institute I.C.A.R.

1.5.12 For executing new as well as ongoing programmes an outlay of Rs.2700 lakhs including Rs.700.00 lakh for hills has been proposed for the Eighth Five Year Plan, while for the year 1991-92 Rs.410.00 lakhs including Rs.60.00 lakh for hills has been proposed.

1.6 Forestry and Wild Life

In U.P. there is too much biotic pressure on forests as against 33% forest area anticipated in Forest Policy-1988 it is only 17.4%. Forest Policy also envisages a minimum of 67% forest area in hills. Although in U.P. hills the area under forest is 67% but the net stocked area is only about 40%.

1.6.2 The main thrust will be to increase the density of existing forests to increase greenery in areas devoid of trees and conserve soil and water in susceptible hill region and at the same time also create resource to meet Industrial and fuel wood needs in the state. It is aimed to achieve the above by formulating.

- i- Soil Conservation scheme for hills.
- ii- Fuel wood plantation scheme for degraded areas in forests.
- iii- Improving economic species cover in forests through plantation
- v- and in plains to increase greenery through social forestry scheme by planting Gram Samaj land, road rail and canal banks and also by distributing seedlings under Farm Forestry programmes.

1.6.3 After putting ban on commercial fellings in areas above 1000 meters the production from forests have come down very sharply. This has created a very large demand for the products from forests.

1.6.4 In the context of annual demand vis-a-vis supply, the position is precarious which is shown in the following table :-

Table - 1.6.1
Demand and Supply of wood

Item	Unit	Demand	Production potential	Supply	Supply as % of demand
(1)	(2)	(3)	(4)	(5)	(6)
(1) Sawon wood	(Lakh Cu.m.)	30.00	3.00	1.00	3.3
(2) Pulp wood	"	25.00	5.00	3.00	12.0
(3) Other Industrial wood	"	35.00	7.00	2.00	5.7
Total		90.00	15.00	6.00	6.7

1.6.5 The above table clearly indicates that as against recorded production of 6.00 lakh cu.m. of timber the supply position to wood-based industries is much higher which is coming either from outside state or from areas which are not under the control of Forest Department.

1.6.6. This point is highlighted more clearly when we consider the position of fire-wood. The estimated annual requirement of followed in the state in 2000 A.D. will be of the order of 63 million cu.m. whereas the recorded production at present is only 0.6 million cu.m. Thus there is a big gap in demand and supply of both timber and firewood.

1.6.7 In this context the emphasis in the coming decade not only for U.P. or India but on global basis is to protect existing forests, improve their density and augment forests in the state in a way that the ecological balance is least disturbed and where it is already disturbed due to past mistakes, it is speedily restored. The chief instrument to achieve this objective is a carefully planned programme based conservation and seek people's participation in increasing green cover in the state and also protect the same.

Table - 1.6.2
Position of Forest in the State

Category	Hill	Plain	Area (Sq.km)
(1)	(2)	(3)	(4)
(1) Under the control of Forest Department	23,780	16,978	40,758
(2) Civil Soyam Forests	8,014	-	8,014
(3) Panchayati Forests	2,368	-	2,368
(4) Private, Cantonment Other Forests	197	-	197
Total	34,359	16,978	51,337

1.6.8 The forest area per capita in the country and especially in Uttar Pradesh is very low in comparison to other countries. Under the present conditions it is not possible to increase the forest area over fertile land in the State. However, plantations can be raised in vacant lands, along road sides, railway lines, canal sides etc. The management and development of reserved forests is to be done in such a way that the productivity of the present forests may increase. In view of this, it is necessary to raise plantations of pulpwood species and species of industrial and economic importance in the vacant lands and degraded forests.

Strategy for the eighth five year plan :

1.6.9 Considering all aims and aspects, the strategy of the plan for forest conservation and development will be :-

- (i) Maintenance of environmental stability through preservation and, where necessary, restoration of the ecological balance that has been adversely disturbed by serious depletion of the forests of the country.
- (ii) Conserving the natural heritage of the country by preserving the remaining natural forests with the variety of flora and fauna which represent a remarkable biological diversity and genetic resources of the country.

- (iii) Meeting the requirements of followed, fodder, minor forest produce and small timber of the rural and tribal populations.
- (iv) Increasing the productivity of forests to meet essential national needs.
- (v) Encouraging efficient utilisation of forest produce and maximising substitution of wood.
- (vi) Creating a massive peoples movement with the involvement of women, for achieving these objectives and to minimise pressure on existing forests.

10.6.10 The following table gives the target and likely achievements for the Seventh Plan as also the anticipated achievements for 1990-91 annual plan, target for important scheme under Eighth Plan as well as for 1991-92.

Table-1 .6.3
Targets and Achievements

Name of Scheme	Unit	1985 -90 target	1985 -90 Act- ual Expe ndit ure	1990 -95 Tar- get	1990-91 Target	1990-91 Ant. Ach.	Proposed target 1991-92
1	2	3	4	5	6	7	8
I. Financial	Rs. in Crores	189.95	221.10	440.00	66.50	66.50	73.00
II. Physical							
1. Industrial and pulpwood Plantation	ha.	75000	57494	70000	14000	14000	14000
2. Roadside Plantation	R.km.	5000	3146	670	670	-	670
Merged Under Indl. & Pulp-wood Plantation.							
3. Platation under Social Forestry project :-							
(i) Plantation	ha.	27950	59039	N.A.	10695	-	10695
(ii) Farmforestry	ha.	134500	156687	N.A.	35000	-	35000
4. Rural Fuelwood and Fodder Plantation- (Renamed as fuel & Fodder Project)							
(i) Plantation		33432	32980	25000	6300	6300	-
5150 and 500 Ha. establishment of silvipastoral farms.							

Table-10.6.3-(Concl'd.)

Name of Scheme	Unit	1985 -90 target	1985 -90 Act- ual Expe- ndit ure	1990 -95 Tar- get	1990-91 Target	1990-91 Ant. Ach.	Proposed target 1991-92
1	2	3	4	5	6	7	8
(ii) Raising of plant for distribution	No. in lakh 2800	737	-	-	-	-	-
5. Energy Plantation	ha.	- 186	12500	570	570	-	500 merged with fuel & Fodder Project.
6. Rehabilitation of Degraded Forests	ha.	- 1200	-	200	200	-	Discontinued in VIII plan.
7. Silvipastoral Development Plantation	ha.	- 3146	-	670	670	-	Proposed under Fuel & Fodder Project.
8. Pasture Development & Afforestation	ha.	- 3357 (fencing)	-	1500 (fencing)	1500	-	Proposed under (fencing) Fuel & fodder project
9. Social Forestry in Urban Areas	ha.	- 1211	3.0 (Lakh Plants)	100	100	-	0.6 LAKH Plants

Eighth Five Year Plan :

1.6.11 Forest Resources Survey : The forest in the natural course replenish themselves. It is however, essential to know the growing stock, rate of growth, success and survival of various indigenous and exotic species. Since the growing stock in the forest is always changing with time, it is essential, not only to survey and estimate it, but to keep the required data up-to-date by carrying out periodical sample surveys of forests, to arrive at the up-to-date position of the growing stock. Against an outlay of Rs 50.00 Lakh during Seventh Plan expenditure is Rs. 29.60 lakh. For Eighth Plan 1990-95 an outlay of Rs. 30.00 lakh has been proposed. Against the anticipated expenditure of Rs. 1.00 lakh during 1990-91 an outlay of Rs. 3.00 lakh proposed for the year 1991-92.

1.6.12 Forest Statistics : Forest Statistics and Monitoring cell for collection and processing of forest statistics was started during Fourth plan. A post of Investigator-cum-Computer has been provided in each division and the staff of headquarters has also been strengthened. For quick processing of data an Electronic minicomputer has also been installed. With this assistance the Forest Department is publishing periodically a bulletin of "Forest Statistics" showing data obtained as by product of day to day forest administration. The cell also carries out the work of monitoring physical and financial

achievements against approved targets of all Plan schemes. An outlay of Rs. 60.00 lakh has been approved for Seventh Plan against which expenditure during Seventh Plan is Rs. 15.67 lakh. An outlay of Rs. 50.00 lakh has been proposed for Eighth Plan 1990-95 against the anticipated expenditure of Rs. 1.45 lakh during 1990-91 an outlay of Rs. 6.00 lakh has been proposed for 1991-92.

1.6.13 Communication Development transport and communication is very essential for extraction and proper utilisation of forest produce. Under the scheme construction of new road/bridge paths, mottling and renovation of old roads, construction of bridges and culverts, installation of telephone lines etc. are being carried out. Upto the end of Seventh Plan 5684 kms. of new roads, 13132 kms. of renovation of old roads, 5656 kms. of telephone lines and 906 number of bridges and culverts have been constructed at a cost of Rs. 1252.60 lakh. Against an approved outlay of Rs. 350.00 lakh for Seventh Plan, expenditure is Rs. 512.60 lakh. An out lay of Rs. 768.29 lakh has been proposed for eighth plan 1990-95. For 1991-92, an outlay of Rs. 141.06 lakh is proposed against the anticipated expenditure of Rs. 118.50 lakh during 1990-91.

1.6.14 Buildings : As a result of development activities in the forest the number of staff and officers has increased. There is acute shortage of buildings for their residence and offices. The position of residential quarters is also unsatisfactory for subordinate and touring staff. Accordingly buildings are being constructed under this scheme subject to availability of funds. This is a district plan scheme, hence the funds are allocated by district plan committees.

1.6.15 Against an approved outlay of Rs. 350.00 lakh for Seventh Five Year Plan expenditure is Rs. 542.65 lakh and for Eight five year plan 1990-95 Rs. 1005.66 lakh has been proposed. For 1991-92 an outlay of Rs. 172.80 lakh is proposed against the anticipated expenditure of Rs. 141.00 lakh during 1990-91.

1.6.16 Communication Project aided by Japan : This project to provide forest wealth from unsomables elements by installing served writers communication system is proposed to be implemented from 1990-91. Due to paucity of funds only a token provision of Rs. 0.01 lakh have been made during 1990-91. Japan Govt. has now sanctioned this scheme so an outlay of Rs. 318.00 lakh for Eighth five year plan 1990-95 has been proposed for 1991-92 Rs. 1.00 lakh is being proposed.

1.6.17 Fire Protection (Enclosing UNDP Project) : In U.P. the Chir, and Sal Forests, miscellaneous forests of southern U.P. and the Tarai Plantation Suffer heavily from fire year after year. About half the area of chir forests, one-third area of Sal and other forests i.e. or an average about 10 lakh hectare forests in the State suffer from fire hazards annually. The fire protection scheme with the assistance of UNDP is being implemented from 1984-85. This project has two objectives :-

1. First to ensure adequate supply of the best possible forest products as well as the protection of soils and environment in the long term perspective through protection from fire.
2. Second, to device, test and demonstrate principles and techniques of prevention and suppression of forest fires in natural and man-made forests.
3. Against and approved outlay of Rs. 440.00 lakh expenditure is Rs. 321.24 lakh during Seventh Plan. For Eight Plan 1990-95 an outlay of Rs. 600.00 lakh has been proposed. Against an anticipated expenditure of Rs. 47.50 lakh during 1990-91 an outlay of Rs. 90.00 lakh is proposed for the year 1991-92.

1.6.18 Forest Protection : At present there are 31 armed Guard Squads and two Forest Protection Force. It is proposed to expand the coverage of forest protection force in the state. An outlay of Rs. 875.00 lakh has been provided during Eighth Plan. Against an anticipated expenditure of Rs. 37.32 lakh during 1990-91 the outlay proposed for 1991-92 is Rs. 125.00 lakh.

1.6.19 Industrial and Pulpwood Plantation : This scheme is being implemented to undertake such plantation in forest so as to meet the demand of raw material for wood-based industries. Against a target of 75000 ha. during 1985-90, the achievement is 57,494 ha. at the cost of Rs. 2872.75 lakh. During eight plan an outlay of Rs. 5950.00 lakh has been earmarked. Against an anticipated expenditure of Rs. 604.40 lakh during 1990-91, an outlay of Rs. 908.00 lakh have been proposed for 1991-92 for doing plantation on over 14,000 ha.

1.6.20 Social Forestry : Social Forestry project is being implemented with the assistance of world Bank and U.S. aid. The second phase of this project has been made coterminous with Seventh Five Year Plan.

1.6.21 The present scheme covers all the districts of the plains region of Uttar Pradesh. World Bank and USAID will reimburse a substantial part of expenditure of the project. This phase would improve the efficiency and the quality of the nurseries, plantations, maintenance and utilisation of forest produce by intensifying the extension, training the research activities. In the wake of massive plantations envisaged under waste land development programme the project would bring nurseries closer to the farmers by establishing well distributed nurseries in every development block and would also provide infrastructure conducive to large scale social forestry plantation in the State. The financial and Physical achievements during seventh five year plan and proposals for the Eight Five Year Plan 1990-95, anticipated achievement for the year 1990-91 target for year 1991-92 are given in the following :-

	Financial (Rs. in lakh)	Physical	
		Plantation ha.	Farm Forestry ha.
1. Eighth plan targets	11500.00	27,950	1,34,500
2. Achievements during 1985-90	13660.29	59,039	1,56,667
3. Eight Five Year Plan targets	25623.43	N.A.	N.A.
4. 1990-91 expenditure (Anticipated)	4900.00	10695	35,000
5. 1991-92	4400.00	10100	35,000

1.6.22 Rural Fuel wood Plantation is renamed as Fuel & Fodder Project scheme from 1.4.90. It is a centrally sponsored scheme and was started in 1981-82, in seven plain and three hill districts. During 1983-84 the scheme was extended to nine more plain districts. Silvipastoral scheme a centrally sponsored scheme (50.50) is proposed to be merged under this scheme from 1991-92.

Table : 1.6.4
Financial and Physical progress

Item	Eight Five Year Plan (1990-95)	Anticipated Achievement (1990-91)	Proposed targets (1991-92)
(1)	(2)	(3)	(4)
I. Financial (Rs. in lakh)	1709.06	249.43	283.39
	(state share)	(state share)	(state share)
II. Physical			
(i) Plantation(ha.)	25000	6300	5150
(ii) Establishment of Silvipastoral farm (ha.)	6500	150	500

1.6.23 Social Forestry in Urban areas :- For raising plantations along roads-sides in urban areas, this scheme is being implemented. Against an outlay of Rs.50.00 lakh and expenditure of Rs.137.08 Lakh has been incurred during 1985-90 and plantation over 1211 ha. have been raised. For Eighth five year plan 1990-95 a outlay of Rs.308.39 has been proposed and 3.00 lakh plants will be planted. Against an anticipated expenditure of Rs.30.00 lakh and plantation of 1.00 lakh plants during 1990-91 an outlay of Rs.49.96 lakh and plantation of 0.60 lakh plants is being proposed for 1991-92.

1.6.24 Forest staff at different levels has to be trained in forestry in order to be able to contribute effectively to the management of forests. To meet the essential training requirement, it is proposed to increase the intake capacity of existing Forest rangers College. Against an outlay of Rs. 100.00 lakh an expenditure of Rs. 10.00 lakh has been incurred during Seventh Plan. For Eighth Plan 1990-95 an outlay of Rs. 200.00 lakh has been proposed. Against anticipated expenditure of Rs.

60.84 lakh during 1990-91 an outlay of Rs. 75.00 lakh has been proposed for 1991-92. It is proposed to convert one year Forest Ranger Diploma course in two years, hence, higher provision during 1990-91 and 1991-92 is proposed.

1.6.25 Project Formulation and Evaluation Cell : A scheme for setting up a cell for project formulation was started in 1977-78 with one forest economist and two field investigators. The cell also prepares forestry projects which are presented to external agencies for aid. This cell is also carrying out physical audit and evaluation of various forestry schemes being implemented by the department. The cell is proposed to be strengthened. Against Seventh Year Plan outlay of Rs. 15.00 lakh and expenditure of Rs. 5.00 lakh has been incurred for Eighth Five Year Plan 1990-95 an outlay of Rs. 30.00 lakh has been proposed. For 1991-92 Rs. 5.00 lakh has been proposed against an anticipated expenditure of Rs. 1.50 lakh during 1990-91.

1.6.26 Revision of Preparation of Working Plans : For the scientific management of forests and proper utilisation of forest produce working plan for each division is proposed and working plan of each division is revised after every ten years. For Seventh Plan an outlay of Rs. 90.00 lakh was approved against which an expenditure of Rs. 83.14 lakh was incurred. For eight five year plan. Rs. 170.00 lakh has been proposed. Against an anticipated expenditure of Rs. 14.75 lakh during 1990-91 an outlay of Rs. 26.00 lakh has been proposed for 1991-92.

1.6.27 Drinking water & electric facility to subordinate staff and Amenities to forest labourers including World Food programme : In forests areas there is great inconvenience of water and electricity which affects the efficiency of standard staff. The scheme envisages provision of such facilities wherever possible. Provision to build hutments for labourers employed in forest department and taungya cultivators has also been made.

1.6.28 For the welfare of forest labourers, world food programme assisted by United Nation W.F.F. fund is also being implemented from 1985-86.

1.6.29 For Seventh Five Year Plan an outlay of Rs. 600.00 lakh has been provided and an expenditure of Rs. 454.44 lakh has been incurred. For Eight five year plan 1990-95 Rs. 1333.86 lakh has been proposed. Against anticipated expenditure of Rs. 116.00 lakh during 1990-91 an outlay of Rs. 207.57 lakh has been proposed for 1991-92.

1.6.30 Group Insurance for Forest Labourers : In order to provide some security to the labor employed in forest deptt. scheme is being implemented from 1989-90. Against a provision of Rs. 3.94 lakh during 1989-90 Rs. 1.00 lakh is proposed for the year 1990-91. An outlay of Rs. 50.00 and 5.00 lakh have been proposed for Eighth Plan and 1991-92 respectively.

1.6.31 Establishment of Forest Corporation : For Eighth Five Year Plan 1990-95 an outlay of Rs. 75.00 lakh has been proposed. Against an anticipated expenditure of Rs. 1.15 lakh during 1990-91 an outlay of Rs. 5.00 lakh is being proposed for the year 1991-92.

1.6.32 Intensive Management of Sanctuaries : A number of National Parks and wild life Sanctuaries have been created in the State covering almost all the geographical region with a view to preserve, conserve and protect variety of fauna and flora. Two new board sanctions are also proposed during the Eighth Plan.

1.6.33 During Seventh Plan an outlay of Rs. 370.00 lakh was approved and expenditure incurred was Rs. 371.06 lakh. For Eight five year plan 1990-91 an outlay of Rs. 660.00 lakh has been proposed. Against the anticipated expenditure of Rs. 75.90 lakh during 1990-91, the proposal for 1991-92 is Rs. 87.00 lakh.

1.6.34 Corbett Park Tiger Reserve : In order to save and rehabilitate tigers, project tiger was launched in the State in Corbett National Park on February 1, 1974. It is proposed to continue this Centrally sponsored scheme in Eighth Five Year Plan.

1.6.35 This scheme was being implemented on a 50 : 50 basis, till 1986-87. But from 1987-88 100% non recurring on selected items and 50% of recurring expenditure will be borne by central Govt. For Seventh Plan an outlay of Rs. 60.00 lakh was approved. The expenditure during 1985-90 is Rs. 145.56 lakh including central share. For Eight Five Year plan 1990-95 an outlay of Rs. 200.00 lakh (state share only) has been proposed. Against the anticipated expenditure of Rs. 12.00 lakh (state share) during 1990-91, an outlay of Rs. 30.00 lakh (state share) has been proposed for 1991-92.

1.6.36 Dudhwa National Park : This park with an area of 450 km² is situated in Lakhimpur Kheri district, and is famous for variety of wild life species. It was opened on 1st February, 1977. In 1983-84 rhinoceros from Assam and later from Nepal were introduced in this park.

1.6.37 For Seventh Plan state share of Rs. 30.00 lakh was provided. During 1985-90 Rs. 82.67 lakh was spent including central share. An outlay of Rs. 200.00 lakh (state share) has been proposed for Eight five year plan 1990-95. The anticipated expenditure during 1990-91 is Rs. 6.00 lakh (state share) an outlay of Rs. 30.00 lakh has been provided for 1991-92.

1.6.38 Regeneration/Rehabilitation of 'Magar'/Ghariyal : This scheme was sanctioned in 1975 with Central Assistance and is being continued in the Eight Five Year Plan. In order to rehabilitate dwindling population of crocodiles, artificial hatching of crocodile eggs collected from nature are reared at centers established at Kukrail and Katarniaghat, which are subsequently released in natural habitat when they are big enough to feed themselves.

1.6.39 During Seventh Five Year Plan state share of Rs. 25.00 lakh was approved. During 1985-90 expenditure is Rs. 42.82 lakh including central share. For Eighth Five Year Plan 1990-95 an outlay of Rs. 50.00 (state share) lakh has been proposed. The anticipated expenditure Rs. 5.00 lakh (state share) during 1990-91. An outlay of Rs. 7.00 lakh (state share) has been proposed for 1991-92.

1.6.40 National Chambal Sanctuary : This scheme was started in 1978-79 for the protection of 'Magar/Ghariyal' found in the river Chambal. In addition to, this 'Magar/Ghariyal' hatched and reared under another scheme are released in Chambal river.

1.6.41 For Seventh Five Year Plan Rs. 700.00 lakh (including Central Share) has been provided. During 1985-90 expenditure of Rs. 80.79 lakh was incurred including central share outlay of Rs. 130.00 lakh (state share) has been proposed for Eighth Plan 1990-95. For 1990-91 an expenditure of Rs. 5.00 lakh (state share) is anticipated. And an outlay of Rs. 20.00 lakh (state share) has been proposed for 1991-92.

1.6.42 Intensification of Wildlife Protection areas outside sanctuaries : There is no Wild Life Staff for the protection of wild life outside parks and sanctuaries. In view of this the scheme was proposed for seventh plan at an outlay of Rs. 80.00 lakh. But due to paucity of fund it could not be implemented. An outlay of Rs. 200.00 lakh has been proposed for Eighth Five Year Plan. For the year 1991-92 Rs. 30.00 lakh is proposed. No proposal was made for 1990-91.

1.6.43 Development of Wetland Sanctuaries : For the development of Wet land sanctuaries an outlay of Rs. 10.00 lakh has been provided for Seventh Plan. Against which an expenditure of Rs. 46.33 was incurred. For the year 1991-92 Rs. 30.00 lakh has been proposed against an anticipated expenditure of Rs. 6.75 lakh during 1990-91 outlay of Eighth Plan is Rs. 200.00 lakh.

1.6.44 Captive Breeding of endangered species : Due to constant inroads in Wild Life habitats the past, the population of certain species of fauna has diminished to such an extent that they are threatened with extinction. To achieve desired results, it will be necessary to supplement the existing population with captive breed stock so as to provide stable breeding nucleus for each species and then to provide ideal conditions for natural propagation of these species. It is proposed to augment the breed-stock of following species in the first phase.

1. Deer, antelope
2. Cats, Canines
3. Birds, Foils, partridge
4. Chinkara and Chausingha
5. Turdo
6. Pheasant

1.6.45 The outlay for the Seventh Five Year Plan was Rs. 40.00 lakh and the expenditure during 1985-90 was Rs. 49.96 lakh. For Eight five year plan Rs. 100.00 lakh has been proposed. Against anticipated expenditure of Rs. 4.50 lakh during 1990-91 an outlay of Rs. 15.00 lakh has been proposed for 1991-92.

1.6.46 Rehabilitation of Turtles : This scheme is being implemented with the assistance of Ganga Pollution Board. To minimise the pollution in various rivers the rehabilitation of turtles is being done under this scheme. At present one rehabilitation centre is functioning at Kukrail in Lucknow district. For 1985-90 expenditure is Rs. 26.59 lakh including central share. Against the anticipated expenditure of Rs. 4.00

(state share) during 1990-91 Rs. 10.00 lakh (state share) has been proposed for 1991-92 Outlay for Eighth Plan is Rs. 75.00 lakh.

1.6.47 Preservation of Mahsheer : Mahsheer is an important fish variety in hill rivers of U.P. found upto 1200 meter height. Construction of roads and dynamiting of hill streams cause great damage to this variety of fish. Hence to check illegal poaching of fish and to impose vagaries central measures including angling in suitable identified areas this scheme of protection and development of mahsheer fishing in hill rivers has been proposed for inclusion during Eight Plan Period. An outlay of Rs. 1.00 lakh has been proposed for this scheme for 1989-90 but could not be implemented. For Eighth Five Year Plan 1990-95 an outlay of Rs. 50.00 lakh has been proposed and for 1991-92 Rs. 10.00 lakh outlay is being proposed.

1.6.48 Establishment of Rajaji National Park . Rajaji National Park is being created by merging Rajaji, Motich and Chilla sanctuaries. During 1985-90 Rs. 414.45 lakh has been spent for land compensation & Guger rehabilitation. For Eighth Five Year Plan 1990-95 an outlay Rs. 500.00 lakh has been proposed. Against the anticipated expenditure of Rs. 9.00 lakh during 1990-91 outlay of Rs. 90.00 lakh has been proposed for 1991-92.

1.6.49 Development of Zoos : The state has two zoological parks at Kanpur and Lucknow for recreation, study and research. A good zoological park should have proper breeding facilities and there should be sufficient number of animal houses and enclosures to avoid discomfort to the animals. With this view in point renovation of existing enclosures, construction of new roads, modernisation of veterinary hospital, establishment of natural history museum and audio-visual hall, establishment of serpentarium, aquarium, well-in-aviary will be taken up.

1.6.50 For the Seventh Plan an outlay of Rs. 25.00 lakh is provided against which Rs. 41.98 lakh were spent during 1985-90. For Eighth Plan 1990-95 an outlay of Rs. 150.00 lakh has been proposed. Against an anticipated expenditure of Rs. 2.00 lakh during 1990-91 an outlay of Rs. 25.00 lakh is proposed for 1991-92.

1.6.51 Development of forest Parks : The importance of recreation forestry has now increased manifold as the demand of urban population desiring to move out of congested towns for recreation purpose is increasing day by day. This scheme envisages creation of new and maintenance of established forest recreation centres like Kukrail Park near Lucknow and Sarnath Park near Varanasi. This is a district plan scheme and there is great demand for creation of forest parks.

1.6.52 Against an agreed outlay of Rs.200.00 lakh for Seventh Plan an expenditure of Rs. 554.64 lakh has been incurred. For Eighth five year plan 1990-95 an outlay of Rs. 1408.31 lakh has been proposed. Against anticipated expenditure of Rs. 146.00 lakh during 1990-91 outlay of Rs. 275.22 lakh has been proposed for 1991-92.

1.6.53 Development of Ramgarh Lake : For the development and beautification of Ramgarh Lake in Gorakhpur district. During 1985-90 Rs. 235.42 lakh has been spent. An outlay of Rs. 50.00 lakh has been proposed for Eight Plan. Against an anticipated expenditure of Rs. 1.00 lakh during 1990-91 an outlay of Rs. 10.00 lakh has been proposed for the year 1991-92.

1.6.54 Establishment of Botanical Garden at Rae-bareilly : A botanical garden is being established in Rae-bareilly. Expenditure for 1985-90 is Rs. 44.18 lakh. An outlay of Rs. 100.00 lakh has been proposed for the Eighth Plan and an outlay of Rs. 20.00 lakh has been proposed for 1991-92.

1.6.55 Development of Kushinagar and Sarnath (Buddha Tirath) : There are many places connected with the life of Buddha which are of tourist interest. It is proposed to beautify such places. During Eighth Plan an outlay of Rs. 250.00 lakh has been proposed. Against Rs. 5.00 lakh for 1990-91 the for 1991-92 is Rs. 31.00 lakh.

1.7 Food Storage and Warehousing

Construction of Godowns by Food and Civil Supplies Department:

For successful implementation of the public distribution system, as also for the storage of wheat and rice procured under the support price scheme, it is proposed to construct 5000 M.T. godowns in each district of the state in a phased manner depending upon the availability of funds. This storage capacity under the Food and Civil Supplies Department will augment the storage capacity being created in the cooperative sector and by the state and Central Warehousing Corporations.

1.7.2. During the Seventh Plan period, there was a programme for constructing 11 godowns in the state. Out of these 7 have been completed creating a capacity of 35000 M.T. Four godowns are under construction after which the total capacity would reach 55000 M.T.

1.7.3. An outlay of Rs. 1250.00 lakh including Rs. 1200.00 lakh for hills has been proposed in the Eighth Five Plan (1990-95) for construction of 16 godowns. During the year 1991-92, 4 godowns are targetted for Construction with a proposed outlay of Rs. 210.00 lakh including Rs. 200.00 lakh for Hills.

Construction of Rural Godowns (Mandi Parishad):

1.7.4. To bring about orderly conditions of marketing and to ensure fair and remunerative prices to the primary producers, the Seventh plan laid emphasis on the development of primary and subsidiary market yards and the construction of rural godowns. Against the target of 200 godowns to be constructed during the Seventh five year plan period, 240 rural godowns having a capacity of 1.27 lakh M.T. and 2 cool houses were constructed upto the end of Seventh Plan. Besides, 149 main markets, 92 sub/rural markets and 22 fruits and vegetables markets were developed during the Seventh Plan period.

1.7.5. State assistance for the development of markets was suspended in 1988-89 as Mandi Parishad was considered to be independent to launch these programmes through its own resources.

1.7.6. During eighth five year plan (1990-95), it is proposed to establish additional 19 State Agmark grading laboratories, 138 commercial grading units, 8 supervisory commercial grading centres, 10 Mechanical Handling units and 19 farmers polyclinics. Besides, it is also proposed to construct and develop the new 49 main markets, 38 sub/rural markets and 17 fruits and vegetables market yards and 230 Hat and Panths.

1.7.7. For implementation of the programme mentioned above, an outlay of Rs. 17240 lakh for the 8th Five Year Plan and Rs. 4000 lakh for the year 1991-92 is proposed.

U.P. STATE WAREHOUSING CORPORATION:

1.7.8. The U.P. State Warehousing Corporation was established in 1958 under the provisions of central Act "The Agricultural Produce (Development and Warehousing) Corporations Act, 1956" which was afterwards repealed and replaced by the "Warehousing Corporations Act, 1962". This Corporation is equally shared by the two shareholders- State Government and Central Warehousing Corporation (A Govt. of India undertaking). The main function of this corporation is creation of scientific storage capacity for the storage of agricultural produce, seeds, fertilizer and notified commodities etc. and thereby minimising the storage losses due to pests, insects, rodents and moisture etc.

1.7.9 Before Seventh Five Year Plan, the constructed capacity of the Corporation was 9.16 lakh M.T. The Target during the Seventh Five Year Plan (1985-90) was 1.25 lakhs M.T. at an estimated cost of Rs.625 lakhs. The achievement against this target was 1.38 lakh M.T. and thus the total constructed capacity by the end of Seventh Plan was 10.54 lakh M.T. (9.96 lakh M.T. in plains & 57,534 M.T. in Hill Region).

1.7.10 For Eighth Five Year Plan period, the Corporation has chalked out a programme to construct a capacity of 1.50 lakh M.T. (1.14 lakhs in Plains and 0.36 lakhs in Hills). The proposed target for construction of godowns during the year 1991-92 is 27,000 M.T.

1.7.11 To Partially finance the construction programme of the Corporation the State Govt. contribute in the share Capital of corporation. An outlay of Rs. 400 lakhs (Rs. 50 lakhs for plains and Rs. 350 lakhs for hills) is proposed for this purpose for the Eighth Five Year Plan. For the year 1991-92, an outlay of Rs. 80.00 lakhs (Rs.10 lakhs for plains and Rs. 70 lakhs for hills) is proposed for State share participation in the corporation.

1.8 Agriculture Research and Education

Though the economy of state is predominantly agrarian, yet the practices of farming are more or less traditional. The reason is that people are conservative, economically backward and whatever research has been made, is not accessible to common cultivators.

1.8.2. In order to keep pace with the changes in other economic sectors like industry, agriculture sector also was contemplated to be backed up by research programmes in the field of foodgrain, pulses, oilseeds, vegetable and other commercial crops. Realising the need, three agricultural universities namely Govind Ballabh Pant University of Agriculture and Technology, Pant Nagar, Nainital, Chandrashekhar Azad University of Agriculture and Technology, Kanpur and Acharya Narendra Deva University of Agriculture and Technology have been established in the state. A brief account of these universities is given below:-

1.8.3. G.B. Pant University of Agriculture and Technology Pantnagar : The university was established in 1960, with the objective of development of agriculture technology for the specific needs of 8 hill and 12 western districts of the state. Accordingly the university is carrying out research work in the field of foodgrain crops, fruits, vegetable and water management. Besides, researches are also being conducted in the areas of linestocks, bio-techniques and non conventional energy resources. In the area of developing agricultural tools and implements appreciable work has been done by the university.

The university has developed many popular varieties of wheat, paddy, Gram, Peas and some varieties of oilseeds. some of these are as under :-

Wheat	:- UP1109, RR21, UP262, UP368
Rice	:- UPR-104,14,U.P.R.254.88-1
Soyabean	:- PK-472,PK471,PK564
Peas	:- UPC-287, Pea Pilot.2

1.8.4. C.S. Azad University of Agriculture Technology, Kanpur: This university was established in 1975. Two colleges, one for Agriculture at Kanpur and other for Animal Husbandry at Mathura are attached with this university. The university covers 22 districts of Lucknow, Agra, Allahabad and Jhansi divisions of the state.

1.8.5. The university is conducting researches on foodgrain crops conducive to regional agro-climatic characteristics. The university has developed more than 24 varieties of different foodgrain crops suitable to irrigated and unirrigated areas. Besides, the university is also doing research on soil texture and developing technology for salt affected and drought affected soils.

1.8.6. Some important varieties of seeds developed by the university are as under :-

Wheat	K-8020, K-8027, K-8434
Mustard	Y.S.K.8502
Maize	R-2, Gram-K.850, T.36, T.8, Arhar-T.17, T.7, T21

1.8.7. Animal Husbandry college is conducting researches in breeding technology and has developed new methods of semen collection for improving the breeds.

1.8.8. Narendra Dev University of Agriculture and Technology, Faizabad : This university was also established in 1975 and was assigned 15 districts of Faizabad, Gorakhpur and Varanasi divisions of the state. The university has 5 crop research centres where researches are being carried out on soil problems and farming conditions.

1.8.9. So far the university has developed about 31 varieties of rice, pulses, oilseeds and vegetables. Researches on waste land management, post harvest technology and new agro-technologies for situations like upland, low land, waste land have also been taken up. Apart from foodgrain crops the university is also working on fruits and vegetables. Some of the varieties are given below :-

Paddy	Suraj.52, Narendra, 1, 2, 80, 118, NDR-232, 97, NDR 626, 628
Peas	N.D.P. 1, 2, 3, 4 and 77
Gram	NDG-8608

1.8.10 An outlay of Rs. 2156.00 lakh including Rs. 256 lakh for hills was approved for Research and Education for Seventh Five Year Plan. Against this outlay an expenditure of Rs. 3055.33 lakh incurred by the end of 1989-90.

1.8.11. For the Eighth Five Year Plan an outlay of Rs. 4850.00 lakh including Rs. 1500.00 lakh for hills has been proposed.

1.8.12. During the Eight Five Year Plan, besides the research and educational work these universities would actively be involved in transfer of technology and research findings to the farmers through the proposed programme of agriculture extension in its third phase. It has also been proposed that these universities would take up such research programmes that would give positive results in a shorter time span. In order to boost up these programmes an outlay of Rs. 850.00 lakh inclusive of Rs. 250 lakh for hills, has been proposed for the year 1991-92.

CANE RESEARCH

1.8.12 Cane Development Department is sponsoring sugarcane research, education and training programme. The research programme are being conducted by the U.P. Sugarcane Research council at its research station, viz. Shahjahanpur, Seorahi, Laxmipur (Deoria) Kuraghat (Gorakhpur) Gola (Lakhimpur Kheri) Kalsipur (Nainital), Daurala (Meerut) and Muzaffarnagar. Under these programmes breeding of sugarcane varieties and their testing for suitability/adoptibility in different tract/soil of state are the primary programmes along with the multiplication of these varieties, control of pest and diseases is also under study. Training for the growers and field staff is being arranged by U.P. Ganna Kisan Sansthan, where theoretical and practical training is imparted in class rooms and field. Mobile training and training with audio-visual media is arranged by Sansthan.

1.8.13 The research programme under take by the U.P. Sugarcane council have yielded successful varieties like U.P.5, UP6, UP8, Cos 8118, Cos 8408, Cos 8214 Cos 8312 and Cos 8422 have been released for general cultivation while Cos 8009 Cos 8016 are suited for water logged areas. The evolution of Sugar varieties Cos 8434

being moderately disease resistant against redrot disease (M.R.) has better juice quality are being released for general cultivation in northern India.

An outlay of Rs. 1.75 cr. has been proposed for the Eighth plan of which Rs. 0.35 cr. are for the year 1991-92.

Forest

1.9.14 Considering the special social, ecological and conservation priorities of the area, research has to reorient itself to involve effective plantation and nursery technique so as to help in the selection of correct species in the massive afforestation programmes.

1.9.15 Keeping in view the importance of the research work the existing research organisation needs strengthening.

1.9.16 Outlay and achievement for Seventh Five Year Plan 1985-90, target for Eighth Five Year Plan 1990-95, target and anticipated achievement for 1990-91 and proposed targets for 1991-92 are shown in the following table :-

Table 1. 1
Outlays and Expenditure

Year	Financial (Rs. in Lakh)		
	Total	Hills	Plains
1. Approved outlay Seventh Five Year Plan 1985-90.	205.00	105.00	100.00
2. Achievement during Seventh Five Year Plan 1985-90.	169.78	110.44	59.34
3. Outlay proposed for Eighth Five Year Plan 1990-95.	325.00	200.00	125.00
4. Target for 1990-91.	30.00	25.00	5.00
5. Anticipated achievement for 1990-91.	30.00	25.00	5.00
6. Proposals for 1991-92.	35.00	30.00	5.00

1.9 Agricultural Financial Institutions

The U.P. Rajya Sahkari Krishi Evam Gramya Vikas Bank Ltd., was organised in March 1959 to provide long term Agricultural credit to the cultivator. The Bank advanced loan to the extent of Rs.503.85 crores upto March 31, 1990 against target of Rs.518.00 crores during the Seventh Five Year Plan.

1.9.2 During Eighth Five Year Plan period the Bank has chalked-out its lending programme to provide long-term credit loans to farm labourer, rural artisans, small scale and village industrial entrepreneurs, in addition to Minor Irrigation Scheme, with a view to provide employment opportunities and raise the economic standard of the rural masses. Purposewise details are as under :-

<u>Purpose</u>	<u>Amount (Rs. in Cr.)</u>
1. Minor Irrigation	665.00
2. Farm Mechanization	85.00
3. Diversified Schemes	106.00
4. Non-Farm Sector	70.00
5. Institutional Finance	33.00
6. Rural Housing Scheme	41.00

Total : 1000.00

1.9.3 Year wise lending targets are as under :

<u>Year</u>	<u>Targets (Rs.in crores)</u>
1990-91	150.00
1991-92	170.00
1992-93	195.00
1993-94	226.00
1994-95	259.00

Total : 1000.00

1.9.4 Management of financial resources : The main financial resource of the Bank is Debenture floatation. The programme of floatation of debentures during Eighth Five Year Plan period is as under :-

(Rs. in crores)

<u>Year</u>	<u>Ordinary Debenture</u>	<u>Special Development Debentures</u>	<u>Total</u>
1990-91	2.00	148.00	150.00
1991-92	2.00	168.00	170.00
1992-93	2.00	193.00	195.00
1993-94	2.00	224.00	226.00
1994-95	2.00	257.00	259.00
Total	10.00	990.00	1000.00

1.9.5. The Central and State Government Contributions in debentures and shares of the Bank is as under :-

<u>Year</u>	<u>State Govt. Contribution In debenture</u>	<u>Contribution In share</u>	<u>Total</u>	<u>Contribution of central Govt. In debenture</u>	<u>Total</u>
1990-91	5.25	1.00	6.25	5.25	11.50
1991-92	6.50	1.00	7.50	6.50	14.00
1992-93	7.80	1.00	8.80	7.80	16.60
1993-94	8.80	1.00	9.80	8.80	18.60
1994-95	10.00	1.00	11.00	10.00	21.00
Total	38.35	5.00	43.35	38.35	81.70

1.9.6 The Bank aims to benefit about 7 lakh cultivators during Eighth Five Year Plan period by creating additional irrigation potential of 20.77 lakh Ha. of land. The Bank has created irrigation potential of 71.66 lakh Ha. upto 31 March 1990. The Bank has introduced new scheme of Rural Housing during Eighth Five Year Plan. An outlay of Rs.3250.00 lakh has been provided Eight Five Year Plan for meeting State Government participation in the debenture and share capital of the Bank and an outlay of Rs.650.00 lakh has been year marked for the year 1991-92 for this purpose.

1.10 Co-operation

The Copoperative movement was started in 1904 as an alternative lending system. Ever since credit had been the backbone of the movement although new dimensions were always added to it to keep it at par with changes. It is a fact that the role of cooperatives in the development of the State had always been no less important.

1.10.2 Contribution of the cooperatives in the agricultural production is an established fact. Presently the share of cooperatives is about 30% in fertilizer distributions and 75% in short term credit distribution. Distribution of inputs shall be the focal point in the eighth five year plan. Upto the end of the plan period it is expected that the level of fertilizer credit distribution shall be doubled through an integrated approach. This shall be achieved by strengthening the PACS by opening new sale points, additional credit limits, timely and regular supply of inputs and strong monitoring.

1.10.3 It contributed a lot in the success of green Revolution and white revolution and it has accepted the challenge of yellow revolution which shall be other focal point of the Eighth five year plan.

1.10.4 Organisationally cooperatives are as follows:-

Apex	12
Primary Agricultural Credit Societies.	8597
District Cooperative Bank	57
Marketing Societies	268
Seed stores	2256

1.10.5 Cooperative credit plays an important role in providing agricultural inputs to the cultivators. The distribution of short term and Long Term credit reached the level of Rs.410 crore and Rs. 133 crore by the end of seventh five year plan and it is proposed to raise this level to Rs. 800 crore and Rs. 240 crore respectively by the end of eighth plan, in order to help achievement of increased targets of agricultural production in the eighth five year plan period. It will require massive efforts on the part of cooperative Department to achieve the big jump in the level of cooperative credit during the eighth plan.

1.10.6 Five Years Plan wise progress of distribution of cooperative credit and total inputs follows :-

(Rupees in crores)

Item	Achievements						
	I	II	III	IV	V	VI	VII
Short Term	5.58	24.61	40.90	64.65	163.48	232.46	409.80
Medium Term	-	6.51	6.63	35.43	16.80	30.98	59.20
Long Term	-	0.03	8.13	28.00	43.46	70.00	132.97
Agriculture Inputs (Fertilizer)	-	-	37.00	62.00	105.30	211.18	310.74

1.10.7 The targets for eighth five year plan are as follows:

(Rs. in crores)

Item	1990-91	1991-92	1992-93	1993-94	1994-95
Short Term	500	575	650	725	800
Medium Term	60	70	90	100	110
Long Term	140	150	190	210	240
Agr. Inputs	450	500	550	625	700

1.10.8 Upto the end of Seventh plan 91 cold storages existed in cooperative sector with 2.69 lakh M.T. capacity. An economic analysis of almost all these cold storages shows that it is an economic proposition which is also a weakening factor for the owning institutions. Hence more or less no new cold storages shall be constructed. However only those storages having less capacity may have additional chambers and iceplants. The network of godowns spreading upto the Nyaya Panchayat level have total capacity of 20 lakh M.T. During Eighth Five Year plan the godowns of only those weak cooperative societies (PACS) which are either defunct or nominally functional, may be constructed to make them more functional and useful.

1.10.9 Details of the important programmes proposed in eighth five year plan are as follows :-

1.10.10 Training, Education, Research and Publicity: U.P. cooperative union underakes the responsibility to educate the masses, train the grass-root level workers and propagate the recent trends and dimensions added to cooperatives among the public at large. It has training centres in all the Division except Allahabad & Lucknow. It is proposed to equip these training centres sufficiently to develop them as the nucleus of cooperative Training Programme and awareness centres for members.

1.10.11 Co-operative Credit: Credit still remains to be the nodal point of cooperative movement. Despite short NODC (300 crores among 45 DCBs) and poor recoveries due to natural calamities, this scheme has made much headway. Loan waiver scheme had been a big milestone. Rs. 8421.16 lakhs & 1426.76 lakhs are provided for 1990-95 & 1991-92, to provide Govt. assistance to the cooperative credit institution in order to help them achieve the target of credit distribution for agriculture.

1.10.12 Storage: Out of 8597 PACS, about 500 PACS are still without any godown and office. But (50MT) godowns are needed to make them functional. Hence an outlay of Rs. 645.23 lakh is proposed.

1.10.13 Processing Units: The programme to revitalise and reorganise the sick processing units will continue. Oilseed programme shall be undertaken in Jhansi-Kanpur-Allahabad-Agra-Meerut belt with the support of NCDC and NDDB in which development, marketing and processing of oilseeds & their products shall be the integral fact. In a decentralised structure, small oilseeds societies shall be organised which shall provide seed & other inputs to members and procure their produce at market rates. For processing 3 units shall be installed in this belt. Only 15% is to be borne by State Government rest shall be received from the above financing agencies Rs. 1225.94 lakhs have been proposed for 1990-95. This scheme will definitely create opportunities for self employment in rural areas.

1.10.14 Cold Storage: Existing cooperative cold storages (91) have proved to be uneconomic ventures. Hence no new cold storage has been proposed except increasing the capacity of the existing ones. An outlay of Rs. 402.84 lakhs is proposed.

1.10.15 Consumers: The task of making essential goods available in the rural areas, was successfully performed by the cooperatives. Although private sector has re-entered in the PDS scheme yet cooperatives distributed the items worth 396 crores in rural area. The real obstacle is margin money to enable the societies to have sufficient credit units. Hence assistance worth Rs. 1015.97 lakh is proposed in 1990-95.

1.10.16 Marketing: P.C.F. is the apex and pioneer institution in the distribution of fertiliser and in marketing/procurement of agricultural produce. It too requires margin money/share capital. The programme to rehabilitate marketing cooperatives shall continue.

1.10.17 Agriculture Inputs: There are about 12000 sale points but more are to be opened to meet the requirement. To make them economically viable, assistance on tapering basis is proposed. Distribution of 3.97 lakh quintal of HYV seed is an all time record which shall be further increased. An outlay of Rs. 622.66 lakh is proposed for 1990-95.

1.10.18 Fruits and Vegetables: Mainly in Hill region, the scheme has U.P. Cooperative Apple & Fruit Federation as an apex institution. As per the recommendation of IRMA, this institution must expand its branches. Since the business involves a great risk a meagre assistance of Rs. 35.18 lakh is proposed for Hills.

1.10.19 Drugs and Herbs: Although an skilled work, .the herb collection & processing task is being well undertaken in fruit belt through PACS/LAMPS and Bsheshaj Sangh. PCF has drug factory at Ranikhet. An outlay of Rs. 98.71 lakh is proposed for 1990-95.

1.10.20 ICDP: It is NCDC's prestigious scheme to integrate the entire cooperative movement. To begin with, the programme was started in selected districts. Reports for Varanasi, Jaunpur are under appraisal of NCDC. and those for Raebareli and Gorakhpur are under preparation. It will involve about 150 crores-major part to come from NCDC. which will provide developments of cooperative in all fields. An outlay of Rs. 115.84 lakh is provided.

1.10.21 Labour Sector: Due to assistance provided by State Govt. U.P. Labour Cooperative federation. could come on profit and clear all previous losses. It is coming up as a real apex of labour cooperatives. To strengthen it, assistance for share and implements is proposed. Those belonging to schedule caste/schedule tribes are proposed to be assisted to become members of labour cooperative hence interest free loan is proposed.

1.10.22 An outlay of Rs.124.75 lakh is proposed for 1990-95.

Cooperative Audit Organisation

1.10.23 An effective and efficient audit is necessary for healthy growth of Cooperative movement. Cooperative and Panchayat Audit Organisation ensures audit of all types of Cooperatives and Panchayat Institutions at least once in a year. The organisation brings to light cases of fraud, embezzlement, misappropriation and manipulation of accounts in the cooperative institutions by detecting them in time. It also prevents their recurrence and esures timely action.

1.10.24 Up to March 31,1990 as many as 33128 special reports regarding serious irregularities, misaporopriation of funds and embezzlement of cash and stock, valuing Rs.20009.99 lakh in various Cooperative institutions are pending with concerning departments for necessary action.

1.10.25 It is clear that cases of fraud, embezzlement misapropriation and amount involved therein is increasing in geometric progression. It is very necessary to strengthen the cooperative and panchayat audit organisation to prevent irregularities. The present set up of 1700 auditors, 797 Senior Auditors Grade II, 71 Senior Auditors Grade-I 29 Audit Officer Grade-II,42 Audit Officers Grade-I, and 8 Deputy Chief Audit Officers (Appex) needs further strengthening to meet the increasing requirements due to tramendous growth in work and expansion of cooperative institutions .

1.10.26 A large number of Cooperative Societies were left un-audited in the past, mainly due to shortage of staff. Table I below shows the figures relating to societies allotted, societies audited and balance as on 30th. June of various Cooperative years starting from 1981-82:

Table 1.10.1
Figures relating to societies audited and balances

Audit Year	Auditable	Audited	Unaudited
ending on 30th. June	Cooperative. Societies	Cooperative Societies	Cooperative Societies
1981-82	23155	18514	4641
1982-83	23238	18259	4999
1983-84	23218	17550	5668
1984-85	23187	16403	6784
1985-86	24166	15846	8320
1986-87	24759	14781	9978
1987-88	25437	14136	11301
1988-89&89-90	26113	10496	15617
(Audit of two years due to change of year)			

Note:- Panchayat institutions are not included in the above table.

Seventh Plan Progress

1.10.27 An outlay of Rs. 420.88 lakh (Rs.327.62 lakh for plain + Rs.93.26 lakh for Hill) was sanctioned for seventh five year plan against which the expenditure up to the end was Rs.415.53 lakh.

1.10.28 Annual audit of all cooperative and panchayat institution requires 10,71,441 days (991631 for Plain area + 79810 days for Hill area). On the basis of 240 man days in Plain and 216 man days for Hill area per auditor, the department requires 4499 audit staff

1.10.29 During the Eighth Five year Plan the requirement of posts etc. are proposed as below:-

1.10.30 Audit of District Cooperative Banks and Milk processing

units : The audit of District Cooperative Banks having the working capital more than Rs.12.50 crores is to be conducted under the supervision of Audit Officer Grade-II. At present there are 29 District Cooperative Banks (23 in Plain area + 6 in Hills area) whose working capital is more than Rs. 12.50 crores. There are 6 Milk Processing unit which require annual audit.

1.10.31 Audit of Cooperative sugar Factories is to be conducted under the supervision of Audit Officer Grade I for efficient audit and better performance. Cooperative Sugar Factory, Asneh Road Najibabad Distt. Bijnore and Cooperative. Sugar Factory, Basgaon Distt. Gorakhpur having the capacity of more than 1250 Mt. Ton can crushing are working since the year 1987-88. these factories require annual audit .

1.10.32 Audit of Primary Urban Cooperative Banks :- In all 40 Primary/Urban Cooperative Banks are functioning in the State out of which 38 Banks are in Plain Area and 2 are in Hill Area. The

mode of working and services rendered by these Primary Urban Cooperative Banks are almost the same as those of the District Cooperative Banks.

1.10.33 Out of 40 Primary Banks in U.P. 23 Primary banks are having working capital more than Rs.150 lakh on average in Plain area. These banks need annual audit under supervision of Senior Auditor.

1.10.34 The department runs a training centre at Ayodhya for training auditor of cooperative and panchayat department. The training centre imparts necessary training to newly recruited auditors and Regional Audit Officer (recruitment of which is made through U.P. Public service Commission). Department is planning to provide specialised training to the audit staff so that with an improved technical know how the audit of various important institutions viz. sugar Factories, Textile Mills, Milk Union, Processing units may be conducted in a much better fashion with fruitful results. For this very purpose the department is trying to make necessary arrangements at Training centre. The training centre needs to be better equipped to achieve the required goal.

1.10.35 In order to cope with the audit work of the cooperative institution mentioned above, it is necessary to strengthen the existing staff of the audit organisation. An outlay of Rs. 27.00 lakh (Rs. 25.00 lakh) for plain and Rs. 2 lakh for hill) is required for the year 1991-92 and Rs. 182.00 lakh is proposed for eighth five year plan including Rs.12.00 lakh for Hills.

1.10.36 Revenue: It is also to mention that the department recovers audit fee from institutions for the work of audit. Audit fee is a Government revenue.

1.10.37 The following table shows the expenditure (Plan and Non Plan) of the department and realisation of audit fee (i.e. Income).

Table 1.10.2
Plan and Non Plan Realisation of Audit Fee
(Rs.in lakh)

Year	Expenditure Plan		Total	Non Plan Expendi- ture	Total Plan & Non Plan Expenditure	Audit fee Realised
	Plain	Hill				
1985-86	39.97	3.00	42.97	459.48	502.45	328.13
1986-87	45.18	13.26	58.44	501.87	560.31	338.93
1987-88	54.92	18.73	73.65	566.51	640.16	331.45
1988-89	83.59	25.97	109.56	677.14	786.70	350.23

1.11 Other Agricultural Programme

Agricultural Marketing : The transition from a situation of scarcity to that of Agricultural surplus has highlighted the imperative need for adoption of appropriate marketing strategies for bringing about orderly conditions of marketing of Agricultural produce and ensuring fair and remunerative prices to the primary producers including small and marginal rural farmers in disposal of their produce.

1.11.2 For the above objectives, the eighth five year plan aims at the followings :-

(a) To lay greater stress on market extension & publicity for popularising the programmes relating market intelligence commercial grading, agmark grading, regulation of markets & their practices etc. for the benefit of producers as well as consumers.

(b) To promote market survey and research work for the development of markets in the state and to investigate the market problems of the producers.

(c) To promote agmark grading apart from commercial grading programmes at the producers level so as to develop quality consciousness among producers and consumers.

(d) To enforce the compulsory agmark grading in mustard oil and spices under the agricultural produce (grading & marketing) Act 1937 of Govt. of India, for providing better and pure quality of these to consumers.

(e) To facilitate producers/sellers and rural farmers by solving all sorts of their problems by establishing the farmers polyclinics in regulated markets specially in Hill areas. The polyclinics will solve the problems of Agriculture, Horticulture, Irrigation, Animal husbandry and marketing at one place in regulated market yards.

(f) To develop market yard facilities in the close proximity of the rural areas.

1.11.3 The total proposed state plan outlay for Eighth Plan is Rs.125.00 Lakhs including Rs.75.00 Lakhs for the Hills. Proposed programmes are to reorganise the department and Directorate of Agricultural Marketing, to establish State Agmark Grading Laboratory in Deharadoun of Garhwal region, 10 Mechanical Handling units in regulated markets and 19 Farmer's Polyclinics in regulated markets of Hill areas.

1.11.4 Central Sector Scheme : Central assistance as grant-in-aid to Mandi Parishad for development/construction of 49 Main markets, 38 sub markets, 17 fruit and vegetable markets and 230 rural markets are proposed in eighth plan period. An outlay of Rs.750.00 Lakhs is proposed for the above development programmes to Mandi Parishad through central plan.

1.11.5 Externally aided scheme : During the eighth plan period external aid is envisaged for establishment of 138 commercial grading units in regulated markets and 18 AGMARK grading laboratories in the state. An outlay of Rs.75.05 lakhs is proposed as grant-in-aid through Mandi Parishad, U.P.

1.11.6 All the proposed plans of agricultural marketing are meant for direct benefits to the farmers of rural areas.

ANNEXURE-1

NUMBER OF MILCH ANIMALS IN THE STATE AS PER LIVESTOCK

CENSUS OF 1982

PARTICULARS	OPERATION FLOOD AREA	MILK PLAINS	BOARD HILL	AREA TOTAL	STATE TOTAL
(1)	(2)	(3)	(4)	(5)	(6)
1.Total Cows	14087082	10154283	1909929	12064212	26151294
2.Total Buffaloes	10779823	4237634	767461	5005095	15784918
Total (1+2)	24866905	14391917	2677390	17069307	41936212
3.Breedable Cows	3535732	2448302	632533	3080835	6616567
4.Breedable Buffaloe	5355562	2062473	487745	2550218	7905780
Total (3+4)	8891294	4510775	1120278	5631053	14522347
5.Cows in Milk	1781068	1103961	315112	1419073	3200141
6.Buffaloes in Milk	3213543	1096536	282729	1379265	4592808
Total (5+6)	4994611	2200497	597841	2798338	7792949

Annexure-II
EIGHTH FIVE YEAR PLAN
(1990-91 TO 1994-95)
PROPOSED PHYSICAL TARGETS

PARTICULARS	PROGRESS AT THE END OF MARCH '90	PROPOSED TARGET AT THE END OF 1994-95
1. <u>Number of Milk Unions</u>		
A. Operation Flood Area	28	28
B. Milk Board (Plains)	8	21
C. Milk Board (Hills)	9	9
Sub Total (B+C)	17	30
Total (A+B+C)	45	58
2. <u>Number of Districts Covered</u>		
A. Operation Flood Area	28	34
B. Milk Board (Plains)	8	21
C. Milk Board (Hills)	8	8
Sub Total (B+C)	16	29
Total (A+B+C)	44	63
3. <u>Number of Functional Societies</u>		
A. Operation Flood Area	5316	9990
B. Milk Board (Plains)	607	3240
C. Milk Board (Hills)	452	1205
Sub Total (B+C)	1059	4445
Total (A+B+C)	6375	14435
4. <u>Farmer Membership (in 000)</u>		
A. Operation Flood Area	381.03	687.00
B. Milk Board (Plains)	37.89	158.00
C. Milk Board (Hills)	18.04	61.40
Sub Total (B+C)	57.93	219.48
Total (A+B+C)	438.96	906.48
5. <u>Average Dairy Milk Procurement (LAC LPD)</u>		
A. Operation Flood Area	3.99	10.07
B. Milk Board (Plains)	0.17	1.49
C. Milk Board (Hills)	0.15	0.43
Sub Total (B+C)	0.32	1.52
Total (A+B+C)	4.31	11.99
6. <u>Peak Milk Procurement (LAC LPD)</u>		
A. Operation Flood Area	5.83	16.11
B. Milk Board (Plains)	0.26	2.23
C. Milk Board (Hills)	0.23	0.64
Sub Total (B+C)	0.49	2.87
Total (A+B+C)	6.32	18.98

Annexure-II(Concl.d.)

PARTICULARS	PROGRESS AT THE END OF MARCH '90	PROPOSED TARGET AT THE END OF 1994-95
7. <u>Average Liquid Milk Sales (LAC LPD)</u>		
A. Operation Flood Area	2.27	10.51
B. Milk Board (Plains)	0.19	1.25
C. Milk Board (Hills)	0.28	0.49
Sub Total (B+C)	0.47	1.74
Total (A+B+C)	2.74	12.25
8. <u>Peak Liquid Milk Sales (LAC LPD)</u>		
A. Operation Flood Area	2.62	12.61
B. Milk Board (Plains)	0.19	1.50
C. Milk Board (Hills)	0.33	0.59
Sub Total (B+C)	0.52	2.09
Total (A+B+C)	3.14	14.70
9. <u>Milk Processing capacity (LAC LPD)</u>		
A. Operation Flood Area	4.80	11.30
B. Milk Board (Plains)	0.40	1.30
C. Milk Board (Hills)	0.25	0.95
Sub Total (B+C)	0.65	2.25
Total (A+B+C)	5.45	13.55
10. <u>Milk Chilling Capacity (LAC LPD)</u>		
A. Operation Flood Area	2.70	7.20
B. Milk Board (Plains)	0.36	0.50
C. Milk Board (Hills)	0.06	0.23
Sub Total (B+C)	0.42	0.73
Total (A+B+C)	3.12	7.93

CHAPTER II

RURAL DEVELOPMENT

2.1 Special Programme for Rural Development

Integrated Rural Development Programme:

Integrated Rural Development Programme is to continue during 8th plan as part of package of poverty alleviation programme, to reduce unemployment and to make the minimum requirements available to the rural population for improving their quality of life. According to the new strategy adopted to revitalise the execution mechanism the following points for action have been suggested :-

1. Stress will be laid on consolidating the gains of 7th Five Year Plan by Providing innovative projects and sufficient unit investment to all the targetted families so that they may cross the poverty line.
2. The families belonging to SCs and STs will be given priority. At least 50% of the selected families will be taken for assistance from SC/ST families. In hill areas, the percentage of SC/ST families will be 30% of the target and the target of plain region is 60%.
3. Atleast 40% of the beneficiaries should be women, particularly women headed households should be given priority, Special schemes to improve their economic status will be undertaken during the year on a group basis.
4. Another significant feature of this new strategy is that the programme execution machinery has been made more responsive by inclusion of Gaon Sabha and public representatives in the selection process of beneficiaries. Beneficiaries advisory committees at village and block level have also been constituted to assist and advise in programme execution.
5. Moreover, role of voluntary organisations has also been recognised and they will be associated more closely and actively with the programme to accelerate the progress of these identified families.
6. Poverty line has been defined in terms of annual family income. A family having annual income of Rs.6400/- or less is considered to be a family below the poverty line. But for the purposes of identification of eligible families below poverty line for assistance, the cut off point has been fixed at Rs. 4800/- for annual income per family. Therefore, D.R.D.As will ensure hundred percent coverage of families having annual

income upto Rs. 3500/- first, then after exhaustion of the first category, they will select the families in the income group of 3501 to 4800/- per annum.

7. The entire Programme will be so dovetailed with other sectoral programmes like O.F.II, Handloom and Sericulture, Social Forestry, Cattle Development and Agricultural Production etc. so that maximum benefits flow to these poor families

2.1.2 Total coverage of the families in the seventh plan was 33.60 lakh including 2.32 lakh benefitted in Hill Region of the state. During the first year of the eighth plan 1990-91, 4.68 lakh total families are likely to be benefitted, involving plan expenditure to the tune of Rs. 8118.00 lakh as state share. In the hill District the number of families targetted is 0.27 lakh.

2.1.3 The targets for the year 1991-92 have been fixed at 4.31 lakh families in all and financial outlay has been proposed as Rs. 8575.00 lakh out of which Rs. 800.00 lakh is proposed for hill districts and the remaining Rs. 7775.00 lakh for plain areas. The break-up of Rs. 8575.00 lakh is as follows:-

	(Rs. in lakh)
1. IRDP subsidy and infra-structure	8080.00
2. Administration (Block Staff)	228.00
3. Trysem	157.00
4. D.W.C.R.A.	110.00

TOTAL	8575.00

Total plan outlay of Rs. 42000.00 lakh is proposed for 8th plan period. Total families to be benefitted would be 18.53 lakh.

TRYSEM

2.1.4 The centrally sponsored scheme of training rural youth, Trysem was started on 15th August, 1979. It is a component of I.R.D.P. The objective of the scheme is to provide technical skills to rural youth living below the poverty line to enable them to take up self employment under I.R.D.P. Stipend to selected trainees and honorarium to the training institution is provided according to norms fixed by Government of India. Funds for strengthening infrastructural facilities of the training institutions are shared on a 50;50 basis by the central and state government

2.1.5 Three thousand and sixty lakh youths are proposed to be trained in the eighth plan period. Under this programme, Rs.785.00 lakh are proposed to be spent as non-recurring grant for strengthening training infrastructure during the plan period. But as TRYSEM is a centrally sponsored scheme, expenditure on which is shared by the state and the central Govt. on 50:50 basis, the proposed targets are subject to change as per direction of Govt. of India.

Annual plan 1991-92

2.1.6 It is proposed to train 0.72 lakh youths during 1991-92 under the programme. The expenditure on training will be borne out from I.R.D.P., Rs. 157.00 lakh have been proposed as the state share to strengthen the infrastructural facilities of training institutions.

Priorities and strategies during 1991-92

2.1.7. The priorities and strategies proposed for annual plan 1991-92 are as follows :-

- (1) It will be ensured that the training institution has adequate technical and Physical infrastructure before sending trainees to it.
- (2) Sanction of the loan during the training period would be ensured.
- (3) Better follow up of trainees during and after training and establishment of business will be ensured.
- (4) Supply of raw material required under the project and marketing of finished goods will be ensured by the training institution/DRDA concerned.
- (5) Training is proposed to be linked to the nature of job opportunities to be created as a result of implementation of the various rural development programmes e.g. bio-gas, smokeless chulha, minor irrigation etc.

Development of Women and children in Rural Areas(DWCRA)

2.1.8 The main objective of the programme is to improve economic status of rural women living below the poverty line. The programme is currently being implemented in 200 blocks of 21 districts of the state.

2.1.9 It has been proposed that out of a total number of 28.60 lakh beneficiaries to be benefitted under I.R.D.P. during the eighth plan period, 11.44 lakh will be women beneficiaries, 1.00 lakh will be assisted under D.W.C.R.A. programme. Accordingly 5000 new women groups will be organised with an additional membership of 1.00 lakh involving a proposed outlay of Rs. 525.00 lakh over the plan period.

Annual plan 1990-91

2.1.10 During 1990-91 five more new districts have been taken up under the programme. It is proposed to organise 1302 new groups with a total membership of 26000:

2.1.11 These women will be given economic activities which will enable them to rise above poverty line. The amount of Rs. 5100 per group for economic activities including Rs. 100 for travelling allowance to each group organisor will be provided from the State Budget for which Rs. 76 lakh will be required. An equal amount will be provided by the central Govt.

2.1.12 The pay and allowances amounting to Rs. 24.00 lakh of the following posts who are not on non-plan budget will have to be met from out of programme funds.

1. Assistant Project Officer (Women)	21
2. Assistant Development Officer (Women)	50
3. Village Level Worker (Women)	200

- Thus, the total requirement offunds will be Rs. 100 lakh.

Annual plan 1991-92:

2.1.13 Duringg 1991-92 an outlay is proposed as Rs. 110.00 lakh and groups to be organised 1000 with a total membership of 20000.

DROUGHT PRONE AREA PROGRAMME

2.1.14 Drought Prone area programme is an area development programme. The unit of area planning is a micro-watershed. The main objective of programme is reatoration of ecological balance, Drought Proofing, increasing the Productivity and generation of additional employment potential for improving the economic status of weaker section of society.

2.1.15 It is a centrally sponsored district plan programme. The ratio of central and State share is 50:50. An outlay of Rs. 4000/- lakh (State share only) has been allocated for the eighth plan period (1990-95).

2.1.16 The programme is being implimented in the state since 1974-75. At present it is being implimented in 87 Development Blocks of 17 Districts including 30 Blocks of 5 Hill Districts also. The programme is proposed to be continued during 8th plan period also. Additional Districts/Blocks may be taken up in accordance to the sanctions if obtained, from Govt. of India.

2.1.17 It is a multi-disciplinary programme .The execution of works is done by the concerned line departments. The unit of planning and execution is micro-watershed. According to the guide lines of Government of India. The weightage of sectoral allotment (financial) is as under:-

	<u>Sector</u>	<u>Weightage Percentage</u>
1.	Soil and Water Conservation	30
2.	Afforestation and Pasture Development	25
3.	Development of Irrigation Potential	20
4.	Other Works	15
5.	Project Administration	10
TOTAL-		<u>100</u>

2.1.18 To improve upon and remove the shortcomings in preparation of Annual Action Plans by the Districts, new direction have been issued from Government level, for planning, execution and maintainance of works, during 8th plan period.

2.1.19 In formulation of Annual Action Plans by the districts now main emphasis is being given to the following aspects.

1. For the intergerated development of the micro-watershed, all necessary treatments shall be prescribed.
2. Selection of sites shall be done before hand for the works proposed by different departments in the Micro-watershed.
3. The works to be done by different departments shall be so co-ordinated as to provide employment to the maximum number of localpopulation and to increase the productivity of the area and income of the population.
4. Proper co-ordination shall be established between the works to be done by different departments. To this effect instructions have been got issued by the heads of departments to the concerned officers.

5. Participation and cooperation of the beneficiaries/Gram Subha shall be ensured in project formulation, planning, execution, follow up and maintenance of works. This involvement will also generate interest in them for proper maintenance of permanent assets created under the scheme.
6. To maintain the technical quality of works, the designs/drawings and estimates of works shall be got approved by the competent authority of the concerned line department, as per norms fixed by the department. This shall be done while preparing the annual action plan.
7. To ensure maximum amount to be spent on works, curb unwanted expenditures and enforce economy in project administration, the staff of soil conservation units borne on D.P.A.P. budget is being sent back to agriculture department. The staff of multidisciplinary units Paid from DPAP budget is also being sent back to their respective parent Departments.

Eighth Plan

2.1.20 An outlay of Rs. 4000 lakh (State share) has been proposed for the eighth plan period. Equivalent amount is expected as central share from G.O.I. In this way a total amount of Rs.8000 lakh is expected for the programme during eighth plan period. An area of about 1.25 lakh Hectares is proposed to be treated for it different treatments. Expected benefits of the programme are as under ;

1. Soil and Water Conservation Treatment of Problem area 65,000 Ha.
2. Afforestation and Pasture Development 40,000 Ha.
3. Water Resources Development-Creation of additional irrigation potential 20,000 Ha.
4. Improvement in income of local population by other works such as Horticulture, Animal Husbandry, Pisciculture, Sericulture, etc.
5. Improvement in the productivity of area.
6. Improvement in ecological balance and drought proofing of the area as a result of aforesaid treatment.
7. To provide additional sources of employment to the local population by creating approximately 320 lakh. Man-days during eighth plan period. This will also increase their income.
8. About 35,000 S.C/S.T. families will be benefited.

2.2 Rural Employment

JAWAHAR ROZGAR YOJNA

Since April 1, 1989 the twin employment generation programme, National rural employment programme and Rural landless employment guarantee programme have been merged into a single new rural employment programme viz. Jawahar Rozgar Yojna.

Financial and physical achievement during Seventh Five Year Plan:

2.2.2 During Seventh Five Year Plan an outlay of Rs. 302.09 crores was approved including Rs. 4493.00 lakh for Hill against which an expenditure of Rs. 340.15 cr. was incurred. During this period 3959 lakh mandays have been created against a target of 2400 lakh mandays.

Objectives of Jawahar Rozgar Yojna :-

1. generation of additional gainful employment for the unemployed and underemployed persons, both men and women. in the rural areas living below poverty line.
2. Creation of sustained employment by strengthening rural economic infrastructure and also assests in favour of rural poor for their direct and continuing benefits and improvement in the overall quality of life in the rural areas.

Salient Features of Jawahar Rozgar Yojna

1. Preference shall be given to SC/ST for employment under the scheme.
2. Thirty percent of the employment opportunities under the Yojna will be reserved for women.
3. The expenditure under the programme is shared between the centre and the state Govt. in the ratio of 80:20.
4. Twenty percent of the outlay has been earmarked for million wells scheme.
5. A maximum of 2% of the annual allocations can be spent on administrative/contingent expenditures of all levels.
6. About 5% of the outlay has been earmarked for Indira Awas Yojna.
7. DRDA's may spend a maximum of Rs.50,000/- to meet training expenses of the officials/Non officials involved in the implementation of JRY (Programmes).

8. After deducting funds earmarked for I.A.Y.M.W.S. administrative training expenditure from the outlay the balance amount is split up into two streams. viz.

(1) Not less than 80% of the balance is to be distributed to Gram Panchayats for the purposes of allocation of funds to the village Panchayats. The population of each village Panchayat having less than 1000 population will be taken as 1000 and more than 10,000 as 10,000. The population of scheduled castes/scheduled tribes will also be adjusted accordingly. 60 percent of the resources earmarked for village panchayats will be distributed on the basis of adjusted scheduled castes/scheduled tribe population and 40 percent on the basis of adjusted total population.

(2) Not more than 20% of the funds are retained at D.R.D.A. level for completing spill over works and for inter village/inter block schemes.

9. Gram Panchayats have the sole authority to select, sanction and implement the works according to the felt needs of the village.

10. Not more than Rs. 250/- and 10% of the funds allotted to a Gram Panchayat can be spent for purchase of stationery etc. and for maintenance of old projects respectively which will be the first charge. After deducting the first charge at least 15% of the balance is to be compulsorily utilised on individual beneficiary schemes for scheduled caste/scheduled tribe. The same rule applies to D.R.D.A. share of funds except the provision of Rs. 250/- for purchase of stationery.

2.2.3 During the eighth Five Year Plan an outlay of Rs.57000 lakh has been approved including Rs.4500 lakh for hill area. A target of 1961 lakh mandays employment generation has been fixed in the Eight Five Year Plan.

2.2.4 An outlay of Rs. 115.25 cr.including Rs. 150 Lakh for N R E G S programme has been approved for the annual plan 1990-91 including Rs. 954.00 lakh for Hill Area. A target of 1703 Lakh mandays employment generation has been fixed.

Annual Plan 1991-92:

2.2.5 An outlay of Rs. 110.00 cr. including Rs. 2.00 cr. for N R E G S programme has been proposed for the year 1991-92 including Rs. 12.00 cr. for Hills. Target for mandays generation is 1736 Lakh mandays has been proposed.

2.3 Land Reforms

Consolidation of holdings

Consolidation of Holdings, besides being an important instrument of land reforms, is also one of the pre-requisite for successful agricultural planning. Consolidation works as a corrective to the ill effects of sub-division and fragmentation of holdings and also helps to rectify land records. It is also a powerful medium for multifacet development of villages. Through this, an attempt is made to ensure that entire land of cultivators is brought to one place and every consolidated chak is provided with an approach road and irrigation channel. Land is also provided for extension of abadi of harijans and weaker sections, besides sector roads, inter-village roads and link roads. Provision is also made for reserving land for public purposes like thrashing floor, school, play ground, cremation ground, grave yard, manure pits, pasture land, hospital, panchayat-ghar, plantation of trees, and other public utility. The land for public purposes is deducted as voluntary contribution from the holdings from 3 to 5 percent. If there is any development scheme in the village, the percentage of deduction can be increased to the maximum of 10 percent.

2.3.2. The consolidation of land Holdings in Uttar Pradesh was first taken up in 1925-26 through the agency of co-operative societies. In 1939 the U.P. consolidation of Holdings Act was passed, which contained provisions for voluntary Consolidation. After the abolition of Zamindari in the state, the scheme of Consolidation was taken up as an integral part of land reforms and the U.P. Consolidation of Holdings Act 1953 was enacted, which provided for compulsory consolidation. The work of consolidation was first started in a well-organised and planned manner in 1954 in tahsil Kairana of district Muzaffarnagar and in tahsil Musafirkhana of district Sultanpur and subsequently it was extended to other districts of the state.

2.3.3. Initially villages having 80 percent cultivated area, were taken up for consolidation. This scheme became so popular that there was pressing demand for consolidation even in the non-consolidation areas. Owing to this, the norm of 80 percent cultivated area of a village was reduced to 60 percent and from 60 percent to 40 percent consolidable area for including the village in the scheme. The popularity of the scheme grew immensely and keeping in view the public demand, the norm of 40 percent cultivated area of a village had to be reduced even to less than 30 percent. With the change in norm, the consolidable area has increased to a considerable extent.

2.3.4. Initially, the total area of the state requiring consolidation was estimated to be 146 lakh hectares, which has, due to change of norm as mentioned above, gone upto 160-94 lakh hectares excluding an area of 69.76 lakh hectares of second round of consolidation. Out of this, by the end of seventh five year plan, transfer of possession over new chaks had been effected over an area of 175.95 lakh hectares at a cost of Rs. 28850.58 cr. The break-up of work done during each plan upto the seventh five year plan and expenditure thereon is given in Table 2.3.1 :-

Table 2.3.1

Physical progress and financial expenditure

Period of Plan	Area taken up for Consolida- tion (Lakh hect.)	Expenditure (Rs. In Lakh)
(1)	(2)	(3)
1. First five year plan	0.76	77.26
2. Second five year plan	21.06	691.30
3. Third five year plan	45.61	1120.40
4. Three adhoc plan	21.53	1045.03
5. Adhoc two yearly plan (1978-79 to 1979-80)	7.19	1615.54
6. Fourth five year plan	26.38	2311.24
7. Fifth five year plan	19.14	2804.60
8. Sixth five year plan	18.20	6411.01
9. Seventh five year plan	16.08	12774.20
Total :-	175.95	28850.58

2.3.5. In the first round of consolidation, the delivery of possession over new chaks has been effected over 157.86 lakh hectares by the end of March, 1990 leaving a balance of 3.08 lakh hectares.

2.3.6. With a view to making the scheme more beneficial to the cultivators, some important amendments in U.P. Consolidation of Holdings Act 1953 were made in 1963. The amended Act provided for the implementation of rectangulation scheme, compulsory partition of Joint holdings, chak sector roads, inter-village roads, Adadi sites for Harijans and weaker sections etc. The cultivators of those areas where consolidation work was completed prior to the

afore said amendment, pressed for second round of consolidation, so as to enable them to avail the benefits of the amended Act. As such, it was decided to start second round of consolidation in 26 tahsils of 24 districts of the state having an area of 16.72 lakh hectares. At present Govt. sanction to start reconsolidation work in 60 tahsils has been received, out of which the work of reconsolidation has already been started in 54 tahsils. Despite notification under section 4A(1) for tahsil sadar of district Agra has also been done. The remaining tahsils will be taken up for re-consolidation in the coming year according to the availability of the staff. From the above 60 tahsils an area of 69.72 lakh hectares was estimated to be re-consolidated and out of it 18.09 lakh hectares has already been re-consolidated by the end of March, 1990, leaving a balance of 51.63 lakh hectares. Thus by the end of March, 1990 delivery of possession over new chaks had been effected over 175.95 lakh hectares in the above mentioned two rounds of consolidation. Now an area of 3.08 lakh hectares of 1st round and 51.63 lakh hectares of 2nd round amounting to 54.71 lakh hectares is pending for consolidation. The details of the two rounds are given below:-

First round consolidation

- | | | |
|----|---|---------------|
| 1. | Area available in 1st round | 146 (Lakh Ha) |
| 2. | Additional area available due to change in norm from 80% to 60% from 60% to 40% and from 40% to 30 percent. | 14.94 |

Total :- 160.94

Second round consolidation

- | | | |
|----|--|-------|
| 1. | Area in 26 tahsils which is in progress for second round. | 16.72 |
| 2. | The left over area of consolidation before 1963 in 24 tahsils of 20 districts. | 24.00 |
| 3. | The left over area of consolidation of 36 tahsils in which consolidation work was completed prior to the amended Act 1963. | 29.00 |

Total :- 69.72

2.3.8 Formely, the hill districts viz. Nanital, Almora, Pethoragarh, Pauri Garhwal, Chamoli, Tehri Garhwal, Uttarkashi, Dehra Dun and Lalitpur of Bundelkhand Division were excluded from the consolidation scheme, as they were not found fit for consolidation. But due to the pressing demand of public, it is being extended in hill areas as well and 33 villages of tahsil Kichha and 115 villages of tahsil Khatima of district Nanital were taken up for consolidation in 1986-87. Lalitpur district of Bundelkhand division has also been taken up for consolidation in 1989-90.

2.3.9 It is worth while mentioning here that after consultation with the officers of Board of Revenue, the Eighth Five Year Plan for hill areas has been prepared separately. Accordingly, villages having 40 percent areas suitable for consolidation shall be taken up. Others will be left for survey and record operations and consolidation would be done blockwise, so that the tenure-holders get as far as possible the same type of lands as they had before consolidation. According to the preliminary survey 17,84,450 acres of land has been indentified as suitable for consolidation in hill districts.

Achievement upto March, 1990

1. Transfer of possession in 1st round	157.86 lakh hectares
2. Transfer of possession in 2nd round	18.09 lakh hectares
3. Area in balance of 1st round	3.08 lakh hectares
4. Area in balance of 2nd round	51.63 lakh hectares
5. Total area of transfer of possession of 1st and 2nd round of consolidation on 31.3.1990.	175.95 lakh hectares
6. Total area of 1st and 2nd round of consolidation in balance on 1.4.1990.	54.71 lakh hectares

2.3.10 It may be pointed out that the scheme of consolidation also provide for reservation of land and other infra structural facilities for the development of a village. At the time of preparation of consolidation scheme, land is ear-marked for various public purposes such as inter-village roads, irrigation chanelns, chak roads, khalian, play ground, panchayat ghar, harijan and general abadi etc. So far 3.495 lakh hectares of land has been made available for various public purposes through the scheme of consolidation, the details of which are given below :-

Table : 2.3.2
Area Made Available For Public Works

Purposes	Area made available (in lakh hectares)		
	1st round of conso- lidation	2nd round of conso- lidation	Total (1st and 2nd round)
(1)	(2)	(3)	(4)
1. Abadi site (General)	0.304	0.265	0.569
2. Abadi site (Harijan and Weaker Section)	0.446	0.214	0.660
3. Manure pits	0.205	0.092	0.297
4. Threshing floor	0.289	0.021	0.310
5. Pasture land	0.240	0.022	0.262
6. Panchayat ghar	0.131	0.009	0.140
7. Plantation of trees	0.160	0.077	0.237
8. Schools and Play grounds	0.098	0.019	0.117
9. Hospitals	0.078	0.029	0.107
10. Others	0.777	0.029	0.806
T O T A L	2.728	0.777	3.505

2.3.11 There is also provision of voluntary consolidation scheme in section 53-A of the Consolidation of Holdings Act. It was started in 1978-79. In this scheme the villagers propose the consolidation scheme themselves with the help of consolidation staff. Thereafter, this scheme is approved by Deputy director of consolidation U/S 53-A of the consolidation of Holdings Act. It minimises litigation and creates an atmosphere of mutual understanding and social goodwill. This scheme has proved very beneficial to the tenure holders. The work of voluntary consolidation has been completed in 1520 villages by the end of March, 1990.

**Proposals for the Eighth Five Year
Plan 1990-95 and Annual Plan 1991-92.**

2.3.12 After the completion of Seventh Five Year Plan, a balance of 54.71 Lakh hectares including the area of second round of consolidation was available on 01.04.1990 for consolidation. As described earlier, due to change of norm the villages having 30 percent area suitable for consolidation are being taken up for consolidation, and in special circumstances the villages having even less than 30 percent area suitable for consolidation can also be taken up for consolidation. There is also a provision

that after a gap of 20 years a tahsil can be taken up again for consolidation work. Thus the area for consolidation could be enhanced to a considerable extent.

2.3.12 An outlay of Rs.20023 lakh including Rs.500 lakh for hills has been proposed for the Eighth five Year Plan 1990-95 against the target of 16.25 lakh hect. For the Annual plan 1991-92 Rs.3773 lakh including Rs.50 lakh for hills has been proposed against the target of 3.25 lakh hect.

2.3.13 The scheme is very beneficial to the tenure holders, as the land records are corrected and up dated. Bulk of disputes are settled on spot by reconciliation and remaining few are decided within short time, which saves the time and money of the tenure holders. Thus this scheme aims at the development of villages and is essentially meant for the welfare of the cultivators. The agriculture production also increases to a considerable extent.

Financial Assistance to ceiling land Allottes

2.3.14 Ceiling on land holdings was imposed in the state initially in the year 1960. Important amendments were made in 1972. The amended ceiling Act was enforced since June 8'1973. Land declared surplus under the Act was allotted among landless agricultural labourers. It was felt that most of the allotted ceiling land was not fit for agricultural purposes. Due to paucity of resources the allottees could not apply inputs to effect expected improvements in the allotted land. Consequently, Govt of India started a central sector scheme with a view to providing financial assistance to them. The scheme was started in the state in 1977-78. The scheme underwent changes form time to time. During the Eighth five year plan 1990-95 an outlay of Rs.227.00 lakh state share has been proposed. For the Annual plan 1991-92 the outlay of Rs.27.00 lakh (State share) has been proposed.

2.3.15 Raja Todarmal Survey and land record training Institute, Hardoi : This Institute was earliar known as Survey and Land Record Training School. Previously there was provision only for training of lekhpals and supervisor, kanoongos in this school. After Dec 1'1978 this school was upgraded as an institute in order to provide training to I.A.S. and P.C.S. officers also. Now this institute is being expanded and about 28 aeres of land has been aequired for the purpose on Hardoi -Lucknow road. Recently the name of the institute has been changed to Raja Todarmal Survey and Land Records Training Institute,Hardoi.

An outlay of Rs.250.00 lakh has been proposed for the Eighth Five Year Plan 1990-95. For the Annual Plan 1991-92 Rs.50.00 lakh has been proposed.

2.4 OTHER RURAL DEVELOPMENT PROGRAMMES

Training State Institute of Rural Development: (S.I.R.D.). Training is an important input for improving the quality of planning and its implementation. It is all the more sharply needed for rural development and to fulfill this aim, the Composite Training Centre at Bakshi-ka Talab Lucknow was strengthened and given the status of State Institute in 1982-83 popularly known as SIRD. The objectives of the institute are as under :-

1. Design and conduct short term courses, seminar, conference and workshops on various aspects of Rural Development and allied subject and training of Regional and District level functionaries.
2. Serve as a centre for collection of information.
3. Provide consultancy Services, Evaluation and study on problems of Rural Development and Administration.
4. Act as an apex institute at state level to advise on Course Content, Examination, Evaluation for improving quality of the training in all the training centres of Rural Development.
5. Under take action oriented research studies on various aspects of Rural Development.

2.4.2 The institute conducted training programmes for the officers engaged in the planning and execution of Rural Development programmes. An outlay of Rs.25.00 lakh has been proposed for the Eighth Five Year Plan 1990-95 and for the Annual Plan 1991-92 Rs.5.00 lakh has been proposed.

2.4.3 Regional and District institutes of Rural Development. At present 22 Regional Institute and 33 District Institute of Rural Development are working in the State. In the hilly region Five new DIRD'S have been sanctioned, which have started functioning during 90-91. 5 new DIRD'S are being proposed for the districts viz. Azamgarh, Maharajganj, Firozabad, Sonhadra, Siddharthanagar which hither to had no such institute DIRD, Kanpur is looking after the work Kanpur Dehat district also.

2.4.4 Training is considered a productive investment, since it enhances the competence of officers and increases understanding of the programmes and policies of the Govt. The training of public representatives such as Pramukh, Pradhan in on going schemes etc is also one of the programmes. Farmers training centres provide training to farmers, farmwomen in improved agricultural techniques and all other activities, of Rural Development Programme.

2.4.5 Keeping in view the importance of training of officers and officials, training frequency has been reduced from 4-5 years to 2-3 years for village development officer in refresher courses on IRD and other on-going programmes including antipoverty programmes etc. In the year 1989-90 a target of 2,50,000 (officials & non officials) was fixed and 2,44,000 persons were trained. In the year 1990-91 a target of 2,50,000 has been fixed.

2.4.6. Training of Pradhans and members of the Block Kshetra Samitis in on-going schemes and their responsibilities: As new schemes like Jawahar Rozgar Yojna has come up in which greater responsibilities are to be shouldered by the Pradhans and member of Kshetra Samiti, therefore, preparing rural leadership of Pradhans and Kshetra Samiti members is essential so that they are made aware of the schemes to be run by the Government and their participation in rural development activities. During eighth five year plan 12,50,000 persons will be trained at the rate of 2,50,000 persons each year.

2.4.7 An outlay of Rs. 800.00 lakh. including Rs. 200.00 lakh for hills has been proposed for the Eighth Five Year Plan 1990-95 and for the Annual Plan 1991-92 an outlay of Rs. 84.00 lakh including Rs. 30.00 lakh for hills has been proposed.
PANCHAYATI RAJ:-

2.4.8. The Gram Panchayat is the primary unit of panchayati Raj System and it has an important role in the rural development. Panchayati raj institutions aim at ensuring Peoples participation not only in local Government but also in promoting various development programmes according to local needs. Schemes included in the eight five year plan are described in the subsequent paragraphs :

2.4.9. Construction of Workshop for Panchayat Udyog : An important programme of community development is the development of rural cottage Industries. In this direction Panchayats have been fulfilling their role by establishing Panchayat Udyog, through Joint committies of the Gaon Sabhas constituted under section 30 of Uttar Pradesh Panchayat Raj Act, 1947. Wooden furniture, Iron and tin goods tat-patties and Cement Articles are manufactured in these varous Panchayat Udyogs. The Profit earned by these Panchayat Udyogs is distributed among the gaon Sabhas concerned on the basis of their shares in the Panchayat Udyog and the Gaon Sabhas spend this money on development activities of thir areas. Hence, it is proposed that every panchayat Udyog should have its own workshop. The Total cost of construction of workshop is expected to be Rs. 1.00 lakh, out of which 90 % of the cost not exceeding Rs. 90,000/- will be given as a Government - Grant and remaining Rs. 10,000/- or 10 % will be borne by concerning Panchayat Udyog in the shape of cash or labour

component. An amount of Rs. 153.78 lakh including Rs. 7.20 lakh for hills has been proposed in the eight plan for constructing 31 workshops.

2.4.10 Technical and Managerial Assistance to Panchayat Udyogs: The main purpose of this scheme is to make the Panchayat Udyogs self-dependent. Under this scheme only those Panchayat Udyogs will be selected for Managerial assistance whose yearly turn over is between Rupees 25,000/- to 50,000/- Selected Panchayat Udyogs will be provided assistance of Rs. 20,000 in the first year, Rs. 17,000 in the second year and Rs. 10,000 in the third year, assuming that the Panchayat Udyog will attain self sufficiency there after. Further an outlay of Rs. 17.67 lakh has been proposed in the eighth plan.

Incentive to Gaon Sabha for Raising their own Resources of Income

2.4.11 The aim and object of the scheme is to create the spirit of healthy competition among the various Gaon Sabhas of each districts. It is proposed that best Three Gaon Sabhas of the district are provided Grant-in-aid in the form of incentive of Rs.6,000/-, 4,000/- and 2,000/- for first, second and third. Gaon Sabhas of the district on the basis of their performance in the field of recovery of Panchayat Tax and Dues. It is imperative for the rewarded Gaon Sabhas to utilize this amount of incentive for public welfare work in the concerning Gaon Sabhas. In order to benefit 175 gaon sabhas, an outlay of Rs. 36.55 lakh has been proposed in the eight plan.

Construction of Panchayat Bhawan at Gaon Sabha level

2.4.12 The object of the scheme is to provide proper place to Gaon sabhas for conducting their meetings at Gaon Sabhas level. Nyaya Panchayat to perform their judicial work for deciding cases of village disputes etc. The estimated cost of each Panchayat Bhawan is Rs. 0.80 lakh out of which 90 % will be borne by the State Government and 10% by the concerning Gaon Sabha. In the eighth plan an outlay of Rs. 999.99 lakh has been proposed for this programme

Construction of Quarters of Gram Panchayat Adhikari

2.4.13 Gram Panchayat Adhikari is an important village level official of Panchayat Raj Department. His area of supervision is a Nyaya Panchayat Circle and the Gaon Sabhas constituted under it. Therefore, one post of Gram Panchayat Adhikari has been sanctioned for every Nyaya Panchayat of the State. At present 8,815 Nyaya Panchayats are functioning in the State. Under the U.P. Panchayat Raj Act, 1947 and Rules made there under, the Gram

Panchayat Adhikari is authorised to maintain papers and records of Gaon Sabhas and to supervise the account and financial aspect of these institutions.

2.4.14. It is essential for every village level officials to live in his Nyaya panchayat circles but due to lack of proper housing accomodation he can not fulfil his duties as required. Thus they are unable to give any proper assistance to Nyaya Panchayat and Gaon Sabhas. For the permanent solution of this problem it has become necessary to provide them living accomodation in each Nyaya Panchayat Circle. He is class three Government employee Accordingly a type two accomodation costing about Rs. 44,000 excluding cost of land is essential. The land will be provided by the Gaon Sabha concerned for these quarters free of cost. For the construction of 700 quarters during eighth plan period, an outlay of Rs. 304.44 lakh has been proposed.

Improvement of Hat Bazar & Melas Managed by Gaon Sabhas

2.4.15 Hat and Bazar are the weekly local markets in villages These markets are quite famous and prevalent in almost all the villages. In these weekly markets villagers are able to self goods and also to purchase foodgrains and other commodities of daily use. Melas are also organised in villages on special occasions which are bigger in size and besides the articles available in Hat Bazar cattle are also available for purchase and sale. On other occasion exhibitions etc are also arranged by the villagers and they are really the source of entertainment for village folks. In order to give maximum facility to people using the Hat Bazar and Melas it is quite necessary to improve the conditions of such places where Hat Bazar & Melas are held.

TRAINING OF PANCHAYAT RAJ office bearers

2.4.16 Elected office bearers of Panchayati Raj Institutions are being trained in matters relating to their Jobs. They will be acquainted with the Gaon Samaj Mannual, U.P.Zamindari Abolition and Land Reform Act, Zila Parishd Act and Panchayat Raj Act and Rules as well as other Development Programmes currently run by the Central and State Governments.

2.4.17 Training camps of 6 days are organised by the District Panchayat Raj Officer at suitable place at the Block/Tehsil level as per convenience. It is proposed to give Rs.35/- per day for each office bearer as Dearness Allowance. In this way the expenditure per Trainee will be Rs.210/- and camp expenditure is also estimated to cost Rs.40/-per trainee for entire training period. Thus total anticipated expenditure will be Rs. 250/- per Trainee. For this programme an outlay of Rs. 71.00 lakh has been proposed for the eighth plan.

Training of Gram Panchayat Adhikari

2.4.18 It is essential to train the Gram Panchayat Adhikars to enable them to perform their duties effectively. They will be given training of 6 Months.

2.4.19 It is proposed to give Rs. 400/- per Trainee per month for boarding and Rs.300/- as a fixed Travelling Allowance. In this way the expenditure per trainee will be Rs. 2700/-. It is also proposed to give Rs. 6,000/- to Training Centre for sight seeing, conducting tours and contingencies. For this propose an outlay of Rs. 26.10 lakh has been proposed for the eight plan.

Training of Assistant Development Officer (Panchayats)

2.4.20 Assistant Development Officers(P) will be given training of 45 days duration at the Training Centres managed by Gramya Vikas Vibhag. Each trainees will be given Rs. 300 as fixed T.A., Rs. 600 for boarding and Rs. 200 for study tours. For this propose an outlay of Rs. 3.30 lakh has been proposed in the eighth plan.

COMMUNITY DEVELOPMENT

2.4.21 Under this head it is proposed to construct official and residential buildings at block level, district level, divisional level head-quarters. For this purpose an outlay of Rs. 9900.00 lakh has been proposed for the eight plan.

CHAPTER-III

SPECIAL AREA PROGRAMME

3.1 Other Special Programmes

Integrated development of Bundelkhand Region

Bundelkhand Vikas Pradhikaran was constituted in 1981 in order, to accelerate the pace of development in the economically backward Bundelkhand region. The Pradhikaran co-ordinates Programmes of development in the region and finances some essential programmes and activities which are not covered by normal plan allocations of the concerned departments. During sixth and Seventh Five Year Plan periods an outlay Rs.150.00 lakhs and Rs. 450.00 lakhs respectively were approved for Pradhikaran.

Seventh Plan Progress

3.2 Out of total of Rs.290.00 lakh sanctioned to the Pradhikaran so far, the Pradhikaran has released Rs.267.73 lakh to different departments of the region upto April 1990. Out of Rs.267.73 lakh, a sum of Rs.245.58 lakh has been utilised by different departments. During the said period Pradhikaran has completed the following works :-

1. Under water supply the repair of treatment plants, conversion of small pipe lines into big pipe lines, installation of some handpumps and expansion of new pipe line for Harijan's Basties.
2. Pradhikaran has constructed 2 college buildings one at Babina in Jhansi and other is at Maurani in Lalitpur district. Besides Pradhikaran has also constructed 4 additional rooms in college at Pali and Boundary wall of Primary school of village Kalyanpura in district Lalitpur.
3. Pradhikaran has constructed roads causeways and bridge etc.

**Eighth Five Year Plan
and Annual Plan 1991-92**

3.43 During Eighth Five Year Plan 1990-95 more and more emphasis will be given for the integrated development of Bundelkhan region. For this a developmental Fund of Rs.500.00 lakh is created. To achieve. The goal programmes like strengthening and expansion of water supply, promotion of private minor irrigation, construction of roads and bridges and few educational institutions are proposed.

3.44 For above programmes an outlay of Rs.4000.00 lakh has been proposed during the Eighth Five Year Plan period. for Annual Plan 1990-91 an amount of Rs.200.00 lakh has been approved. It is estimated that the whole amount will be utilised by the end of the year 1990-91.

3.45 An amount of Rs.500.00 lakh has been proposed for the Annual Plan 1991-92.

**Special Programme for Integrated
Development of Eastern Uttar Pradesh**

3.46 The economy of the Eastern Uttar Pradesh is mainly agrarian, soil is fertile and rainfall high. Population of the region heavily depends upon agriculture and about 75 per cent of the total workers are engaged in it. But majority of farmers have small and marginal holdings. In view of these and the severity of the backwardness, the State Government has always been striving hard for the socio-economic development of the region. In follow up a massive investment has been made on development of productive activities and socio-economic development in the region during various Five Year Plans.

3.47 Even after all these efforts much is to be done to make the region to catchup with Western and Central Zones of the State.

3.48 For accelerating the pace of development in Eastern Uttar Pradesh a new programme named "Special Programme for integrated development of Eastern Uttar Pradesh" has been taken in hand during the Eighth Five Year Plan from the year 1991-92. An amount of Rs.16000.00 lakh has been proposed for eighth five year plan 1990-95 and an amount of Rs.2000.00 lakh has been proposed for the Annual Plan 1991-92.

Integrated Area Development

3.109 Two scheme viz. Integrated Development Agency and Adarsh Gram Yojna were being implemented under this sector in Seventh Five Year Plan period.

3.110 The total expenditure under the sector "Area Development" will be Rs. 731.00 lakh in the Eighth plan period. Physical targets for the Agency sector will be decided as soon as the shape and nature of works to be taken in the Agency is decided by the Government. Under the Adarsh Gram Yojna mostly fund will be utilised on completion of the on-going works like pevement of lanes, construction of drains, installation of hand pumps and construction of PRAI type latrines.

Accelerated Programme of Development for Dacoity Prone Area

3.111 Twenty eight contiguous districts of Uttar Pradesh, Madhya Pradesh and Rajasthan suffer from the problem of acute poverty, unemployment and low level of development. These areas are, therefore, also prone to crimes and dacoity. Twelve districts of Uttar Pradesh declared to be dacoityprone areas as under :-

(i) Budaun	(ii) Agra	(iii) Etah
(iv) Etawah	(v) Mainpuri	(vi) Farrukhabad
(vii) Kanpur Dehat	(viii) Jalaun	(ix) Jhansi
(x) Lalitpur	(xi) Hamirpur	(xii) Banda.

3.112 In order to find long term solutions to the problem of dacoity in these areas a working group was setup by the planning commission, Government of India. The working group felt that normal share of development assistance recieved by these areas like any other areas in the State was not enough to accelerate their development. The working group, therefore, recommended that apart from normal plan assistance additional assistance should be provided to these areas so that, adequate infrastructure facilities for development could be created in these areas. These facilities included. (i) Ravine reclamation, (ii) Roads and bridges and (iii) Rural electrification. It was also recommended by the working group that substantial investment would be required on ravine reclamation, roads and bridges and rural electrification. It was also recommended that entire ravine reclamation programme should be funded from central resources. The contribution of centre for ravine reclamation can be in the shape of fifty per cent grant and fifty per cent loan. The other two programmes will be funded on a sharing basis. The outlays and mode of financing pattern as recommended by the working group for Uttar Pradesh for Seventh plan was given as below :-

Table-3.1.1
Outlays and pattern of financing

(Rs. in lakhs)

Programme	Pattern of Sharing	Outlay recommended for Seventh Plan		
		Total	Central share	State share
1	2	3	4	5
1. Ravine reclamation	Cent percent	1808.19	1808.19	-
2. Construction of roads and bridges	50.50	12327.00	4821.00	7506.00
3. Rural electrification	Entire amount is to be contributed by R.E.C.	15000.00	2059.00	12941.00
Total		29135.19	8688.19	20447.00

3.13 Progress during Seventh five year plan 1980-85 under these three infrastructure facilities are as under :-

Ravine Reclamation

3.14 This scheme had been launched in districts Kanpur Dehat, Kanpur Nagar, Farrukhabad, Agra, Etawah, Firozabad, Banda, Mainpuri, Hamirpur and Jalaun. At the end of Seventh plan period an amount of Rs.12.65 crore has been spent and about 17253 hectares of ravinous area have been treated. Besides, 700 Kms. peripheral dam have also been constructed under this scheme.

Construction of roads and bridges

3.15 For faster development of dacoity prone districts this scheme was sanctioned by central working group. The working group recommended a programme of Rs.123.27 crore on 50:50 sharing basis for construction of 1924 Kms. of roads and 111 bridges during Seventh Plan period. Till now the sanction of near about 908 kms. of roads and 35 bridges has been received from central Government. At the end of Seventh plan period 14 Kms of roads has been completed. 423 Kms. surface and 230 Kms. unsurfaced roads are under construction. Besides, the construction of 4 bridges has also been completed. On these works an amount of Rs.49.52 crore on the sharing basis Rs.23.28 crore central and Rs.26.24 crore state share has been spent.

Rural Electrification

3.16 There are 15451 inhabited villages in dacoity prone 12 district out of which 3127 villages were electrified by the end of Sixth five year plan. The working group recommended electrification of all the remaining 12324 villages to achieve cent percent electrification of identified village by the end of Seventh plan. Out of 12324 villatges 6924 villages were to be covered by normal Plan Programme of rural electrification under energy sector and b alance 5370 villages were to be covered under this special programme in Seventh plan. For this an investments of Rs.150.00 crore was approved out of which Rs.20.59 crore were to come in the shape of additional central assistance and rest of Rs. 129.41 crore to be financed by R.E.C. in shape of loan to State Government through special scheme for this area.

3.17 During Seventh plan period no assistance was recieved either from Central Government or Rural Electrification corporation (REC).The Government of India was requested from time to time to provide special assistance in terms of the recommendation of the working group. However, Rs.6.00 crore were spent during Seventh plan from State's own resources. Due to the non-availibility of Fund from Central Government/REC, against a target of electrification of total 5370 villages and energisation of 18500 private pump .sets/tubewells, only 25 villages and 8 pump-sets have been electrified/energised at the end of Seventh plan.

**Eighth five year plan
and Annual plan 1991-92.**

Ravine Reclamation :

3.18 Out of total 6.02 lakh hectare of ravine land 17253 hectare ravines land were treated during seventh plan. Accordingly an outlay of Rs.3500.00 lakh as central share is proposed for Eighth five year plan. During First year 1990-91 an outlay of Rs.600.00 lakh has been approved. It is estimated that all amopunt will be utilised by the end of the year. For Annual plan 1991-92 an outlay of Rs.700.00 lakh is proposed for this scheme.

Roads and Bridges :

3.19 For containing dacoit menace a quick communication system is vital to enable authorties to move about quickly and effectively and find out hide outs of dacoits. The good road system will also open up the area and assists implementation of other development activities. The said scheme is costing Rs.123.27 crore. The scheme was likely to be completed in the year 1990. However only Rs.49.52 crores (Rs.23.28 crore central

share), could be spent and construction of 395 kms. of roads and 4 bridges could be completed. During Eighth Plan it is proposed to construct 1590 Kms of roads and 50 bridges. For this an outlay of Rs.24000.00 lakh in the ratio of 50:50 between the Central and State Government is proposed. During the first year 1990-91 of Eighth plan an outlay of Rs.3000.00 lakh including Rs.1500.00 lakh central share has been approved. It is anticipated that the whole amount will be utilised by the end of the year. An outlay of Rs. 3000.00 lakh including Rs.1500.00 lakh central share is proposed for annual plan 1991-92.

Rural Electrification

3.120 This scheme is a centrally sponsored one. A total of 5370 villages were proposed to be covered under this special programme under seventh plan. At the end of Seventh plan only 25 villages were electrified. Thus 5345 are to be electrified during eighth five year (1990-95) plan. An outlay of Rs.5000.00 lakh including Rs.2500.00 lakh central share is proposed for Eighth plan period. During first year of Eighth Plan an outlay of Rs. 600.00 lakh including Rs.300.00 lakh central share is approved. It is anticipated that the amount will be utilised by the end of the year 1990-91.

3.121 An outlay of Rs.1000.00 lakh including Rs.500.00 lakh as central share is proposed for the year 1991-92.

CHAPTER IV

IRRIGATION AND FLOOD CONTROL

4.1. Major and Medium Irrigation

The economy of Uttar Pradesh is primarily agriculture based with about 78 percent of its population dependent on agriculture and allied activities. Rapid increase in the pace of agricultural development is therefore, essential to bring about desired improvement in the state's economy. The resources of cultivable land of the state are, however, limited and agricultural production can, therefore, be increased mainly through multiple cropping and higher productivity of crops. For both these, irrigation is the most important input.

4.1.2. The increase in population, the rise in the standard of living, occurrence of frequent droughts in the state and the increasing demands of agriculture based industries are placing heavy pressures on our water resources. As against this, the availability of water is being affected adversely by deforestation and deterioration of environment and ecology. It is, therefore, essential to observe great economy in the use of water for agricultural, industrial, municipal and domestic purposes.

4.1.3. The assessment made by the water resources organization, Government of India indicates that 75 percent dependability flow of five major rivers of the state is as below :

Table 4.1.1.
Water Availability and Annual Flow

Name of River	Discharge observing site.	Annual inflow (maf)	Share of catchment of U.P. (maf)
1.	2.	3.	4.
1. Ganga	Varanasi	54.49	34.79
2. Gandak	Balmikinagar	26.75	8.43
3. Ghagra	Turtipar	50.59	50.59
4. Sone	Chopan	9.27	1.25
5. Gomti	Naighat	4.00	4.00
	Total	145.10	99.06

4.1.4. The quantum of water available for irrigation in the state will be 99.06 maf. which is much lower than the annual inflow of 145.10 maf., as provision has to be made for shares of

other states, non irrigational uses and minimum flows from environmental considerations. The break-up of ultimate irrigation potential as now assessed is given below :

(In lakh Hectares)

1. Major & Medium irrigation Schemes	125.00
2. Minor surface irrigation Schemes	12.00
3. Minor irrigation schemes (Ground water)	180.00
Total	317.00

4.1.5. On the basis of availability of this potential, the state would be able to achieve only about 184 percent irrigation intensity ultimately which would be insufficient to meet the requirements of agricultural production in the long term perspective. Much greater economy in water use will, therefore, be necessary to meet the needs of irrigated agriculture.

4.1.6. The figures of growth in irrigation potential and investment made up to the end of Seventh Plan, the potential and the investment proposed during the Eighth Five Year Plan (1990-95), Annual plan 1990-91 and 1991-92 are given below :

Table 4.1.2.
Expenditure and Benefits of Major and Medium Projects

Plan Period	Expenditure Incurred. (Rs. in CRORE)		Potential Created (in lakh ha.).	
	During	Cumulative	During	Cumulative
1	2	3	4	5
1. Pre-Plan.				25.53
2. First Plan(1951-56)	30.81	30.81	3.30	28.83
3. Second Plan(1956-61)	25.43	56.24	2.71	31.54
4. Third Plan(1961-66)	54.90	111.14	3.57	35.11
5. Annual Plan(1966-69)	48.93	160.07	0.96	36.07
6. Fourth Plan(1969-74)	172.18	332.55	4.73	40.80
7. Fifth Plan(1974-78)	371.59	704.14	11.17	51.97
8. Annual Plan(1978-80)	296.08	1000.22	3.07	55.94
9. Sixth Plan(1980-85)	924.26	1924.48	6.21	62.15
10. Seventh Plan(1985-90)	1245.01	3169.49	4.43	66.58
*11. Eighth Plan(1990-95)	2001.00	5170.49	8.66	75.24
**12. Annual Plan(1990-91)	304.05	3473.54	1.32	67.90
*13. Annual Plan(1991-92)	345.08	3818.62	1.30	69.20

*- Proposed, **-Anticipated

4.1.7. An outlay of Rs. 2001.00 crore, including 1.0 crore for hill area proposed for the Eighth Five Year Plan (1990-95) is mainly for spill-over schemes in the Eighth Plan from the previous plans. Year wise breakup of outlays and potentials to be achieved during Eighth Plan are given below:

Table 4.1.3.
Year wise outlays and Physical Benefits

Year	Outlays/ expenditure (Rs.in crore)	Creation of additional irrigation potential (In Lakh ha.)	Additional utilisation of irrigation potential (In Lakh ha.)
1	2	3	4
* 1990-91	304.05	1.32	1.35
** 1991-92	345.08	1.30	0.66
** 1992-93	406.14	1.56)	
** 1993-94	451.34	2.17)	4.01
** 1994-95	494.39	2.31)	
Total	2001.00	8.66	6.02

*-Anticipated, ** -Proposed

4.1.8. The position of utilization of irrigation potential is given below:

Table 4.1.4.
Potential Creation and Utilization
(In lakh hectares)

Year	Creation of potential		Utilization of potential		Potential Gap (Col 3-5)	Percentage of utilization with respect to same previous year	
	During	Cumu- lative	During	Cumu- lative		year	year
1	2	3	4	5	6	7	8
upto							
1979-80	-	55.95	-	49.37	6.57	88.25	-
1980-85	6.21	62.15	5.77	55.14	7.01	88.72	-
1985-86	0.38	62.53	0.41	55.55	6.98	88.84	89.38
1986-87	0.64	63.17	0.26	55.81	7.36	88.35	89.25
1987-88	1.04	64.21	0.40	56.21	8.00	87.54	88.98
1988-89	1.71	65.92	0.48	56.69	9.23	86.00	88.29
1989-90	0.66	66.58	0.27	56.96	9.62	85.55	86.40
1990-91*	1.32	67.90	1.35	58.31	9.59	85.88	87.58
1991-92**	1.30	69.20	0.66	58.97	10.23	85.22	86.85

*- Anticipated **-Proposed

4.1.9. A gap of 7.01 lakh hectares persisted between the potential created and utilized at the end of the sixth plan. Under utilization is significant mainly in Sharda Sahayak and Gandak canals. Attempts have been made to bridge up the gaps by construction of water courses for farm blocks of 5 to 8 hectares and proper maintenance of canal distribution system. It is hoped that all the potential created by the end of 1980-85 and except for a small share of the potential created in the Seventh Plan period, the rest would be utilized by the end of Eighth Plan. Further provision have been made in Eighth Plan particularly to help in increasing the utilization of created potential.

4.1.10. Restoration and improvement of existing irrigation system : Normal maintenance grant for existing irrigation system does not provide sufficient fund for restoration of old irrigation works and the works of the nature of special repairs and improvement. This is one of the causes for under utilization of created potential. In this context works for Belan canal system and Tons pump canal system have been identified. provisions for other systems have already been made.

4.1.11. National Water Management Project : According to recommendation of working groups, special provision has been made under this head. Two identified systems i.e. Sharda canal system and lower Ganga canal system are proposed to be taken up under this scheme for National Water Management. This provision has been made for construction of check structure and regulators at frequent intervals to enable flexible operation and other improvement in the existing canal system to ensure availability of water in the tail reaches over the entire range of flow pattern in the system. The works are aimed to achieve equitable distribution of water. These provisions shall help in narrowing the gap between created and utilized potential.

Strategy for Eighth Five Year Plan
(1990-95) and Annual Plan (1991-92)

4.1.12. Keeping in view the guiding principle for formulating the Eighth Plan proposal issued by planning commission, Govt. of India, the broad strategy regarding implementations of projects in the annual plan (1990-91) is to give thrust on completion of ongoing projects. This will enable faster creation of potential and obviate the time and cost overrun to a greater extent. New project proposals during Eighth plan 1990-95 have been restricted to projects aimed at removal of regional imbalances and yielding benefits to drought prone and under developed areas.

4.1.13. The interse priority of major projects for funding in the annual plan 1991-92 is as under :

- (I) On-Going Projects :
- (a) Externally aided projects
 - (b) Inter-state projects
 - (c) Projects taken up prior to fifth plan
 - (d) Other on-going projects.

(II) New Projects:

New projects of Eighth Plan : In addition to projects funding, plan outlays are to be provided separately for :

- (i) Special repairs of existing irrigation system.
- (ii) Dam safety measures.
- (iii) Restoration and improvement of existing irrigation system.
- (iv) Improved water management.
- (v) Surveys and investigations.
- (vi) Research and development.
- (vii) Training
- (viii) Performance evaluation and environmental impact studies and
- (ix) National hydrology project.

4.1.14. In all there are 44 schemes which have spilled over into Eighth Five Year Plan. During the Eighth Five Year Plan, 13 new schemes (3 Major, 8 Medium, 2 modernization projects) are proposed to be taken up. Category-wise breakup of major and medium irrigation schemes proposed to be completed during Eighth Plan are given below:

Table 4.1.5.
Proposed Completion of Schemes during Eighth Plan

Category of Schemes.	Spillover schemes to Eighth Plan	Schemes proposed to be completed during Eighth Plan	Proposed Completion during the year					Spill Over to Ninth Plan
			1990 -91	1991 -92	1992 -93	1993 -94	1994 -95	
1	2	3	4	5	6	7	8	9
1. Externally aided Projects	1	-	-	-	-	-	-	1
2. Inter state Projects	4	2	-	-	1	-	1	2
3. Projects taken up prior to Fifth plan. (major irrigation projects)	2	1	-	-	1	-	-	1
4. OTHER ONGOING PROJECTS:								
a) Multipurpose Projects	4	-	-	-	-	-	-	4
b) Major irrigation projects	16	11	2	2	3	-	4	5
c) Medium irrigation projects	7	7	1	3	2	1		

Table 4.1.5. (Conclid.)

Category of Schemes.	Spillover schemes to Eighth Plan	Schemes proposed to be completed during Eighth Plan	Proposed Completion during the year					Spill Over to Ninth Plan
			1990 Eighth Plan -91	1991 -92	1992 -93	1993 -94	1994 -95	
1	2	3	4	5	6	7	8	9
d) Modernization Schemes.	6	4	1	1	-	1	1	2
5. NEW SCHEMES OF SEVENTH PLAN:								
Medium irrigation Schemes	4	1	-	-	1	-	-	3
Total (1 to 5)	44	26	4	6	8	2	6	18
6. NEW SCHEMES OF EIGHTH PLAN:								
a) Major irrigation Projects.	3	-	-	-	-	-	-	3
b) Medium irrigation Projects.	8	2	-	1	-	-	1	6
c) Modernization Schemes.	2	-	-	-	-	-	-	2
Total (6)	13	2	-	1	-	-	1	11
Total (1 to 6)	57	28	4	7	8	2	7	29

4.1.15 Yearwise proposed completion of schemes during Eighth five Year Plan is given below:

Table 4.1.6

Schemes Proposed for Completion during Eighth Five Year Plan

YEAR	Category of Schemes	
	Major Projects	Medium & Modernization Projects
(1)	(2)	(3)
1990-91	1. Increasing Capacity of Deokali Pumped Canal.	1. Yamuna Pump Canal. 2. Modernization of Eastern Yamuna Canal.
1991-92	2. Raising of Meja dam. 1. Increasing Capacity of Zamania Pump Canal. 2. Bhimgoda head works	1. Chittaurgarh Reservoir. 2. Remod. Ken Canal. 3. Lining of Safai Rajwaha 4. Kishanpur Pump Canal. 5. Modernization of Bhognipur Branch.
1992-93	1. Urmil Dam. 2. Gandak Canal 3. Increasing Capacity of Narayanpur Pump Canal 4. Maudha Dam. 5. Bewar Feeder.	1. Revised Kwano Pump canal 2. Revised Tons Pump canal 3. Pathrai Daa.
1993-94		1. Gunta Nala Dam. 2. Modernization of Ghaghara Canal.

Table 4.1.6(Concl'd.)

YEAR	Category of Schemes	
	Major Projects	Medium & Modernization Projects
	(1)	(2)
1994-95	1. Raighat Canal. 2. Madhya Ganga Canal. 3. Eastern Ganga Canal. 4. Chambal Lift Scheme. 5. Okhla Barrage.	1. Jarauli Pump Canal. 2. Modernisation of Agra Canal

4.1.16. Priority-wise brief description of schemes, outlays provided in Eighth Five Year Plan and annual plan (1991-92) is given below :

Liabilities of Completed Schemes

4.1.17. Four major, thirteen medium and six modernization projects (Total 23 projects) have been completed in the Seventh five Year Plan. Though the construction works of these projects have been completed, some financial liabilities like disputed claims payment of land compensation, minor works left out etc. are still required. Tentative amount as assessed has been provided under the head "LIABILITIES OF COMPLETED SCHEMES" The Total amount proposed at present is Rs. 12.00 crore for Eighth Plan and Rs. 3.0 crore for the annual plan 1991-92.

Externally Aided Projects

4.1.18. Upper Ganga canal system is being modernized with world bank assistance. The proposed modernization is being done in two phases. The first phase has been divided in four time slices of Sixth Year each. The agreement was signed by world Bank for the first-time slice in June, 1984 which is now scheduled to be completed by June, 1993. First time slice of this project has been fully funded during Eighth Plan, which has a spill over cost of Rs.248.57 crore, Rs.76.00 crore has been provided during the annual plan (1991-92). The principal components of the project in the first time slice are shown as below:

1. Replacement of existing main canal (from 6 Kms. to 36 Kms.) by a parallel line channel and construction of lined channel parallel to the existing main canal common to both upper Ganga canal and Madhya Ganga canal between 188.8 Kms. to 240.0 Kms. Works would include lining of canal surface, improvement, replacement and modernization of canal structure and regulators.
2. Replacement of existing main canal (from 240.0 Kms. to 290.0 Kms.) by a parallel lined channel.

3. Lining and improvement of structure for water courses serving about 64000 hectare
4. Installation and electrification of 33 augmentation tubewells.
5. Installation of two way radio system to improve canal communication.
6. Pilot work programme for drainage in the canal command area.
7. Replacement of the hydel station on the parallel main canal and construction of civil works of a second station.

4.1.19. The preparation of the project for the second time slice is in hand. The approximate estimated cost would be Rs.400.00 crore out of which Rs. 145.43 crore has been provided in the Eighth Five year plan. Brief description of the works which are anticipated to be included in the project are as below:

1. Completion of the balance work of PUGC. from 6 Kms. to 36 Kms. including 4 major cross drainage works.
2. Construction of PUGC from 36 Kms. to 70 Kms (Belra escape) of main canal.
3. Construction of PUGC from 240.0 Kms to 290.0 Kms.
4. Completion of the balance works of Machua distributary.
5. Modernization of Hathras Branch System (Nearly 50 percent works).
6. Modernization of three other distributaries.
7. Drainage improvement in the modernization blocks and in tail reach of U.G.C.
8. Completion of Telecommunication network
9. Construction of augmentation tubewells.

Inter-State Projects:

4.1.20. The four inter-state projects are Rajghat Dam, Bansagar dam, Urmil dam and new Tajewala Barrage. Betwa river board and Banasagar control board under the union ministry of water resources are already functioning for speedy execution of Rajghat and bansagar dams.

4.1.21. The cost of construction of Rajghat dam is being shared by the two states of Uttar Pradesh and Madhya Pradesh in the ratio of 1:1. The total cost of the projects is Rs. 213.66 crore out of which Uttar Pradesh share is Rs. 106.83 crore. Total expenditure on this project up to march, 90 is Rs. 132.51 crore and against due share of Rs. 66.25 crore Uttar Pradesh has paid Rs. 79.80 crore to Betwa river board (i.e. Rs. 13.55 crore more than its share). The project has been fully funded which has a spillover cost of Rs. 27.03 crore in Eighth Plan. During the year 1991-92 it is proposed to pay Rs. 6.0 crore as share of Uttar Pradesh.

4.1.22. The cost of construction of Bansagar dam is to be shared by the three states of Uttar Pradesh, Madhya Pradesh and Bihar in the ratio of 1:2:1 respectively. The total cost of the project is Rs. 448.00 crore out of which share of Uttar Pradesh

is Rs.112.00 crore. Total expenditure on this project up to March, 90 is Rs. 207.08 crore and against due share of Rs. 51.77 crore. Uttar Pradesh has paid Rs. 44.95 crore to Bansagar Control Board (i.e. Rs. 6.82 crore less than its share). The spillover cost of the project is 64.65 crore in Eighth Plan against which Rs. 35.0 crore has been provided in the Eighth Plan. During the year 1991-92 it is proposed to pay Rs. 5.00 crore as share of Uttar Pradesh. Since Govt. Of Uttar Pradesh is already financing these projects for Dam construction, provision for constructing canal system for utilizing the stored water as per inter-state agreements have also been made.

4.1.23. The total cost of the Urmil Dam Project is Rs. 22.63 crore. The construction cost of the project is to be shared by Uttar Pradesh and Madhya Pradesh in the ratio of 40 and 60 percent. The total expenditure upto march, 90 is Rs. 15.06 crore. which is paid by Uttar Pradesh only. Madhya Pradesh has not paid its share till now. The project has been fully funded in Eighth Plan (spillover cost Rs. 8.17 crore). Rs. 4.0 crore has been provided in the annual plan 1991-92.

4.1.24. The total cost of the New Tajewala barrage at Hathnikund which would be a replacement of the old barrage which feeds Yamuna canal system of Haryana and Uttar pradesh is Rs. 75.00 crore, which is to be shared by Uttar Pradesh and Haryana governments in the ratio of 1:2. The work of the new barrage has not yet been started. Provision of Rs. 10.0 crore has been made during Eighth Plan and Rs. 10.0 lakh during annual plan 1991-92.

Project Started Prior to Fifth Five Year Plan

4.1.25. The projects falling in this category are Gandak Canal and Sharda Sahayak Project. Funds have been provided for Gandak canal to complete it in Eighth five Year Plan. The spillover cost of the project is Rs. 15.18 crore, Rs. 6.0 crore has been provided in the annual plan 1991-92. There is a provision of 226 augmentation tubewells in the project out of which 90 have been completed, but are not operative. Further augmentation tubewells would be constructed after assessing the performance of the augmentation tubewells already constructed.

4.1.26. Sharda Sahayak project at an estimated cost of Rs. 733.23 crore was submitted to Central water commission in 1985. On the preliminary assessment of cost escalation the cost of the project was estimated at Rs. 869.70 crore during the Seventh Plan period. On further revision of project on the basis of works executed upto march, 90 and cost of balance work on 1989-90 base, the likely cost of the project is estimated to be Rs. 1102.03 crore. Sharda Sahayak project shall be funded in two phases, upto Rs. 869.70 crore during the Eighth Plan

period and the balance amount of Rs. 232.33 crore shall be spillover cost in the ninth plan, which will also include the additional items.

Other On-going Projects

4.1.27. Multipurpose Projects : Three Multipurpose projects, Lakhwar Vyasi Dam, Kishau Dam and Jamrani Dam project have spilled over into Eighth Plan, work on Kishau dam is in preliminary stage and progress will depend on the early finalization of inter-state agreement with Himachal Pradesh. For Lakhwar -Vyasi project outlay in the irrigation sector has been provided in accordance with its construction schedule. The total outlay provided for these multipurpose projects is Rs. 231.75 crore for the Eighth Plan 1990-95 and Rs. 26.05 crore for annual plan 1991-92. A separate corporation named Tehri construction corporation has been setup for the construction of Tehri dam. Hence for Tehri dam project provision has not been made in the annual plan 1991-92.

4.1.28. Major irrigation projects: Out of 16 major schemes (excluding 4 inter state projects) which have spilled over into Eighth Plan the works of Madhya Ganga canal, Stage I, Eastern Ganga canal, Maudha dam, Bewar feeder, Increasing capacity of Narainpur Pump canal, Increasing capacity of Zamania pump canal are in the advance stage of construction. Total outlay of Rs. 609.39 crore and Rs. 121.86 crore have been provided for major projects in the Eighth Plan 1990-95 and annual plan 1991-92 respectively. Out of these projects 11 are proposed to be completed in the Eighth Plan period.

4.1.29. Medium irrigation schemes : All the 7 medium schemes which have spilled over into Eighth Plan are proposed to be completed during the Eighth Plan. Outlay of Rs. 29.49 crore and RS. 12.26 crore has been provided for these schemes during the Eighth Plan(1990-95) and annual plan(1991-92).

4.1.30. Modernisation schemes : Six modernization schemes have spilled over into Eighth Plan. Outlay of Rs. 37.56 crore and Rs. 5.85 crore has been provided for these schemes during Eighth Plan and annual plan 1991-92.

4.1.31. New schemes of Seventh Plan : Four medium schemes Pathrai dam, Lakheri dam, Resin dam and increasing capacity of Manda pump canal fall under this category. Only one scheme namely Pathrai dam could be started during Seventh Plan. Three other schemes are proposed to be started during Eighth Five Year Plan.

New Schemes of Eighth Five Year Plan

4.1.32. Three major, 8 medium and 2 modernization schemes have been included in Eighth Plan. The schemes which have been included in Eighth Plan are in the drought prone and under

developed areas which will improve the regional imbalances to some extent. It is proposed to include one or two pump canal systems to augment tail reaches of existing canal system in Ganga Yamuna Doab where there is chronic shortage of water in channels of Fatehpur and Allahabad districts. A sum of Rs. 38.17 crore (nearly 2 percent of the total plan outlay) has been proposed for these projects during Eighth Five Year Plan. Apart from these schemes Tehri, Lakhwar-vyasi and Kishau water utilization projects have also been included as works of these dams have started and it is necessary to complete the modification and extension of distribution system which are benefitted by these schemes.

4.1.33. Water Development Programme : Separate provisions for survey and investigation, research and development, Training, Performance evaluation and Environmental impact studies, National hydrology Project, Dam safety and National water management project have been made under the head water development programme.

4.2. Minor Irrigation

4.2.1. 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. Three agencies of the state are responsible for different aspects of this programme. The irrigation Department is responsible for construction of larger capacity tubewells, lift schemes, hill channels, bundhies and small storage works mainly in the southern region of the state. The minor irrigation department is concerned with construction of masonry wells, Persian wheels, smaller private tubewells and pumping sets and some minor works concerning water conveyance and storage namely guls, hauzes and bundhies. Both these organizations depend upon the ground water department for providing data about the availability and state of exploitation of under ground water in various part of the state.

4.2.2. The construction of minor irrigation works has to be viewed in the context of the overall irrigation requirements of the state. The present assessment of surface and ground water availability indicates that the irrigation intensity can be raised to about 184 percent. This will be possible only by judicious and conjunctive use of the surface and ground water to meet the requirement of overall irrigation for developing the agricultural production potential of the state. The economies on the budgetary finances of the state as also for encouraging private enterprises, the construction of private minor irrigation works is being encouraged during Eighth Five Year Plan through special food production programme. These works, however, are not able to benefit certain sections and areas of the state. Difficulties arise in the case of a small holdings where owners are not able to provide or mobilize

finances for constructing of their own irrigation works. In other areas, the water bearing strata is so deep that its economical utilization through the limited financial resources of private individuals is not feasible. Thus, the programme of construction of state tubewells has to be accelerated-along side the construction of private works, utilizing ground water, in order to benefit small and marginal farmers.

4.2.3. By the end of Seventh five Year Plan (1985-90), irrigation potential of 155.68 lakh hectares had been created through minor irrigation works comprising 36.32 lakh hectares of state minor irrigation works and 119.36 lakh hectares of private minor irrigation works. The target of additional irrigation potential of 55.76 lakh hectares is envisaged in Eighth Plan period in which contribution of both private minor irrigation works and state minor irrigation works is 50.75 lakh hectares and 5.01 lakh hectares respectively.

GROUND WATER DEVELOPMENT

4.2.4. This department was created in 1970 for investigation and assessing ground water resources in each block of the state. It was transferred from the administrative control of the irrigation department to the organization of the agriculture production commissioner in 1975 for better coordination between agriculture production and minor irrigation works. The basic objective of the ground water survey is to evaluate the occurrence, availability and quality of ground water in the state.

Achievements During Seventh Five Year Plan:

4.2.5. PHYSICAL PROGRESS : To keep a close watch on ground water level and to study its response it is very essential to have effective monitoring of the ground water regime through a network of observation wells(hydrographs station). During 1985-90, 133847 water level measurements were recorded on a total of 3500 hydrograph stations.

4.2.6. District wise Water Balance Reports : Detailed block wise reports have been published for all the districts(except hills) for each calender year. Further, detailed micro studies in 110 dark blocks have been carried out. On the basis of these reports which are prepared on the guidelines, provided by NABARD minor irrigation programmes are implemented and institutional finances and loans are sanctioned.

4.2.7. The department is engaged in investigation and exploration which is linked with various ground water, development programmes. During the period 1985-90, 1388 blast wells and bore well sites were surveyed for proposed feasibility .

4.2.8. Photogeological and Remote Sensing Studies : During the Seventh five Year Plan period, photogeological and remote sensing studies have been completed in 22111 sq. Kms. area. These studies help in the delineation of buried channels, valleys and potential areas for the installation of various types of ground water structures, selection of suitable sites for construction of tubewells and for development work in problematic zones.

4.2.9. Nuclear Hydrological Study : The nuclear hydrology (Tritium injection studies) have been carried out at 163 sites for determination of rate of seepage, ground water flow and movement, both vertical and lateral, regeneration and base flow etc.

4.2.10. Hydrochemical Study : In the Seventh Plan till Dec. 1988, 6809 water samples were collected from open wells, hand pumps and deep tubewells and were analyzed to delineate the areas of natural ground water pollution.

4.2.11. Exploratory Drilling : During Seventh Plan period total 21700 Mts. of exploratory drilling was done at number of places in the problematic zones. Water bearing strata and its parameters were determined followed by electrical logging and pumping tests. Several production wells have been constructed and handed over to concerned departments.

4.2.12. Micro-level Survey of Dark and Grey blocks : Sample surveys and micro level studies have been carried out in 110 dark blocks during the period 1985-1990. Ground water resources are evaluated, estimated and recommendations made for further ground water development in the dark blocks (Nyaya Panchayat wise).

4.2.13. Special Studies : Several studies have been taken up with reference to special problems, such as :

- (1) Water logging problems in Sharda Sahayak command area of Barabanki District and pilot studies for protective measures.
- (2) Pilot studies of Induced recharge with special reference to flood and drought measures in Hindon -Solani river basin.
- (3) Demarcation of saline zone in District Fatehpur.

**Financial Outlay of
Seventh Five Year Plan:**

4.2.14. An outlay of Rs. 85.00 Lakh was approved for Seventh plan period as the establishment budget transferred from plan to non plan head at the end of sixth plan. Keeping in view the importance of survey and investigation activities of the depart-

ment, more funds were made available during the Seventh five Year Plan. A sum of Rs. 337.71 lakh was spent on these activities during first four years of Seventh plan. Against an approved outlay of Rs. 85.00 lakh in the year 1989-90, expenditure of Rs. 110.58 lakh was incurred. Thus, Rs. 448.29 lakh had been spent during Seventh Plan period. In addition to this Rs. 135.78 lakh was made available as central share from government of India for purchasing special equipments under centrally sponsored scheme.

4.2.15. Uttar Pradesh is a vast state with varied hydro-geology, which poses various problems in development. Some of these are as follows:

- (1) Indiscriminate use of ground water leads to regional imbalance and may cause water logging or undermining.
- (2) The state is facing critical problem of salinity in some areas e.g. districts of Agra, Mathura, Aligarh, Etawah, Unnao, Fatehpur, Raibareilly, Pratapgarh & Sultanpur.
- (3) Development of tube wells in Trans-Rapti area is being adversely effected due to inadequate knowledge of deeper potential zone.
- (4) Bundelkhand and Vindhyaachal regions are experiencing acute shortage of water .
- (5) Failure of M.I. structures during construction & thereafter.

Strategy and Priorities In 1990-95

4.2.16. Considering the phenomenal rise in the utilization of ground water, it is imperative that this economic resource should be used in or utmost scientific and planned way. Taking into consideration the above mentioned problems, a systematic approach is essential to overcome them. In Eighth Five Year Plan priority of works has been proposed as follows:

- (1) Normal Programme
- (2) Special Programme

Normal Programme

4.2.17. The ground water resources have two components dynamic and static. The dynamic component gets replenished every year, mainly due to rainfall and is available for exploitation. However, with changes in various input and output components, the scenario keeps on changing. This requires periodic re-assessment and quantification of resources. Regular

monitoring will be carried out on a network of 3500 hydrograph stations. Photogeological and remote sensing studies will be done to determine potential zones. Geophysical sounding will be taken up in problematic areas to locate water bearing zones, besides exploratory drilling and electrical logging will be done to substantiate findings of various other survey results. Tubewell / Blastwell sites will be selected as per the requisition of Minor Irrigation Department. About 300 technical reports will be published, for technical guidance and information to user departments/agencies.

Special Programme:

4.2.18. Delineation of Water Bearing Strata For Shallow and Deep Tubewells : Keeping in view the scientific use of surface and ground water, Ground water department has been entrusted with the job of :

- (1) Demarcation of shallow and deep tubewell zones.
- (2) Detailed feasibility and survey report in the proposed deep tubewell clusters
- (3) Conjunctive use of surface and ground water.

4.2.19. During the year 1990-95 it has been proposed that 790 blocks will be selected on priority for delineation of shallow and deep tubewell zones. This will include, detailed hydro geological survey, photo geological and remote sensing and geophysical survey besides exploratory drilling and electrical logging. Proposed financial outlay for the job will be Rs. 55.70 lakh.

4.2.20. Nayaya Panchayat wise Survey of "DARK" Blocks : On the basis of yearly estimation of block wise ground water status, certain block, where utilization of ground water is more than 85% are termed as "dark" category. It has been decided that Nyaya panchayat wise detailed micro level survey will be carried out in the identified 20 "dark" blocks. Proposed outlay for these studies is Rs. 20.50 lakh.

4.2.21. Delineation of Fresh Aquifer in saline Areas : Extensive geophysical survey will be carried out in about 300 blocks. The proposed outlay for this work is Rs. 41.5 lakh.

4.2.22. Construction of Piezometer on unconfined and confined Aquifer : In order to evaluate the ground water potential in unconfined as well as in confined aquifer, piezometer will be installed, during the Eighth Plan period. Proposed outlay is Rs. 117.70 lakh.

4.2.23. Equipments Under Centrally Sponsored Scheme : Development of groundwater in the problematic zone is an urgent need for which this department has to play a very important role. Systematic and scientific investigation in these zones require modern, sophisticated and high proficiency equipments. A list of the equipments, amounting to Rs. 110 lakh has already been submitted to the ministry of water resources, govt. of India, through the state Govt. for the year 1990-91.

4.2.24. Total financial provisions proposed for the year 1990-95 is Rs. 5.00 crore for survey and investigation activities of the department. During the Year 1990-91 an expenditure of Rs. 40.00 lakh is anticipated. A plan outlay of Rs. 60.00 lakh has been proposed for 1991-92.

State Minor Irrigation

4.2.25. State minor irrigation works comprise large capacity tubewells, small lift canals, hill channels and bundhies and is managed by the irrigation department. These works with a short gestation period provide quick irrigation facilities. They benefit mainly small and marginal farmers who are not in a position to construct their own source of irrigation. The expenditure incurred and potential created in various plans through state minor irrigation works is given in table 4.2.1. On the basis of the reduced norm of 100 hectares irrigation potential per tubewell from February 1980, the irrigation potential has been revised and indicated in Column -6 of table no.4.2.1.

Table 4.2.1.
Financial and Physical Achievements

Period	Expenditure Incurred. (Rs. in crore)		Potential Created (in lakh he.)		Revised irrigation potential from Feb, 1980
	Additio- nal	Cumu- lative	Additi- onal	Cumu- lative	
1	2	3	4	5	6
1. Pre-Plan	-	-	4.82	4.82	
2. First Plan(1951-56)	17.25	17.25	3.92	8.74	
3. Second Plan(1956-61)	13.30	30.55	4.34	13.08	
4. Third Plan(1961-66)	37.10	67.65	3.48	16.56	
5. Annual Plan(1966-69)	42.97	110.62	1.81	18.37	
6. Fourth Plan(1969-74)	78.62	189.24	1.43	19.80	
7. Fifth Plan(1974-78)	94.38	283.62	4.00	23.80	
8. Annual Plan(1978-80)	68.42	352.04	2.86		23.60

Table 4.2.1. (Concl'd.)

1	2	3	4	5	6
9. Sixth Plan(1980-85)	278.01	630.05	7.16		30.76
10. Seventh Plan(1985-90)	597.10	1227.15	5.56		36.32
11. Eighth Plan(1990-95)*	650.00	1877.15	5.01		41.33
12. Annual Plan(1990-91)**	114.27	1341.42	0.84		37.16
13 Annual Plan(1991-92)*	132.00	1473.42	1.27		38.43

*- Proposed **-Anticipated

4.2.26. The state minor irrigation works being executed and operated by irrigation department comprise of the following components:

1. State Tubewells
2. Minor Lift Schemes
3. Bundhies etc.
4. Hill Channels

4.2.27. The irrigation department is constructing tubewells of normally 1.5 cusecs discharge in different areas of state. Lift irrigation scheme of up to 100 cusecs discharge have been traditionally classified as minor lift schemes in the department, where as the criterion fixed by govt. of India for classification of minor lift schemes is 2000 hectares command area. The figures of potential created by minor lift schemes therefore include all schemes of up to 100 cusecs discharge capacity with command areas of 60 to 70 hectares per cusec. The bundhies are being constructed mainly in Mirzapur and Sonbhadra districts while the hill channels are being constructed in hill districts of Nainital, Almora, Pithoragarh, Pauri, Chamoli, Dehradun and Uttar Kashi. The position of irrigation potential created upto the end of sixth plan by each component is enumerated below :

<u>Scheme</u>	<u>Potential Created</u> <u>(In lakh ha.)</u>
1. State Tubewells	27.45
2. Minor Lift Schemes	2.09
3. Hill Channels & Bundhies	3.89

Total	33.43

4.2.28. The cumulative potential created by tubewells upto the end of sixth plan was 27.45 lakh hectares, while the total number of tubewells energized was 24782. The potential created by tubewells was assessed as 120 hectares or more per tubewell prior to 1980, which was reduced to 100 hectares per tubewell from Feb., 1980 and on the basis of this the potential works out to 24.78 lakh hectares. Thus, by the end of sixth plan (1984-85), irrigation potential of 30.762 lakh hectares had been created through all components of state minor irrigation works.

**Review of Physical and Financial
Targets and Achievements during Seventh Plan Period :**

4.2.29. The approved outlay for the Seventh Plan was Rs. 483.15 crore, out of which Rs. 427.65 crore was for state tubewells and Rs. 55.50 crore for surface water schemes. In the above, outlay of hill sector is Rs. 8.00 crore for tubewells and Rs. 50.00 crore for surface water. The target for creation of irrigation potential was 7.03 lakh hectares (6.75 lakh hectares through tubewells and 0.28 lakh hectares through surface water schemes). The actual expenditure during the plan period was Rs. 597.10 crore, (Rs. 523.30 crore on tubewells and Rs. 73.80 crore on surface water schemes). Out of above, the expenditure on tubewells of hill areas was Rs. 9.02 crore and on surface water Rs. 60.09 crore. The increase in expenditure over the approved outlay is mainly on account of rise in prices which has been about 10 percent every year. Besides this about Rs. 40.0 crore were utilized for the reconstruction of failed tubewells and for replacement of worn out equipments installed on tubewells. An additional irrigation potential of 5.56 lakh hectares has been created during the Seventh Plan period of which ground water component accounts for 5.15 lakh hectares and surface water 0.41 lakh hectares. Thus, irrigation potential of 36.32 lakh hectares had been created by the end of Seventh Plan.

4.2.30. The scheme wise position of minor irrigation programme is enumerated below:

4.2.31. State Tubewells : During the Seventh Plan 5144 tubewells were energized against the target of 6750 tubewells, resulting in creation of additional potential of 5.144 lakh hectares. These targets were fixed on the presumption that the third phase of world bank tubewells project will be taken up during the plan period and substantial number of tubewells would be constructed under this project. But the world bank has not yet sanctioned this project.

4.2.32. The above shortfall is mainly due to the non sanction of world bank tubewell project, phase - III, further large number of tubewells which were energized in previous years, whose distribution system were incomplete, were taken up for completion so that created potential may be properly utilized. A considerable portion of plan outlay was utilized for the completion of spillover works. Further 1007 tubewells, which had failed on completing their life were reconstructed, resulting in regeneration of 1.007 lakh hectares irrigation potential which was otherwise lying unutilized. Further 183 B&L forms of new tubewells and 219 B & L forms of reconstructed tubewells are pending with Hydrel Department for energization.

4.2.33. The actual utilization has been about 40 percent of the created potential. Following are the main reasons for the shortfall of utilization of irrigation potential.

- (1) Shortage of power supply
- (2) Incomplete distribution system
- (3) Failed and partially failed tubewells

4.2.34. Shortage of Power Supply : The command of a tubewell is fixed as 100 hectares per tubewell based on the assumption that the power supply would be available for about 18 - 20 hours per day, but the actual average availability of power is about 8 - 10 hours per day and that too with frequent trippings and with low voltage in some areas. This automatically reduces the irrigation potential to about 53 percent.

4.2.35. Incomplete Distribution System : At the end of Seventh Plan there are 746 tubewells which do not have any distribution system and 2553 tubewells having less than 2 Km. distribution system. Further the existing distribution system on 9257 tubewells, mostly constructed upto the end of fourth plan period have also been damaged and needs major repairs. Considerable percentage of water is wasted due to the damaged distribution system.

4.2.36. Failed and Partially Failed Tubewells : At the end of Seventh Plan there are 803 tubewells which are lying totally failed and about 2000 tubewells with discharge less than 20000 G.P.H. as against normal discharge of 33750 G.P.H. (1.5 cusecs). Further with the passage of time the discharge of other tubewells is also likely to drop down.

4.2.37. The actual potential created upto the end of sixth plan after accounting for change in command area of tubewells works out as 24.782 lakh hectares which also includes potential of totally failed tubewells. Against this the utilization of potential was 12.82 lakh hectares. The cumulative potential by the end of Seventh Plan works out to 29.926 lakh hectares and the utilization as 14.862 lakh hectares through ground water schemes.

4.2.38. In surface water schemes the expenditure has been Rs. 73.80 crore against an approved outlay of Rs. 55.50 crore. The potential created during the Seventh Plan is 0.41 lakh hectares against the target of 0.28 lakh hectares which is commensurate with the increase in expenditure. The total potential created till the end of Seventh Plan is 6.39 lakh hectares and utilization is 3.32 lakh hectares through Surface water schemes.

Strategies/Policies and Programmes during Eighth Plan

4.2.39. During the Eighth Plan period it is proposed to continue the existing programmes. The construction of new tubewells under normal programme is proposed under district and state

sector. specially in those areas where surface irrigation is not possible and further where there is no assured source of irrigation. Provision has also been made for the completion of incomplete distribution system of the tubewells constructed in previous years under state and district sector. Further it is also proposed to provide funds in the plan for the reconstruction of about 1600 tubewells, which include already failed tubewells and also which are likely to fail during the plan period. Provision has also been made for the replacement and modernization of worn out equipment fitted on tubewells and for the purchase of rig machines and allied equipments required for drilling in hard rock zones, deep drilling zones and Tarai areas. Provision has also been made for purchase of deep drilling machine and about 20 exploratory drillings by Nalkoop Nigam Limited.

4.2.40. In case of minor lift canals, it is proposed to provide funds for the construction of new lift canals in eastern districts and in Bundelkhand region and where construction of tubewells is not possible due to non availability of proper ground water strata. it is also proposed to provide funds for the modernization of existing lift canals by replacing worn out equipment, strengthening and extension of distribution system and providing independent electric feeder lines.

4.2.41. It is proposed to provide funds for the construction of bundhies on small rivers in Mirzapur and Sonbhadra district where no other source of irrigation can be economically provided.

4.2.42. In case of hill channels, it is proposed to provide funds for the construction of hill channels from small nallahs in the hill districts, where no other source of irrigation can be provided.

**Programmes and Estimated
Year wise outlay :**

4.2.43. Following programmes/ schemes are proposed to be taken up for execution during Eighth Plan.

A- GROUND WATER :

1. Normal Tubewells
2. Indo-dutch schemes
3. World Bank Tubewell project phase-II&III

B- SURFACE WATER :

1. Minor lift canals
2. Bundhies
3. Hill Channels

4.2.44. The scheme wise position in respect of financial outlays and physical targets is discussed below.

4.2.45. Ground Water : The state still has vast untapped ground water potential, a part of which is proposed to be utilized in Eighth Plan by constructing state tubewells under different schemes. It is proposed to drill about 4320 tubewells and energize 4643 tubewells during the Eighth Plan. Thus an additional potential of 4.643 lakh hectares is likely to be created. As the figures of potential of creation are based on 18-20 hours power supply, while actual supply is about 8-10 hours, per day, the utilization of potential is expected to be about 53 percent. The figures of utilization can improve if power supply position is improved.

4.2.46. New Tubewells under District/State Sector : Normal tubewells will be constructed under district and state sector. Under the district sector the outlays and works to be executed are finalized at district level, while the state government decides the works to be carried out in state sector. An outlay of Rs. 310.00 crore has been proposed under this head. The details of works are given below :

4.2.47. Construction of new Tubewells : It is proposed to drill 2360 new tubewells as per plans of the districts and state and energize them, creating irrigation potential of 2.36 lakh hectare. A sum of Rs. 177.50 crore has been proposed for this work.

4.2.48. Spill over Works : Water distribution system on a considerable number of tubewells which have already been energized is, incomplete to the extent of 2 k.m. and it has not been possible to complete it in Seventh Plan due to paucity of funds. A sum of Rs. 33.00 crore is required to complete all these balance works. An outlay of Rs, 14.15 crore has been provided for partially completing the incomplete distribution system during this period.

4.2.49. Modernization of Existing Tubewells : Tubewells have been under construction since 1935. The number of tubewells of pre plan period was 2200, which became 12447 by the end of fourth plan. At present there are 26985 tubewells in operation. As per norms the life of a tubewell is 17 years. Thus out of the above, about 10300 tubewells have since completed their lives. some of them need reconstruction and improvement of discharge, while others need replacement of worn out equipment which have completed their lives. Similarly the distribution systems of almost all of them need relaying, as they have completed their useful lives and are lying damaged. These works could not be carried out from the normal grant of Rs. 5000/ per tubewell which is insufficient enough to meet the requirement of normal maintenance. About Rs. 30.00 crore per year is credited to the "Depreciation Reserve Funds" for meeting out such reconstruction and replacement. But sufficient amount has not been made available for these works in the past. Therefore to regenerate the, otherwise unutilized

potential, following works are proposed to be carried out in the plan period. There are about 800 tubewells which have already failed and require reconstruction. In addition another 800 tubewells which are likely to fail during the plan period on completing their life will also have to be reconstructed. An outlay of Rs. 48.00 crore have been provided for this work. Further there are about 2000 tubewells whose discharge have fallen below 20000 G.P.H. They come under the category of partially failed tubewells and are to be reconstructed or modernized. An outlay of Rs. 5.00 crore is proposed for improving the discharge of 1200 tubewells, in addition an outlay of Rs. 25.00 crore is proposed for replacement of worn out equipment which have become unserviceable on completion of their lives. An outlay of Rs. 22.00 crore is also proposed for relaying of derelict guls, which have mostly been damaged with the passage of time. Therefore a total outlay of Rs. 100.00 crore has been proposed for all these modernization works.

4.2.50. Machinery, Equipment and Exploratory Drilling by U.P. Nalkoop Nigam Limited : Uttar Pradesh Nalkoop Nigam Limited was established in the year 1976 under the companies act, 1956 with its objectives of augmentation of construction programme of tubewells of state sector as well as to raise additional resources through Institutional finances and foreign aids. This Nigam is constructing tubewells since then for state programmes as well as raising resources through Institutional finances and also executing the foreign aided tubewell projects.

4.2.51 With the objectives of making Uttar Pradesh Nalkoop Nigam, a premier tubewell construction organization of the state and to equip the Nigam with necessary resources and capacity to raise institutional finances, it is imperative to provide financial assistance through state resources in the Eighth plan.

4.2.52. The main areas of the activities proposed to be expanded by the Nigam are as below :

- (a) Construction of tubewells in the state sector as well as foreign aided tubewell projects.
- (b) Raising Institutional finance for construction of tubewells to augment state sector programme.
- (c) Exploration of difficult areas of the state which have not been explored so far and conducting studies regarding availability and quality of water in different problem areas of the material measures.
- (d) Providing drilling equipments and machinery for drilling in hard rock areas including Bundelkhand region.

4.2.53. The authorized capital of the Nigam is Rs. 6.00 crore and paid up share capital is Rs. 4.9 crore. The paid up capital of the Nigam has been converted into the form of assets of the Nigam such as drilling rigs and allied equipments in the form of inventory such as mild steel pipes etc. which are

being used regularly for construction of tubewells of deposit works. Major drilling equipments of the Nigam were purchased during the year 1976-77 and 1979 which will be completing their lives shortly and their will be uneconomical to repair and hence need replacement. In order to keep the drilling capacity matching with the work entrusted, the Nigam has to purchase the equipment in replacement for which the Board of the Nigam has accepted the proposal to increase the paid up share capital. In view of the above, a provision of Rs. 5.00 crore for increase in share capital during different years of the Eighth Plan has been proposed.

4.2.54. Uttar Pradesh Nalkoop Nigam is exploring possibility for raising resources through Institutional finances like NABARD and scheduled banks. The Nigam has submitted projects for construction of tubewells to NABARD for financing and they are in process. The Bank of India has already submitted their acceptance to finance few tubewell projects of the Nigam costing about Rs. 40.00 crore, for which the margin money amounting to Rs. 4.0 crore is required. As such the provision of Rs. 4.0 crore has been made in the Eighth Plan for the schemes cleared by the bank.

4.2.55. In addition to the replacement of the old existing rigs, the Nigam has to increase its drilling capacity specially keeping in view the provisions for deep drilling areas as well as Bundelkhand region. At present the Nigam does not have any deep drilling rig machine and D.T.H. rigs suitable for hard rock areas. In order to equip the Nigam with different types of additional equipments to enhance its capacity to cater the need of entire state, a provision of Rs. 8.0 crore has been made in the Eighth Plan for purchase of rigs and allied equipments.

4.2.56. There are several areas in the state which are lying unexplored because of non-availability of the suitable equipments. Considering the size of the state and areas still required to be explored, exploratory drilling work of the Central Ground Water Board needs to be supplemented. As such it is proposed to establish exploratory units in the Nigam with the provisions of suitable equipments for exploration as well as staff required to operate them. Also the programme of exploration of 20 sites during the year has been included. The provision of Rs. 10.0 crore has been proposed in the Eighth plan.

4.2.57. Uttar Pradesh Nalkoop Nigam will also share programme of construction of tubewells under normal programme and also under foreign aided projects.

4.2.58. In addition to the provisions covered under normal programme of state sector and foreign aided projects to be shared by U.P. Nalkoop Nigam in the Eighth Plan, additional proposals to be implemented as mentioned above are given below :

	<u>Rs. in Crore</u>
(a) Increasing share capital	5
(b) Margin money for projects to be financed by the banks	4
(c) Additional drilling equipments and allied machinery to raise drilling capacity in hard rock areas including Bundelkhand region.	8
(d) Exploratory drilling programme	10

Total	27

4.2.59. Investigation, Planning, Quality Control and Monitoring: AT Present there is no organization for investigation, planning, quality control and monitoring. As such a sum of Rs. 0.35 lakh has been proposed for this work.

4.2.60. Tubewells Under Foreign Aided Projects : Following projects are proposed to be taken up in the Eighth plan for which a sum of Rs. 200 crore has been proposed.

4.2.61. Indo-Dutch Tubewell Project : Under this project construction of 750 new tubewells, modernization of 125 tubewells and connection of 200 tubewells with independent feeder is being undertaken. The latest revised cost of project is about Rs. 98.00 crore, out of which the expenditure incurred by the end of Seventh Plan is Rs. 44.70 crore. The project is scheduled to be completed by March, 1992. Therefore, an outlay of Rs. 50.00 crore has been proposed. It is proposed to energize 636 tubewells during Eighth Plan creating irrigation potential of 0.636 lakh hectares while 114 tubewells were energized during Seventh plan.

4.2.62. World Bank Tubewell Project : The second phase Uttar Pradesh Public tubewell project being financed by world bank is under execution and is to be completed by the end of March, 1991, for which a sum of Rs. 10.00 crore has been provided during 1990-91. As a follow up of above project, a third Uttar Pradesh Public tubewell project has also been submitted to world bank for approval, under which construction of 3000 new tubewells, modernization of 600 old tubewells and connection of 900 old tubewells to dedicated feeders is envisaged. The estimated cost of the project is Rs. 371.25 crore. Since the sanction of the project is still awaited, a provision of Rs. 140.00 crore has been made in the Eighth Plan. The work will be taken up after sanction from world bank. An additional irrigation potential of 0.147 lakh hectares from phase-II and 1.40 lakh hectares from phase-III is likely to be created under this project.

SURFACE WATER

4.2.63. Minor Lift New Schemes : There are many areas in Bundelkhand and in districts of Varanasi, Ghazipur and Mirzapur where it is not possible to provide other means of irrigation and there is heavy demand for water. In such areas construction of minor lift schemes is the only solution. An outlay of Rs. 5.00 crore has been proposed for construction of new schemes, spread evenly throughout the plan period. It is estimated that irrigation potential of 6000 hectares will be created through these schemes.

4.2.64. New schemes of Modernization : There are 231 lift canals in running condition with discharge capacity of upto 100 cusec. Most of these lift canals were constructed about 20 years back and their equipments have worn out. These canals are to be modernized by replacing/ repairing worn out equipments, strengthening and extension of their distribution system and providing dedicated electric feeder lines for them. This work was not possible from the normal grant of maintenance and repairs and also their major repairs could not be carried out in the past years due to non-availability of funds. The present utilization is 0.64 lakh hectares as against their irrigation potential of 2.09 lakh hectares. It is expected that by modernizing these lift canals and providing them 16-18 hours power supply per day, the utilization of irrigation potential will increase appreciably. The modernization works have not been possible to be carried out from normal maintenance grant of Rs. 4000.00 per cusec per year. An outlay of Rs. 20.00 crore has been proposed for modernizing these lift canals.

4.2.65. Bundhies : Bundhies are being constructed in Mirzapur and Sonbhadra districts on small rivers. Work on construction of 34 bundhies was undertaken in the Seventh Plan. A project for construction of 45 and 4 bundhies is being taken up at a cost of Rs. 23.64 crore and Rs. 3.62 crore creating an additional potential of 0.124 lakh hectares and 0.019 lakh hectares respectively. An outlay of Rs 15.00 crore has been proposed, creating an additional potential of about 0.048 lakh hectares.

4.2.66. Hill channels : Hill channels are being constructed in the hill districts of Nainital, Almora, Pithoragarh, Pauri, Chamouli, Dehradun, Uttar Kashi and Tehri. During the Seventh Plan a sum of Rs. 60.08 crore was spent. An outlay of Rs. 85.00 crore has been proposed for Eighth Plan, creating an additional potential of about 0.263 lakh hectares.

Private Minor Irrigation

4.2.67. Uttar Pradesh is predominantly an agricultural state. Agricultural production can be increased either by increasing the area under cultivation or increasing the productivity of the land. There is very little scope for increasing the

agricultural area. Therefore, main thrust now has to be to devise ways and means to increase the productivity. Private shallow borewells in the alluvium region of the eastern, western and central part of the state have been the main source of assured private minor irrigation. Guls, hauzes and hydrams in the hill region, blast wells and deep tubewells in the hard rock area of southern part are the other sources of private minor irrigation. With rapid advancement in the field of agriculture and increasing production cost, It is obviously natural that the cultivator wants irrigation facilities to be wholly under his own control. The trend of increasing private minor irrigation works during the last two decades in Uttar Pradesh shows clearly that such facilities are even essential for supplementing the supplies available from canals and state tubewells. Most of the private minor irrigation works being executed in state are therefore pivotal to the concept of intensive cultivation and conjunctive use of surface and ground water.

4.2.68. In Uttar Pradesh the development of irrigation potential is being carried out both through surface and ground water irrigation works. The surface water irrigation works comprising major, medium and minor irrigation projects are mainly being developed by the state irrigation department. The public ground water irrigation works, that is state tubewells, are being constructed and maintained by the state irrigation department and shallow tubewells/ borewells i.e. private tubewells/ borewells are being constructed and maintained by the farmers themselves. The construction of private tubewells /borewells of small and marginal farmers is, however, being handled by Govt. agencies like minor irrigation department etc. with a subsidy for practically the entire cost of the boring and a part of the cost of the pump set.

4.2.69. As per the latest available statistical records (year 1985) the net cultivated area and the net area irrigated through different sources in the state is as follows :

I. Net Cultivated Area (Lakh ha.)	172.44
II. Net Irrigated area (Lakh ha.)	
(a). Canals	33.57 (19.47%)
(b). State tubewells	06.45 (03.74%)
(c). Private Tubewells/ Borings	51.28 (29.71%)
(d). Other sources	10.07 (05.84%)
	<hr/>
Total :	101.32 (58.76%)
	<hr/>

4.2.70. From the above it is clear that the major share of the net irrigated area about 61 percent of the total net irrigated area in the state, is through private tubewells/ borewells. Individual ownership of project, freedom in the operation of the project by the farmer as per his convenience and requirement, quick and easy installation, government aided infrastructure and technical assistance, credit facilities and above all, financial assistance from the Government encouraged the small and marginal farmers to become self-sufficient in respect of irrigation. Big farmers having holding of more than 4 hectares have a total holding area of about 27 percent in the state. These farmers generally did not need any government assistance and were able to install their own source of minor irrigation. The small and marginal farmers who have a total holding area of about 48 percent are now being assisted by the government for having their own source of minor irrigation. Rest of the farmers with holdings of 2 to 4 hectares having a total holding area of about 25 percent are being neglected in respect of development of private minor irrigation even though the cost of development of irrigation potential through shallow private tubewell/ borewells is very small as compared to that through deep tubewells.

4.2.71. At the onset of the first five Year Plan 14.44 lakh hectares of irrigation potential was available through different private minor irrigation sources. By the end of Seventh five Year Plan 119.36 lakh hectares irrigation potential was created. Plan wise achievement of irrigation potential is given in table 4.2.2.

Table 4.2.2
Irrigation Potential Created Through Private Sources

Plan Period	Irrigation Potential (In lakh hectares)		
	During	Depreciation	Cumulative after depreciation
1	2	3	4
1. Pre Plan	14.44	-	14.44
2. First Plan (1951-56)	00.76	-	15.20
3. Second Plan (1956-61)	1.45	-	16.65
4. Third Plan (1961-66)	8.48	-	25.13
5. Annual Plan (1966-69)	15.61	5.37	35.37
6. Fourth Plan (1969-74)	31.26	11.31	37.12

Table 4.2.2(Concl'd.)

Plan Period	Irrigation Potential (In lakh hectares)		
	During	Depreciation	Cumulative after depreciation
1	2	3	4
7. Fifth Plan (1974-79)	26.23	5.66	57.69
8. Annual plan (1979-80)	8.62	1.44	64.87
9. According to Census 1980	-	-	62.67
10. Sixth Plan (1980-85)	39.33	9.41	92.59
11. Seventh Plan (1985-90)	39.55	12.78	119.36

4.2.72. During the sixth five Year Plan most of the big and well to do farmers with land holdings above 4 hectares got their private irrigation sources installed. Objective of Seventh five Year Plan was to cover those small and marginal farmers who due to their financial constraints could not install their own irrigation sources till sixth five Year Plan. A special programme of free boring under S.M.P.P. was launched in Jan, 1985. Besides this, during this plan period we could extend our activities in hard rock and difficult areas of the state by providing different drilling equipments with the central assistance.

4.2.73. The functions and responsibilities of Minor Irrigation Department have increased manifold during the Seventh Five Year Plan. The role of the department was almost advisory during and before the Sixth Five Year Plan. It has now touched new horizons with the introduction of free boring scheme and entire responsibility of its planning, execution and implementation by the department. It is in this back ground that the department needs strengthening for carrying out the new task.

4.2.74. Physical Achievement : A target for creation of 35 lakh hectares of additional irrigation potential was fixed for the Seventh Plan. Achievement during Sixth Plan and year wise during Seventh Plan is given as below.

Table 4.2.3
Target and Achievement of Irrigation Potential

ITEM	Irrigation potential (in lakh hectares)						
	Sixth Plan	Seventh Plan	1985	1986	1987	1988	1989
	1	2	3	4	5	6	7
a) Target	33.79	35.00	6.80	6.90	6.95	6.13	11.21
b) Achievement	39.33	39.55	7.10	7.29	7.67	7.43	10.06
c) Utilization	39.33	39.55	7.10	7.29	7.69	7.43	10.06

4.2.75. **Free Boring** : Free boring scheme was started under Small and Marginal farmer's programme (S.M.F.P.) at the end of year 1984-85 with a view to increase agricultural production. Under this scheme, the department with an annual capacity of about 60,000.00 borings could benefit 1,86,363 small and marginal farmers by the end of 1987-88. In extraordinary drought of 1987-88 the target of 60,000 free borings was enhanced to 65,000 with a view to ensure its benefits in the Rabi 1987. This whole target was achieved in December, 1987. This facility was a boon for the cultivators.

4.2.76. In the Seventh five Year Plan a target of 3 lakh borings was fixed based on the annual capacity of 60,000 borings of the department. About 60 percent targets were achieved in the first three consecutive years of above plan by completing 54808, 61027 and 65047 free borings respectively. Because of large popularity gained by the scheme, a target of 2,12,175 borings per year was earmarked for the year 1988-89 and 1989-90 thereby revising original targets of 3 lakh borings of Seventh five Year Plan to 6.04 lakh borings. Due to various constraints of the department about 5.45 lakh borings could only be completed jointly with U.P. Agro and other government agencies.

4.2.77. **Financial Achievement** : Finance for the development of Minor irrigation programme is arranged through (a) State Plan Outlay (b) Land Development Banks and Commercial banks and (c) cultivator's share. In addition D.R.D.A., Harijan and Social Welfare Department, Agriculture Department and other institutions also provide assistance for the Minor irrigation Programme. Expenditure during Sixth plan and outlay for Seventh plan for different items are given in table 4.2.3.

Table 4.2.3
Outlay and Expenditure
(Rs. in Lakh)

Item	Expenditure in Sixth Plan	Outlay of Seventh Plan	Actual Expenditure					Expenditure in Seventh Plan	
			1985	1986	1987	1988	1989		
	1	2	3	4	5	6	7	8	9
1. Loan (Hills)	256.29	111.00	33.90	21.99	22.00	21.57	-	99.96	
2. Subsidy	1000.76	3676.10	562.07	611.68	594.16	166.01	170.51	2104.43	
3. Boring Godown	94.59	160.00	54.36	92.64	82.12	69.91	49.00	348.03	
4. Tools &	619.05	1060.00	302.36	412.94	354.86	215.11	202.54	1487.81	
5. Other expenses	396.45	1294.00	11.90	47.23	69.63	143.22	147.83	419.81	
6. Hydras etc.	339.10	699.00	109.65	116.81	127.40	130.94	150.60	635.40	
Total	2706.24	7000.00	1074.24	1303.29	1250.17	746.76	720.48	5094.94	

Facilities :

4.2.78. The following facilities are being provided the cultivators for the construction of their own source of irrigation:

(1) For the whole state :

(a) Under Centrally sponsored S.M.F./S.F.P.P. and IRO programme, facility of free boring up to the limit of Rs. 3,000 to small farmers, Rs. 4,000 to marginal farmers and Rs. 5,000 to the cultivators of scheduled tribes is provided in the State. Subsidy at the rate of 25 percent to small farmers, maximum of Rs. 1500 and 33 1/3 percent to marginal farmers with a maximum of Rs. 2,000 is admissible for pump sets/tubewells.

(b) Subsidy at the rate of 50 percent is provided for the construction of tube-wells by departmental heavy rigs in hard rocky and difficult areas of the state up to a maximum limit of Rs. 30,000. In case of failures of boring, only 10 percent subject to a maximum of Rs. 1,000 is charged from cultivator and the rest is borne by the government.

(c) In addition to boring pump-sets/tubewells, one fourth and one third of loan is also provided as subsidy to small and marginal farmers respectively for other works such as masonry well/Persian-wheel and pump sets installed on surface water resources.

(2) Regional :

(a) Subsidy at the rate of 50 percent subject to a maximum of Rs. 7,500 is admissible for the construction of tube-wells by the departmental In-well Rigs in hard rock area of Jhansi, Lalitpur, Banda, Hamirpur, Agra, Allahabad, Mirzapur and Varanasi districts of the state. In case of failures of borings only 10 percent subject to a maximum of Rs. 400.00 is charged from the cultivator and the rest is borne by the Government.

(b) In the hard rock area of Bundelkhand, Allahabad, Varanasi, Mirzapur and Agra, subsidy at the rate of 50 percent subject to a maximum of Rs 5,000 is admissible for the construction of new blast wells and at the rate of Rs. 10 per hole for deepening of wells by blasting.

(c) All categories of farmers of Bundelkhand and rocky area of Allahabad are given 25 per cent subsidy for installation of tube-wells and pump-sets.

(d) In 24 blocks of Agra, Etah, Mathura and Aligarh districts facility of subsidy at the rate of 50 per cent subject to a maximum of Rs. 2,500 is available on the failed tube-wells on account of saline water.

(e) In Agra, Mainpuri, Etawah and Jalaun districts subsidy at the rate of 50 per cent subject to a maximum of Rs. 5,000 is admissible for the construction of Artesian wells by hand boring sets. The limit is Rs.15,000 when the boring is done by rigs.

(f) Subsidy for establishing sprinkler equipment in Sonbhadra, Jhansi, Jalaun, Banda, Hamirpur, Lalitpur, Agra, Mathura and Allahabad districts is admissible at the rate of 25 per cent to small farmers, 33 1/3 per cent to marginal farmers and 50 percent to the cultivators of scheduled tribes under central scheme. Maximum unit cost is taken as Rs.40,000 for sprinkler establishment. In addition to this 25 percent subsidy subject to the maximum of Rs. 2500 is given on each equipment by the state.

(3) Hilly Region :

(a) Subsidy at the rate of 50 per cent is provided for construction of hauzes and guls up to a maximum limit of Rs. 1,500 per acre.

(b) Hydram in hilly areas and artesian wells in tarai area of Mainital district are constructed by the department at cent per cent grant from government.

**Strategy and Thrust Areas
for Eighth Plan.**

4.2.79. During the Eighth Plan period it is proposed to continue the existing programmes. A massive target of 10 lakh borings has been proposed for the benefit of poorer section of the cultivators including small and marginal farmers under special food production programme. Under Tribal Sub Plan allocation of funds is to be increased to the extent that at least 40 percent of cultivated area is brought under irrigation by the end of Eighth plan. The development of minor irrigation in tribal areas is to be accelerated. It is also proposed to provide customs service for feasibility of wells and drilling of tubewells at nominal rates.

**Physical and Financial Programme
for Eighth Plan**

4.2.80. An outlay of Rs. 6500 lakh, including Rs. 1500 lakh for hills is proposed in the Eighth Plan. The target for creation of additional irrigation potential is 50.76 lakh hectares. The abstract for physical and financial programme is given in table 4.2.4.

**Table 4.2.4.
Physical and Financial Programme**

Item	Outlay (Rs in Lakh)	Irrigation Potential (ha.)
1.	2.	3.
1. Surface Water		
(i) Lift irrigation scheme		
(a) Hydram and maintenance	610	1500
(ii) Other expenditure		
(a) Loan (Hills)	100	--
(b) Subsidy on gul & hauz	50	1350
(c) Subsidy on pump set	212	15000
(d) Construction of gul	500	1800
(e) Mini turbine	14	--
2. Ground Water		
(i) Subsidy		
(a) Deep tubewell by heavy rig machine	746	30000

Table 4.2.4.(Concl'd.)

Item	Outlay (Rs in Lakh)	Irrigation Potential (ha.)
1.	2.	3.
(b) Tubewell by In-well/ Wagon drill machine	214	15000
(c) Boring Pump set/ tubewell	45	7500
(d) Blast well/ deepening of wells by blasting machines	55	2850
(e) Artesian wells	5	500
(f) Saline water scheme	5	--
(g) Sprinkler scheme	60	--
(ii) Machinery and equipment		
(a) Tools and plants	1426	--
(b) Special equipments	750	--
(iii) Tubewell/ Wells		
(a) Shallow tubewells	--	5000000
(b) Artesian wells	25	400
3. General		
(i) Direction and administration		
(a) Staff	1131	--
(b) Stipend	20	--
(ii) Other expenditure		
(a) Boring godown and office building	532	--
Total	6,500	50,75,900

4.2.81. During the year 1990-91, an expenditure of Rs. 1118.00 lakh including 218.00 lakh for hills is anticipated. A plan outlay of Rs. 1300.00 lakh, including Rs. 250.00 lakh for hills has been proposed for 1991-92. A target of 10.13 lakh hectares additional irrigation potential is proposed to be created during 1990-91. The same target is also fixed for 1991-92

4.3. Command Area Development Programme

4.3.1. Command Area Development Programme aims at increasing the agriculture production and productivity of the area through full and better utilization of irrigation potential created by the major and medium irrigation projects and thus bridging the gap between creation and utilization of irrigation potential. For achieving this objective, Command Area Development Authorities are undertaking On Farm Development (O.F.D.) works which includes construction of field channels, lining of field channels, field drains and water control structures. This is preceded by Soil Survey, topographical survey, planning and designing and followed by Warabandi (Osrabandi) and crop planning for optimum agriculture production and remunerative return to farmers.

4.3.2. This programme was initiated in the year 1974-75 on three major canal systems, namely Sharda Sahayak, Ram Ganga and Gandak, Ministry of Water Resources, Government of India also agreed to foreclose the on going Sharda Sahayak Project at an area of 14.08 lakh hectares and include Sharda Canal Project with a C.C.A. of 7.33 lakh hectares in the Centrally sponsored Command Area Development Programme. By the end of Sixth Five Year Plan, 23.68 lakh hectares (revised after joint verification) had been developed through construction of field and drainage channels and water control structures etc. Osrabandi was also done in an area of 4.04 lakh hectares.

4.3.3. During the Seventh Plan period it was proposed to cover 22.53 lakh hectares area under O.F.D. works and 34.15 lakh hectares area under osrabandi. This included 2.15 lakh hectares area of new command. Due to non-availability of new area for O.F.D. works and late sanction of the new Sharda Canal System to be included under Command Area Development Programme, the targets fixed for Seventh Plan period were not achieved. The details of the achievements during Seventh Plan period are given in table 4.3.1 :

Table 4.3.1
Physical Targets and Achievements
(in thousand ha.)

Item	Seventh Plan		Achievement					Total achievement during Seventh Plan
	Targets (1985-90)	1985	1986	1987	1988	1989	1990	
1.	2.	3.	4.	5.	6.	7.	8.	
1. Construction of field channels (O.F.D. works)	2253.00	222.15	231.37	222.58	171.60	258.96	1106.66	
2. Osrabandi	3415.00	232.16	300.99	336.76	477.40	555.46	1902.77	

4.3.4. By the end of Seventh Plan, progressive achievement of O.F.D. works is 34.75 lakh hectares and osrabandi in 23.07 lakh hectares was done in the three command and Sharda Canal System included in place of Sharda Sahayak under this programme.

4.3.5. An outlay of Rs. 107 crore was approved for this sector as State share and Rs. 104.80 crore as Central share on 50:50 basis. Thus the total plan outlay for the Command Area Development Programme was Rs. 211.80 crore. The expenditure during the Seventh Plan period was as under:

Table 4.3.2
Financial Outlay and Expenditure
(Rs. in lakh)

Item	Seventh Plan		Expenditure				Total Seventh Plan
	Outlay 1985-86	1986-87	1987-88	1988-89	1989-90		
1.	2.	3.	4.	5.	6.	7.	8.
1. State Share	10700.00	1211.71	2148.32	2359.63	2120.17	1285.98	9125.81
2. Central Share	10480.00	1200.21	2114.09	2341.01	2120.16	1269.70	9045.17
Total	21180.00	2411.92	4262.41	4700.64	4240.33	2555.68	18170.98

Strategy of Command Area Programme for Eighth Plan

4.3.6. The main strategy under command area development is to ensure effective water utilization and equitable distribution of irrigation water through integrated water management for optimizing agricultural production in command area. To fulfil this objective, it is necessary to take up items like training, demonstration, adoptive trials, farmers participation, wireless communication, monitoring and evaluation programme to improve agricultural production.

Removal of Uncertainty in Irrigation Water Supply :

4.3.7 Due to lack of Management approach and poor coordination between the agencies involved in function of distribution of water irrigation, water do not reach from head work to farm gata timely. To improve uncertainty in water supply and increase water use efficiency through better management techniques, canal wise rosters are being prepared to

match the crop needs and will be widely publicized in the command areas. Scheduling of canals done by the irrigation department are to be monitored and it will be ensured that the water flows on prescribed FSL.

On Farm Development :

4.3.8 Command Area Development Programme cannot be designed in isolation and hence must be related to construction programme of the irrigation project. Utilization of potential can not be planned unless there is a definite phased programme of creation of irrigation potential. Length of kuccha field channels and its lining, field drains and water control structures can be considerably reduced by appropriate planning. There is justification for lining of field channels over certain reaches but it should be need based in the vulnerable reaches to minimum extent.

Farmers Participation :

4.3.9 To ensure farmers participation Chak Samities are being substituted by Water Management Committees constituted under section 110 of United Provinces Panchayat Raj Act 1947. Since Gram Pradhan is the Chairman of these committees and ownership of the executed O.F.D. works is to be transferred to these committees, maintenance of these works will also be looked by them in future. These Committees will also be actively involved in the construction of O.F.D. works and implementation of osrabandi in Command areas.

Water Cooperative Societies :

4.3.10 Sharda Sahayak Command has constituted one water cooperative society on 5 outlets of Amethi minor in district Lucknow where water is purchased in bulk at the rate of 0.17 paise per 10,000 liters and distributed amongst the members of the society. This society is also realizing the irrigation charges from the beneficiaries and implementing osrabandi. The societies have been able to save the irrigation water and are ensuring timely water supply. Members are also being given rebate at the rate of 10 % to promote timely payment of irrigation charges to societies. Societies are also envisaging to take up the work of input supply and crop loan to the beneficiaries. The programme is to be extended to other areas of the command.

Adoptive Trials & Demonstrations :

4.3.11 Studies of farm water management in collaboration with research institutes/ universities to ensure optimum utilization/ production per unit of water will be taken up in the commands.

Training :

4.3.12 Personnels engaged in command area development are to be trained to improve their efficiency. The farmers are also educated in sharing water. On farm water, management, crop water requirements, detrimental effects of water logging and salinity, pest and weed control through T & V programme are being taken up in all the districts of Command Area Development Authority.

4.3.13. Crop cutting experiments for all major crops grown in the command area should be conducted through Directorate of Statistics, U.P to assess the productivity level and increase in production.

Conjunctive Use of Surface And Ground Water :

4.3.14 The emerging dichotomy of shortage/ non-availability of water over certain area of command on one hand and water logging and salinity problems due to excessive water use on the other, demands conjunctive use of surface and ground water in the command area through free boring programmes.

Monitoring and Evaluation :

4.3.15 Monitoring is a management tool which ensures timely diagnosis and intervention in implementation of programme which undertake monitoring of water availability, carrying capacity of canals and field channels, structures, water distribution, ground water rise, salinity and post irrigation aspect and financial aspects involved in the programme. For proper method of compilation, collaboration, processing, storing and retrieval of such information for purpose of analysis, effective monitoring and decision making, one computer should be installed in each Command Area Development Authority. There is need of regular evaluation of command area development projects internally through the office of Command Area Development Authority and some evaluation studies will be entrusted to institutions capable of evaluating the performance of Command Area Development projects.

4.3.16 An outlay of Rs. 100.00 crore is proposed for Command Area Development Programmes as state's share for the Eighth Plan against which same amount would be the central share on 50:50 basis. A sum of Rs. 16.88 crore as state's share is anticipated to be spent during the year 1990-91 against approved outlay of Rs. 12.00 crore. A plan outlay of Rs. 12.00 crore has been proposed for annual plan 1991-92.

4.3.17 The physical targets proposed for Eighth Plan and annual plan 1990-91 and 1991-92 are given in table 4.3.3 :

Table 3.3
Physical Targets for Eighth Plan
 (in thousand ha.)

Item	Eighth Plan Target	1990-1991		Target proposed for 1991-92
		Target	Anticipated achievement	
1.	2.	3.	4.	5.
1. Construction of field channels (O.F.D. works)	1488.00	204.00	204	332
2. Osrabandi	2347.00	390.00	390	390

4.3.18. During the Eighth Plan period, 7 new projects (Upper Ganga, Madhya Ganga, East Ganga, East Yamuna, Betwa and Gursaiia, Ken and Jamrani) have been proposed to be included under Command Area Development Programme. Inter ministerial sanctioning committee has accepted the proposal and detailed project reports along with the cost estimates have been submitted to the Ministry of water resources for approval.

4.4 Flood Control and Drainage

4.4.1. Floods are a regular feature in Uttar Pradesh and the damages on account of floods in this state are the highest in the country. It has been observed that out of a total area of 294.4 lakh hectares an area of 43.43 lakh hectares on an average, has been affected by flood annually between the years 1978 to 1982. In 1978, which was a year of heavy floods, as much as 73.36 lakh hectares and 23 percent population were affected. The loss of crops, property and cattle, up-dated for price level of 1987, has been estimated at about Rs. 400 crore in an average year, which were well over Rs. 1225 crore in 1978 and over Rs. 2930 crore in 1985. Again in the year 1980, 1982, 1983, 1984, 1985, 1986, 1987 the state experienced very heavy floods due to incessant rains and the losses were estimated at about Rs. 677, 979, 1175, 1390, 581, 2932, 596, 288 crore respectively. The losses during 1988 were assessed at Rs. 839 crore.

Flood Protection in U.P. vis-a-vis other States

4.4.2 A comparison of the areas affected by floods and which have been provided protection in the northern part of the country is given below (Table no. 4.4.1):

Table 4.4.1
Areas Affected by Floods in Various States

State	Flood prone area	Protectable area	Area Protected upto end of Seventh Plan	Balance area to be Protected	Percentage area protected upto end of Seventh Plan
1.	2.	3.	4.	5.	6.
1. Uttar Pradesh	73.36	58.72	14.87	43.85	20.26
2. Bihar	42.60	34.08	19.29	14.79	45.28
3. West Bengal	37.66	30.19	18.55	11.64	49.26
4. Punjab	40.50	37.00	26.81	10.19	66.21
5. Haryana	23.50	23.50	17.20	6.30	73.19
Total Country	366.61	320.00	137.76	182.16	37.58

4.4.3. The above figures clearly show that the state of Uttar Pradesh is the worst flood affected in the country and where as by the end of Seventh Plan Bihar, West Bengal, Punjab and Haryana had protected 45.73 per cent of their flood affected areas, the area protected in U.P. is only 20.26 per cent. At the end of Seventh Plan U.P. is to be provided protection to an area of 43.85 lakh hectares as against balance of 182.16 lakh hectares for the entire country i.e. U.P. has to provide protection to 25 percent of the balance protectable area in the entire country.

**Achievements during
Pre-Sixth Plan period :**

4.4.4. Flood works comprising 1389 Km. long marginal embankments, 12433 Km. length of drainage channels, 4500 Raising of villages and protection works for 58 towns were completed in U.P. in the Pre-Sixth plan period at a cost of Rs. 120.16 crore providing protection to an area of 11.56 lakh hectares.

Progress during sixth plan period :

4.4.5. An outlay of Rs. 230 crore was proposed by the state for flood management during sixth five Year Plan period, against which working group on flood control of the government of India recommended an outlay of Rs. 218 crore. However the planning commission approved an outlay of Rs. 134.00 crore in view of constraints of funds against which only Rs. 86.44 crore could be available for flood protection works and only

2.11 lakh hectares area could be benefited by constructing 277 km. long marginal embankments, 315 Km.length of drainage channels and protection to 6 towns could be provided during the sixth plan period.

Progress during Seventh Five Year Plan :

4.4.6. Due to constraints of funds, a provision of only Rs. 164.50 crore was made for flood schemes to protect an area of 3.0 lakh hectares. The year wise break up of outlay/expenditure, Physical progress and benefited area are shown in table 4.4.2 :

**Table 4.4.2.
Financial and Physical Progress**

Year	Actual expenditure (Rs. in Lakh)	Physical Achievement		Area Benefited (in lakh ha.)
		Marginal embankment (Kms.)	Drains. (Kms.)	
1.	2.	3.	4.	5.
1985-86	1637	20	40	0.20
1986-87	2115	25	50	0.30
1987-88	2029	22	40	0.22
1988-89	2003	33	16	0.20
1989-90	1912	45	18	0.28
Total	9696	145	164	1.20

4.4.7. The table above indicates that only 57 percent of the plan provision was available during Seventh five year plan, with this outlay 145 Km. long marginal embankment, 164 Km. long drainage channel besides town protection and anti erosion works were constructed and protection to an area of 1.20 lakh had been provided.

4.4.8. During the Seventh Plan a provision of Rs. 8.88 crore was made for the drains of industrial area. These drains do not fall under flood sector in the Seventh Plan and also do not provide protection to flood prone area.

Flood Problems :

4.4.9. The State of U.P. lies entirely in Ganga, basin and the main rivers are Ganga, Yamuna, Ghaghra, Rapti, Gandak, Sharda, Ramganga, Gomti, Sai, Betwa and Ken. The worst flood affected areas lie in eastern Uttar Pradesh which faces the fury of rivers Ganga, Gandak, Ghaghra, Rapti, Sharda, and their tributaries. All these rivers except Ganga have their origin in Nepal. The strategy for the management of floods in the basins had been to construct marginal embankment and drainage improvement schemes. The Western part of the state faces flood problem due to river Ganga, Yamuna, Ramganga etc. while the central Uttar Pradesh is affected due to flooding of river Gomti,

Sal and other smaller rivers, Bundelkhand region experienced unprecedented floods during 1983 due to flooding of river Betwa, Dhasen and Ken. Western and Central Uttar Pradesh also suffered due to water-logging and drainage congestion of the areas.

Strategy for the Eighth Five Year Plan :

4.4.10. As the occurrence of floods in the rivers is a natural phenomenon, it is recognized that absolute control and protection from floods can seldom be achieved and even if it is technically feasible, it may not be economically passible. However, the damages due to floods and human misery caused on this account can be considerably mitigated by judicious combination of various flood protection measures.

Engineering Methods :

4.4.11. The main elements of flood control as far as engineering methods are concerned are structural method such as construction of reservoirs on rivers, construction of marginal embankments to contain the floods within the embankments, river improvement works to increase their discharge carrying capacities, flood-ways and diversion works, construction of drains to improve the drainage of affected area, anti erosion and town protection works.

Administrative Measures :

4.4.12. The very effective methods are non structural measures such as provision of proper flood warning and forecasting arrangements, flood plain zoning regulation and management, flood fighting, evacuation and relief measures.

Objective and Strategy of 1991-92 :

4.4.13. The main elements of flood control as far as structural measures concerned are:

- (a) Construction of marginal embankments to contain the floods within the embankments.
- (b) Construction of town protection works to save important residential areas and towns.
- (c) Construction of anti-erosion works on various rivers to check erosion of soil.
- (d) Construction of drains of Industrial areas.
- (e) Construction of drains to improve the drainage of flood affected areas.
- (f) River improvement works to increase their discharge carrying capacities.

4.4.14 All these methods have been employed in framing schemes included in the plan. Emphasis has been laid on completion of pre-Seventh Plan period schemes so that benefits

of the schemes could be drawn at the earliest. Priority has been given to drainage improvement schemes of Western and central Uttar Pradesh as these region are suffering due to acute water logging. Marginal embankment schemes of eastern Uttar Pradesh have also been given special attention.

4.4.15. The work wise break up of proposed outlay of Rs. 190.00 crore for Eighth Five Year Plan (1990-95) and Rs. 20.00 crore for annual plan 1991-92 are given in table 4.4.3 :

Table 4.4.3
Work Wise Breakup of Plan Outlays (Rs. in Lakh)

Name of Work	Eighth Plan (1990-95) proposed outlay	Annual Plan 1990-91 approved outlay	Annual Plan 1991-92 proposed outlay
1.	2.	3.	4.
I. Flood Control Schemes			
(a) Marginal embankment	9280.54	493.00	1051.00
(b) Town protection	2677.14	407.00	380.00
(c) Anti erosion	3070.19	250.00	273.00
2. Industrial drains	2500.00	150.00	150.00
3. Drainage schemes	1277.13	250.00	96.00
4. Survey, investigation, emergent and unforeseen, flood fighting, flood forecasting, monitoring etc.	195.00	100.00	50.00
Total	19000.00	1650.00	2000.00

4.4.16 A provision of Rs. 190.00 crore is made for flood schemes to protect an area of 1 lakh hectares during Eighth Plan period. Annual Plan for 1990-91 with a provision of Rs. 16.50 crore is envisaged for protection of 0.20 lakh hectares by constructing 20 Km. long marginal embankments and 40 Km. long drains. It is planned that in the year 1991-92 with a provision of Rs. 20.00 crore, 0.20 lakh hectares of new area will be protected from floods by constructing 20 Km. long marginal embankments and 40 Km. length of drainage channels. The cost per hectare area benefited, is expected to be about Rs. 9250.00.

---*---

CHAPTER VI

INDUSTRY AND MINERALS

Uttar Pradesh the most populous State of the country endowed with large and highly fertile areas, is witnessing the transition of a predominantly agricultural economy to an agro-industrial economy. In a situation where there are constraints of entrepreneurship, capital, infrastructure and support systems for the development of industries, the State Government, has been making most judicious use of available resources for ensuring rapid industrial development of the State.

6.0.2 The process of industrialisation gained momentum only in the last two decades and sector has been showing constantly improved performance. Planwise performance of the industrial sector is as follows:-

Plan period	Annual compound growth rate (%)
First Plan (1951-56)	2.3*
Second Plan(1956-61)	1.7
Third Plan (1961-66)	5.7
Three Annual Plans (1966-69)	1.2
Fourth Plan (1969-74)	3.4
Fifth Plan (1974-79)	9.4
Sixth Plan (1979-85)	11.8
Seventh Plan (1985-90)	12.5**

* State Income Bulletin

** Quick estimates based on investment in the organised sector and number of small units set up.

6.0.3 The following table gives an over all view of progress made during Seventh Plan Period in respect of units established, investment, production and employment:-

Table 6.0.1
Seventh Five Year Plan - Progress

Name of Scheme	Unit	Sixth Plan progress upto 31-3-85.	Seventh plan (Additi-onal)	Cumulati-ve progr-ess upto 31.3.90.
(1)	(2)	(3)	(4)	(5)
1. Large & Medium Industries				
(a) Units set up	No.	690	249	939
(b) Capital investment	Crore Rs.	3575.00	4267.98	7842.98
(c) Employment	No.	332580	116358	448938

Table 6.0.1(Concl'd.)

Name of Scheme	Unit	Sixth Plan progress upto 31-3-85.	Seventh plan (Additi-onal)	Cumulati-ve progr-ess upto 31.3.90.
(1)	(2)	(3)	(4)	(5)
2. <u>Small Scale Industries</u>				
(a) Units set up	No.	110710	105541	216251
(b) Anticipated	Cr.Rs.	676.00	642.42	1320.42
capital investment.				
(c) Anticipated	No.	920756	524310	1445070
Employment				
3. <u>Artisan Units</u>				
(a) Units set up	No.	228228	162643	390871
(b) Anticipated	No.	450000	296494	746494
employment				

Objectives of the industrial development for the Eighth Plan

6.0.4 In spite of significant achievements during the Seventh Five Year Plan per-capita investment in the industrial sector continued to be well below the national average. Industrialisation of rural areas could not receive the desired attention. Creation of additional employment opportunities has also not been commensurate with the need and investment that has been made in this sector. With a view to correct these aberrations and ensuring a rate of growth of around 15 percent, the State Government has adopted a new Industrial Policy, the main objectives of which are:-

1. Creation of maximum possible employment opportunities by development of employment oriented industries like tiny, small, handloom, handicraft, cottage and village industries and sericulture.
2. Removal of disparities in the levels of development of various regions of the State through industrial development of rural areas.
3. Bringing such sections of society like educated youth, women, ex-servicemen which have hitherto not joined the main stream of industrial activity to the fold of industrial development.
4. Optimum utilisation of capacity already created in this sector.
5. Development of industries based on local resources, skills and demand like electronics, Drugs and Pharamaceuticals, Plastic and Chemicals, Leather, Petro-Chemicals, Textiles.

Strategy for the Eighth Plan

- (a) Priority to development of employment oriented industry.
- (b) Block headquarters to be nucleus for future industrial growth.
- (c) Incentives for attracting industries in backward areas.
- (d) Development of industrial infrastructure.
- (e) Optimum utilisation of installed capacity and modernisation of small scale sector.
- (f) Entrepreneurship development and increased activity in joint sector.
- (g) Development of Handloom, sericulture and Khadi industries.
- (h) Strengthening of Single Window System Service.
- (i) Development of Handicrafts.
- (j) Marketing assistance to Handicrafts sector.

6.0.6 The economy of the State as a whole has to grow at the rate of six percent per annum during the Eighth Five Year Plan with the manufacturing sector recording a growth of 12% with consequential additional investment of Rs. 32000 cr. in organised sector and Rs. 4000 cr. in unorganised sector and generation of 8 to 10 lacs additional job opportunities. To achieve these objectives, an investment of Rs. 16,500 crs. has been targetted for gestation during the Eighth Plan period in large and medium industries other than Sugar and Electronics by setting up around 500 new medium and large undertakings which would provide additional employment to 2 lakh persons. During the same period 1,65,000 modern small, tiny and rural tiny industries would be set up which would call for an investment of Rs. 2550 crs and provide employment to approximately 6.5 lacs persons. In the Khadi & Village Industry Sector, additional activities would generate employment opportunities to another 2.5 lakh persons.

Large and Medium Industries

6.0.7 As a result of a number of measures ranging from development of infrastructure, attractive package of incentives, an administrative machinery tuned to meet the needs of the entrepreneurs, this sector saw the gestation of an investment of Rs. 4268 crs. as compared to the cumulative investment of Rs. 3575 crs. in the sector by the end of Sixth Five Year Plan. It is also reflected in the number of Letters of Intent, D.G.T.D. and S.I.A. registrations obtained by the entrepreneurs for setting up industries in Uttar Pradesh. During the period 1986-89, a total of 2803 LI's:/DGTD/SIA registrations were obtained by entrepreneurs for setting up industries in Uttar Pradesh. During the year 1990 this trend has more or less been maintained with a total of 263 such LI's and registrations having been obtained till May, 1990. Arrival of natural gas from Bombay High ushered the era of petrochemical industry in the State which till the end of Sixth Year Plan was limited to one Oil Refinery at Mathura. Major projects for manufacture of fertilizer based on natural gas, automotive vehicles, colour picture tube, ethylene, glycol,

polyester fibre plyester film, bulbs & tubes, photocopiers are some of the 249 new medium and large industries that commenced production during Seventh Five Year Plan. Planwise progress of this sector has been as follows:-

Table 6.0.2
Large and Medium Industries Planwise Progress

Plan period	Unit (no.)	Employment (no.)	Capital Investment (Rs. crores)
1951-56	52	24,960	156
1956-61	174	84,480	669
1961-66	308	1,47,840	1,232
1966-69	351	1,68,480	1,404
1969-74	452	2,16,960	2,079
1974-79	560	2,68,800	2,800
1979-80	585	2,80,800	3,030
1980-85	690	3,32,580	3,575
1985-90	939	4,48,938	7,843

6.0.8 During the first year of Eighth Five Year Plan itself, projects calling for investment of around Rs. 10,000 crores are at various stages of implementation. This includes projects like the Gas Cracker project at Auraiya, Aromatic Complex at Salempur, Bagasse based news print project, Optical Fibre project, Polyester filament yarn project, Sponge Iron project, Acrylic Fibre project, Gas based fertilizer project at Sahajahanpur and Badaun etc.

Village and Small Industries

6.0.9 Village & small industry sector has, over the years, been one of the most effective tools for meeting the twin objectives of providing employment and gainful production at low capital cost. There are basically three characteristics of the state's economy, viz. shortage of financial resources, abundance of manpower and vastness of the area which make small scale industries the most powerful instrument for industrialisation of the state. Small scale industries are not capital intensive, but, have vast employment potential at relatively low per-unit investment and have the required flexibility as far as location is concerned to bring about the desired dispersal of industries and reduction in the levels of development of the various regions of the state. Its short gestation period, comparatively simpler techniques, easy availability of required plant and machinery and the capacity to meet the demand for consumer goods and services make this sector particularly relevant to meet the goals of the new industrial policy.

6.0.10 Growth and performance of the tiny and small industry sector has, by and large, not only justified the special role and promotion given to it but has also brought out the fact that this is the sector which can bring about rural

industrialisation and also generate employment avenues at the required levels. The planwise achievements of this sector have been as follows:

Table 6.0.3
Planwise Achievements - Village and Small Industries

Plan Period	No. of Units	Investment (Rs. in crs)	Employment (no.)	Estimated Production (Rs. in crs)
1. First Five Year Plan (1951-56)	1647	11.50	29898	34.50
2. Second Five Year Plan (1956-61)	2824	19.72	48382	50.16
3. Third Five Year Plan (1961-66)	4842	33.83	114431	101.49
4. Three Annual Plans (1966-69)	6147	42.04	124738	128.82
5. Fourth Five Year Plan (1969-74)	12851	45.94	160027	249.00
6. Fifth Five Year Plan (1974-79)	42035	294.00	475180	882.00
7. Rolling Plan (1979-80)	47943	336.00	538260	1008.00
8. Sixth Five Year Plan (1980-85)	110710	676.00	920756	2143.00
9. Seventh Five Year Plan (1985-90)	216251	1392.00	1445068	4173.64

6.0.11 However, it has been observed that the level of small scale industry development in rural areas has not been significant. Per-unit investment was of the order of only Rs.60,000 at current prices with employment per unit falling down to 5 against 7 in the preceding plan period. Sickness is on the increase due to variety of factors ranging from lack of entrepreneurial skill, administrative procedures for obtaining various assistance and clearances etc. being cumbersome, inadequate availability of power, absence of marketing support, irregular supply of raw material, etc.

6.1 VILLAGE AND SMALL INDUSTRIES

6.1.1 Statistical and Documentation Data Cell and Computerisation : For efficient planning, monitoring and evaluation, computerisation will be done with full accessories and soft-wares.

6.1.2 Entrepreneurial Development Programme: This programme had been started in 1978-79 and more emphasis was given in Seventh plan and the scheme had been earmarked in District plan. Various agencies are associated with training programmes.

Besides, Institute of Entrepreneurial Development, Lucknow has also been set up. At present one week, two weeks and six weeks programmes are being organised.

6.1.3. Details of various training programmes conducted during earlier plans are as follows:

<u>Period</u>	<u>Courses</u>	<u>Persons trained (Nos.)</u>
1. Fifth & Sixth Plans	94	3,656
2. Seventh plan		
(a) 1985-86	287	12,870
(b) 1986-87	319	16,004
(c) 1987-88	313	16,208
(d) 1988-89	475	23,392
(e) 1989-90	438	21,070

6.1.4. During the year 1990-91 41,600 persons are proposed to be trained.

6.1.5. Institute of Entrepreneurial Development, Lucknow : In order to give more emphasis on the training programme, the institute had been established with Head Quarter at Lucknow in Seventh Plan. The Institute would function as a nodal agency for the development of entrepreneurship.

6.1.6. U.P. SMALL INDUSTRIES CORPORATION LTD., KANPUR : The authorised capital of the corporation is Rs. 10 crores and the paidup capital is Rs. 5.24 crores contributed by the Government. Besides, the corporation has got an authorised cash credit limit of Rs. 5.95 cr. sanctioned by the State Bank of India, Kanpur to increase its resources. The turn over of the Corporation during 1989-90 was Rs. 35.93 cr.

6.1.7. The UPSIC proposes to set up a marketing company for sale of specific products to Govt. and in the consumers market. In the Eighth plan period new depots shall be opened at the headquarters of Kumaon and Faizabad divisions. An additional depot at Panki is also proposed.

6.1.8. U.P. State Leather Development & Marketing Corporation Ltd. (LAMCO), AGRA : The Corporation plans to expand its activities by upgrading technology, providing facilities to hire equipments, provide facilities for value addition and imparting skills and training to the artisans in the Eighth Plan. An emphasis on exports will also be given. It is proposed to open more wet blue complexes and organise equipment leasing for entrepreneurs. Existing tanneries will be modernised and assistance to finishing units will be provided.

6.1.9. Exhibition and other Promotional Activities : To fulfil promotional and developmental efforts for the leather industry, Corporation has to participate in various exhibitions to increase the awareness of the development in this field.

6.1.10 District Industries Centres (DIC) : This is a 50% centrally sponsored scheme which was started in 1978-79. The estimated expenditure on this scheme for 1988-89 and 1989-90 will be at a rate of Rs. 6.00 lakh per D.I.C. as State's due to enhancement of dearness allowance and interim relief etc.

Table 6.1.1
Achievement of District Industries Centres

Programme	(Number)					
	Achievement				Anticipated Target	
	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91
1. Establishment of Small and Tiny Units	16584	18893	20875	23150	24000	26000
2. Establishment of Village Artisans Units	34237	31082	33150	31720	30000	30000
3. Beneficiaries under programme/ industries, service & business	254208	289695	301421	288635	253200	253200
4. Trainees benefited under TRYSEM programme	32965	32264	35763	29772	22175	22175

6.1.11 U.P. Minorities Financial & Development Corporation Ltd: This corporation organises professional and vocational training to its target group. It also provides loans as margin money to students of target groups for certain professional courses. The corporation proposes to establish a Diamond cutting and polishing training centre at an estimated cost of Rs. 35.00 lakh.

6.1.12 The Corporation has been conducting a number of useful training schemes aimed at providing professional & vocational training and upgradation of skills to the members of the minority communities with a view to enable them to get employment or get into self employment by establishing their own ventures. These schemes cover both male and females members of the target group.

6.1.13 Industrial Colonies: It is proposed to develop workshop cum residential sheds for lock artisans in Aligarh and similar facility in Agra for development of Charanagari.

6.1.14 Besides schemes for development of Industrial complexes, master craftsman training centre and promotional activities such as awards to small scale entrepreneurs etc. started in a earlier plan periods will continue in Eight plan period also.

6.1.15 With a view to provide an access to modern technology for manufacturing and processing, Process and Product Development Centres (PPDC) were established at Meerut, Agra and Farrukhabad, besides, a National Glass Technology Centre at Firozabad. These centres will be completed and further strengthened during the Eighth Plan.

6.1.16 Fairs and Exhibitions: The products of small scale and cottage industries do not find ready market in the absence of proper publicity. With a view to create market for SSI and cottage sector, the department runs a scheme of holding fairs and exhibitions in each year and displaying these products there.

6.1.17 Integrated Margin Money Loan : This scheme was introduced in 1984 after merging a number of margin money loan schemes. The margin money loan is given to entrepreneurs, who are unable to raise required capital to meet the requirement of the promoter's contribution laid down by financial institutions. The maximum margin money which can be given to an entrepreneur can not exceed 10 percent of the project cost in general cases and 15 percent in cases of scheduled caste entrepreneurs or 50 per cent of the margin money required by the financial institutions. A maximum of Rs. 3.00 lakhs can be given as a margin money loan to entrepreneurs.

6.1.18 Artisan Programme: Artisan and craftsman of Uttar Pradesh produce articles which are highly valued and enjoy good reputation abroad. In order to look after small artisans and cottage industries, the State Government are giving priority to the implementation of the scheme for self employment of educated unemployed youths. The progress made during the seventh plan and target for 1991-92 are given below:

Table 6.1.2
Seventh plan progress Artisan progremes

Item	Achievement						Target Proposed	
	1985 86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	
1. Establishment of small and tiny units	15884	18893	20875	23150	26039	30000	30000	
2. Artisan establishment	34237	31082	33150	31720	32454	40000	50000	
3. Employment generated	144599	135723	147146	152144	169271	190000	240000	
4. Integrated Rural Dev. Inds. service & Business	254208	289595	301421	288635	254234	253200	253200	

6.1.19 Subsidy on Generating sets: This scheme has been discontinued but provisions will be made to meet outstanding liabilities. Besides schemes such as integrated margin money loan assistance to sick units, export subsidy for 100% export oriented units, started in earlier years will continue in the Eighth plan.

6.1.20 The U.P. Export Corporation Ltd. : The corporation has fixed a target of 1100.00 lakh for export and sale of Handicrafts goods in the year 1991-92.

6.1.21 The performance of the Corporation in the field of export as well as internal marketing for the last two years as under:-

Table 6.1.3
Performance of Export Corporation

	(Rs. in lakh)			
Item	Achievement 1988-89	1989-90	Target 1990-91	Proposed 1991-92
<u>Export</u>				
Traditional items (Carpet, Handicrafts, Leather goods, RMC/ Textiles & others)	354.25	478.89	500.00	500.00
<u>Internal markets:</u>	771.27	872.78	1000.00	1100.00
Sale of Handicrafts (items through Gangotri Emporium)				
Total:	1125.52	1351.67	1500.00	1600.00

6.1.22 Share Capital Assistance : The Corporation had established two new show-rooms & renovate five of its existing emporias during Seventh Plan period. To increase the turnover of the corporation in Eighth Plan period, the corporation is proposing to open atleast one new show room and renovate its remaining emporias.

6.1.23 Craft Bazar : For providing direct marketing assistance as well as popularising their products in other big cities of the country, the corporation has proposed to organise craft bazar every year.

6.1.24 Carpet Weaving Training Scheme : The U.P. Export Corporation has been implementing carpet weaving training scheme since 1976-77. Under this scheme 50 persons are trained in each centre. The physical progress under carpet training centres alongwith the number of persons trained is given below:-

Table 6.1.4
Carpet Training centres - Physical Progress

Year	Training Centres				Persons Trained			
	General	Special Component Plan	Tribal	Total	General	Special Component Plan	Tribal	Total
Upto								
1987-88	619	58	12	689	30800	2900	600	34300
1988-89	16	6	6	28	800	300	300	1400
1989-90	16	7	-	23	800	350	-	1150
1990-91								
(anticipated achievement)	32	7	10	49	1600	350	500	2450
1991-92 (Target)	33	10	70	1650	16500	500	350	2500
Target proposed for Eighth plan	164	47	38	249	8200	2350	1900	12450

Bhadohi Industrial Development Authority (BIDA)

6.1.25 The Government has constituted Bhadohi Industrial Development Authority for creating infrastructural facilities for artisans and foreign buyers in Bhadohi, the main nerve centre of carpet export trade authority is already constructing industrial sheds, shopping complexes and transit hostels etc. The authority is establishing an export house wherein 77 show rooms and shops and 24 big office rooms are under construction. The main programmes are given as under:

1. Satellite Growth Centres
2. Jamnipur Housing Scheme
3. Rajpura Commercial/Residential Scheme
4. Rajpura Housing Scheme
5. Jalalpur Housing/Commercial scheme

6.1.26 It is proposed to establish 100 growth centres in those rural areas/villages which are highly carpet weavers concentrate areas.

6.1.27 It is proposed to establish about 10000 units. The avenues of employment may be created for 20000 people.

6.1.28 Interest Subsidy for Handicraft Artisans: This scheme is proposed for the welfare of the needy artisans who are not able to bear heavy cost of interest on the loans provided by the Banks. Bankers have agreed in principle to provide loans @ 10% interest under the NABARD Refinancing Scheme in Shilpkar camps. The State will subsidise the interest 2.5% and actual cost that shall be borne by the artisans shall be 7.5%. The amount of loan provided to the artisans under this scheme shall not exceed Rs. 30,000. Initially 1700 artisans shall be covered in the first year, i.e 1990-91.

6.1.29 Training and Seminars : In order to increase awareness as well export potential and procedures, training and seminars will be organised.

6.1.30 Industrial Co-operatives (Non-Textiles): The programme for organisation of industrial co-operatives was introduced in fourth plan in small scale sector with a view to extend financial assistance to weaker societies and to strengthen them for effective working. The existing schemes of providing share capital loan, assistance for construction of workshop/godowns, managerial assistance will be continued during 1989-90. Scheme for providing managerial staff to each of the co-operatives specially those of the weaker sections will also continue.

6.1.31 State Handicrafts and Industrial Co-operative Association Ltd., Kanpur (SHICO): The main objectives of this apex body of non-textile industrial co-operative societies of the state are as under:-

1. To educate members and officials of the societies in the co-operative principles and methods.
2. To recruit and control staff of affiliated societies.
3. To exercise general supervision and provide guidance to its members in resolving their problems.
4. To purchase shares of primary and central societies on behalf of the Government.
5. To arrange raw materials wherever necessary
6. To assist societies in the sale of their products and to open sale depots in important towns of State and outside.

6.1.32 The organisation has started marketing of products of the co-operative societies of khadi and village industries and handicrafts etc. A show room has been established at Kanpur. SHICO had also participated in the India International Trade Fair, New Delhi.

6.1.33 Financial Assistance to Handicrafts Co-operative Societies :- This scheme is sponsored by the Development Commissioner (Handicrafts), Govt. of India, New Delhi for provision of share capital loan and subsidy to handicrafts cooperatives to accelerate the role of development of handicrafts

in the State. In the scheme share capital loan provided to the extent 90% of the value of each share. Apart from this managerial subsidy for appointment of Secretary is given to the Societies for 3 years on tapering basis Rs.5400, Rs.3600 and Rs. 1800 during the first, second and third year respectively.

6.1.34 State Capital Subsidy :The State Government has announced industrial policy, 1990, in which various incentives, concessions and facilities have been announced. The State Capital subsidy is one of them. This scheme is valid from April 1, 1990 to March 31, 1995, under this scheme backward districts have been categorised as A.B.C. districts. The New Industrial units set up in backward areas will be entitled to the State Capital Subsidy on fixed investment as under :-

CATAGORY 'A' 20 % (maximum Rs. 20 lakh)
CATAGORY 'B' 15 % (maximum Rs. 15 lakh)
CATAGORY 'C' 10 % (maximum Rs. 10 lakh)

6.1.35 Units investing upto Rs. 5 lakh in plant and machinery in backward districts of category A, B & C shall be eligible for the subsidy. Besides, units investing over Rs. 5 lakhs to Rs. 5 cr. in plant and machinery and situated in industrial estates or industrial areas, will be entitled to capital subsidy as mentioned above.

6.1.36 The subsidy will be provided @ 20 % (maximum Rs. 20 lakh) in Hill and Tarai area. In other Hill districts the subsidy will be provided @ 30 % (maximum Rs. 30 lakh). In order hill districts the rate of subsidy will be 35 % (Rs.35 lakh): This scheme will give greater incentive to the entrepreneurs for establishment of these units in the backward areas.

6.1.37 The Special State Capital subsidy for pioneer units at block level will also be provided @ 10 % (maximum Rs. 5 lakh). 5% special capital subsidy upto maximum of Rs. 1 lakh would be payable to an Industrial units in any district if all the entrepreneurs are women or ex-service man or of scheduled Castes/ Tribes.

6.1.38. Development of Industrial Infrastructure :With a view to provide developed sites complete with road, rain water drains, power lines etc. at reasonable cost to the small scale industries, Directorate of Industries had been implementing a programme of setting up big industrial estates in tehsil towns and mini industrial estates at block headquarters.

6.1.39 Upto Sixth Five Year Plan, a total of 95 big industrial estates have been set up. During the Seventh Five Year plan, 5 big industrial estates have been developed. During the seventh plan period, the emphasis was on development of industrial infrastructure. For tiny and smaller tiny industries at block headquarters a programme of setting up of mini industrial estates was taken up wherein the ultimate objective was to set up one mini industrial estate at each of the 895 Block headquarters of the state. Work on development of 215 such industrial estates is at various stages of implementation.

During the Eighth Five Year Plan, this activity is proposed to be handed over to the State Infrastructure Development Corporation and limit the financial assistance from the Government to additional contribution to equity so that this corporation could raise necessary funds from financial institutions. During the year 1990-91 spill over works in respect of only those mini industrial estates wherein the actual work of development has been taken up, would be met out of budgetary support from the State Government.

6.1.41 Handloom :There are about 15 lakh weavers and over 5 lakh looms in the State engaged in handloom sector. This sector provides employment to large number of weavers mostly from the weaker sections, minorities, scheduled castes and scheduled tribes in the state. The new industrial policy also emphasises on ensuring availability of yarn at reasonable price to the weavers, increase in the productivity and quality of handloom cloth and development of this sector further by bringing more and more weavers into the cooperative fold and making necessary arrangements for the marketing of handloom cloth.

6.1.42 The main thrust of the Eighth Plan is to create necessary facilities for procurement of yarn and its distribution, infra structure facility and marketing arrangement etc.

6.1.43 The production level of 615 million metres at the beginning of the seventh plan has risen to 661 million metres by the end of the plan period against the seventh plan target of 700 million metres. The production level of different items of handloom cloth at the end of the seventh plan and envisaged production at the end of Eighth Plan is shown in table 6.1.15.:-

Table 6.1.5
Performance of Handloom production during Seventh Plan
and targets for Eighth Plan

Particulars	Production level			
	End of seventh plan		End of Eighth plan	
	Million Meters	Value (Rs. crores)	Million Meters	Value (Rs. Crores)
(1)	(2)	(3)	(4)	(5)
Cotton Cloth	557.00	529.15	661.50	793.80
Synthetic/ Blend	46.00	69.00	90.00	180.00
Silk	23.00	230.00	37.50	562.50
Wool	10.00	75.00	16.50	165.00
Others - Fancy	25.00	187.00	67.50	675.00
Silk Art Staple etc.				
Total	661.00	1090.65	873.00	2376.30

6.1.44 Thus it is envisaged to increase the production of handloom cloth by 32 % in terms of quantity and 117.8 % in terms of value.

6.1.45 It is proposed that old, obsolete and unworkable looms be converted into modernised and improved looms.

6.1.46 During the Eighth Five Year Plan, it is proposed to modernise 7063 looms under the cooperative as well as outside the cooperative fold. In order to accelerate the modernisation programme, it is proposed to introduce a new scheme for subsidising the cost so that the weavers may adopt the modern techniques and devices.

6.1.47 In order to provide modernised looms to the weavers, it is proposed to set up new units for the manufacture of modernised looms and attachments.

6.1.48 At present U.P. State Handloom Corporation and Uttar Pradesh Industrial Cooperative Association (UPICA) are engaged in distribution of yarn to weavers through their yarn depots. At present the total turn over of these agencies in distribution of yarn is about Rs.50.00 crores. During the Eighth Plan period 100 new yarn distribution centres are proposed to be setup through U.P. Handloom Corporation and UPICA. A sum of Rs. 10.49 crores has been proposed during the Eighth Plan.

6.1.49 Marketing Development Assistance (MDA) :- Fifty percent centrally sponsored rebate scheme has now been replaced by a new scheme viz: Marketing Development Assistance (MDA) from 1990-91 by widening its scope.

6.1.50 Silk yarn is proposed to be made available to weavers at reasonable prices by setting up of a Silk Bank in the Eighth Plan.

6.1.51 Infrastructure Support : During the Eighth Plan period a modern design centre at Fatehpur, silk finishing and zari twisting plant at Varanasi, process house at Etawah, Fashion Design Institute at Allahabad and a modern testing laboratory have been proposed.

6.1.52 During the Seventh Five Year Plan 62300 persons got employment through various schemes and promotional activities under the handloom sector. It is estimated that about one lakh persons will get direct and indirect employment during the Eighth Plan.

6.1.53 An outlay of Rs. 95.00 crores is proposed for the Eighth Plan of which Rs 11.77 crore are allocated for the year 1991-92.

6.1.54 Khadi and Village Industries : Uttar Pradesh Khadi and village industries board was set up to establish the net work of Khadi and village industries in the State for providing employment. The new industrial policy has its major thrust for

providing maximum employment in rural areas. An ambitious target of providing employment to about 14 lakh persons by way of Khadi and Village Industries has been set for the eighth five year plan period and can be achieved only when new dimensions are given to the planning efforts.

6.1.55. Progress of Village Industries during Seventh Five Year Plan :- At the end of the seventh five year plan period, the physical achievements in the field of village industries were as follows:

Table 6.1.6
PHYSICAL ACHIEVEMENTS

Item	Unit	Achievement	
		Upto Seventh Plan	Additional in seventh Plan
(1)	(2)	(3)	(4)
1. No. of units Financed (level)	in lakh	1.43	0.81
2. Production (level)	in crore Rs.	254.43	148.23
3. Employment (level)	in lakh	4.02	1.83

6.1.56 Employment :- The creation of additional employment opportunities during the Seventh Plan (1.83 lakh persons) was insignificant as compared to the magnitude of the problem of unemployment in the State.

6.1.57 The strategy formulated for the Eighth Five Year Plan seeks to overcome the problems experienced during Seventh Five Year Plan period. It is proposed that 5.00 lakh village industries units will be set up during Eighth Plan with the co-ordinated efforts of the U.P.Khadi and Village Industries Board, Rural Development Department, Harijan and Social Welfare Department, Minorities Commission etc. The target proposed for the Eighth plan are as follows:

TABLE 6.1.7
PHYSICAL TARGETS FOR EIGHTH PLAN

YEAR	NO. OF UNITS	EMPLOYMENT(Lakh no.)
(1)	(2)	(3)
1. 1990-91	74303	2.30
2. 1991-92	87028	2.62
3. 1992-93	98749	2.93
4. 1993-94	112247	3.30
5. 1994-95	127751	3.70
Total	500078	14.85

6.1.58. In order to achieve the targets of Eighth Five Year Plan, the emphasis has been placed on strengthening the marketing system, facilitating the access of village artisans and the weaker section, to mini industrial estates, promoting self employment to trained technical personnel, strengthening of training institutions and reorientation of delivery system. A brief description of some of the schemes proposed to be taken up follows:-

6.1.59 Assistance for Marketing Development :- The weakest link of this sector is poor marketing support. The Khadi and village industries sector has not made any headway towards product development, improvement in packaging, change in the design to suit the needs of the consumers and technical upgradation. These weak areas have to be shored up by improving the quality of Khadi cloth and changing the manufacturing pattern. It is proposed to provide assistance for marketing development in place of the existing system of rebate. The production units will get financial assistance for developing their products instead of subsidising on rebate without any regard to product development. This scheme envisages the following thrust areas:-

6.1.60 Product Development : It is being proposed to obtain latest patterns and designs from National Institute of Design and the same will be transmitted to Khadi producing centres. The manufacturing and printing of Khadi cloth shall be on the pattern of new demand.

6.1.61 Improvement in Packaging : Entrepreneurs engaged in village industries adopt primitive packaging techniques which are difficult & can not match the commercial packaging. Proper training and financial support will be provided to the sector for improving the packaging to suit the requirement of the consumers.

6.1.62 Exhibition and Publicity The scheme envisages large scale coverage with latest modes of publicity by way of television, newspaper and mobile vans etc. It is also envisaged to organise on extensive scale workshops and seminars on the theme of village industries promotion.

6.1.43 Marketing Extension Centres: It is proposed that in the first phase 52 development blocks shall be covered by this scheme under which infrastructure for laboratory testing facilities, packaging and storage of raw material and finished products will be provided. These marketing extension centres shall be operated by voluntary agencies. One third of the financial burden shall be shared by the Khadi and Village Industries Commission and the remaining two thirds by the state government.

6.1.64 Package for Rehabilitation of sick units: A sample survey got conducted by Uttar Pradesh Khadi and Village industries board revealed that 34 % of the total financed units are totally nonexistent. Out of the existing units, 17 % are sick

but they can be revived provided they are given financial and technical assistance. Out of about 4 lakh financed units about 45 thousand need immediate financial support. A package of support measures is being drawn up to assist the sick units.

6.1.65 Scheme of subsidy on plots in Mini Industrial Estates : Mini industrial estates are being set up by the small scale industries department in all 1989 blocks of the state. Out of 30 plots in each industrial estate, 20 % shall be kept for village industries sector. The rural entrepreneurs will have to bear only 67 % of the cost of the plot and remaining 33 % of the cost shall be subsidised by the state government. Priority in allotment shall be given to entrepreneurs belonging to scheduled castes and tribes.

6.1.66 Concessional Bank Finance to Trained Individual Entrepreneurs: This scheme envisages that the students about to pass from Polytechnics and Industrial Training Institutes and willing to set up village industries shall get necessary financial and technical assistance for setting up their project. The project formulation shall be made in the institute itself and after suitable training such trained entrepreneurs will set up village industries with the help of subsidised bank loans at an effective rate of interest of 4 %. The number of such beneficiaries is proposed to be around 33 thousand during the Eighth five year plan. The commercial banks will finance this scheme. The burden of interest subsidy amounting to the difference between the existing bank rate and 4 % shall be borne by the Khadi & Village Industries Board.

6.1.67 Strengthening of Existing Training Centres: The existing 12 training centres are not well equipped. Modern training tools are non-existent. The existing residential accommodation is highly inadequate. The KVIB has expanded the scope of village industries and about 70 new industries have come in its ambit. They need proper training. All training centres are also to be equipped with quality control laboratories. The scheme envisages the setting up of 11 new laboratories during the Eighth five year plan.

6.1.68 Sericulture :- Sericulture is an agro-based, labour intensive employment oriented industry having very short gestation period and easily adoptable by the poor, in rural areas utilising available local natural resources without disturbing the eco-balance. Its adoption does not require heavy investment, specific technical knowhow and infrastructure. A mulberry garden of one hectare generates employment for 12-13 persons round the year.

6.1.69 At the end of the seventh five year plan period sericulture was adopted in 40 districts of the state and total infrastructure created under the mulberry sector was 208 mulberry farms / nurseries / chawki rearing centres covering an area of 1816.39 acres (726.26 ha), 6 grainages, 3 reeling units / filatures and 1 training centre. 14 farms over an area of

2418.82 acres (968 ha) , 9 grainages, 3 reeling units, 1 cocoon godown and one coldstorage have been established under the tasar production programme.

6.1.70 By the end of the seventh plan, the state production of 2.04 lakh kg. mulberry cocoon, 16.45 lakh tasar and 2.60 lakh oak tasar cocoon and 9 tonnes of raw silk provided subsidiary occupation to 20,597 beneficiaries of whom 40 % belonged to SC/ST.

6.1.71 It is proposed to produce 400 tonnes of rawsilk by the end of Eighth plan and generate employment opportunities for about 0.70 lakh persons throughout the year. The emphasis has been placed on the development of the industry in the private sector and to create maximum direct and indirect employment to the local people. The estimated financial requirement for the Eighth plan is Rs. 40.00 crores. A brief description of the major schemes proposed to be taken up, follows :-

1. Development of Backward Areas

(a) Purvanchal Sericulture Project : This project has been formulated with a view to developing sericulture industry in the Eastern districts of the state. The project will be launched jointly by government of India (Central Silk Board) and sericulture directorate. In the first phase, it is proposed to cover 3000 acre of mulberry plantation in private sector in the districts of Varanasi and Ghazipur. 70 tonnes of raw silk is expected to be produced at the end of the project.

(b) Purvottar Sericulture Project : In order to intensify sericulture activities in districts of Gonda and Baharaich , it is proposed to raise mulberry plantation in additional 3000 acres of land in private sector. The scheme is expected to produce 70 tonnes of rawsilk.

(c) Development of Sericulture in Non-traditional Districts : To develop plain areas, it is proposed to cover 600 acres under mulberry plantation in districts of Hardoi, Unnao & Fatehpur in the first phase. Production of 15 tonnes of rawsilk is envisaged at the end of the project.

(d) Intensive Development of Tropical Tassar Industry in Bundelkhand (Lalitpur District): This scheme has been formulated to tap the naturally grown arjun / asan stands available in Lalitpur district. It is expected that 300 villagers will be benefitted under this scheme and their socioeconomic conditions will improve considerably.

2. Privatisation and Employment Generation :-

(a) Interest Subsidy on NABARD'S approved Sericulture Model Schemes :- NABARD has approved different model schemes of sericulture in the state for extension of the programme in private sector. Interested farmers will get loan

from the bank for adopting sericulture. Under the scheme, interest subsidy @ 3% is proposed to be granted to the beneficiaries.

(b) Incentive scheme for development of reeling in private sector:- An incentive in the shape of the subsidy is proposed to be provided to private entrepreneurs for establishment of reeling units. The subsidy component will be shared jointly by the Directorate of Sericulture and Central Silk Board (Goovernment of India).

(c) Extension and development of Sericulture Industry through Unemployed Youths:- This scheme is proposed to provide gainful employment through sericulture to unemployed youths of rural areas. Under the scheme, services of 400 unemployed rural youths will be utilised for expansion of sericulture programmes in private sector at the nominal stipend in addition to other incentives based on survival of mulberry plantation and cocoon production.

(d) Development of Sericulture Industry through Voluntary Organisation :- Co-operation from active voluntary organisation for development of sericulture (both mulberry & tassar will be elicited under this scheme. Voluntary organisations are being attracted to supplement the efforts of directorate of sericulture in speedy developmet of sericulture, for which necessary infrastructure support is proposed to be provided to them.

(e) Technical and Working Capital support to Sericulture Cooperative Societies:- Under the scheme, active sericulture cooperative societies will be provided necessary technical and working capital support for successful implementation of the programmes in their jurisdiction.

(f) Silkworm Insurance Scheme:- This scheme has been formulated to cover the risk of mortality and morbidity during silkworm rearing. Under the scheme, insurance premium will be borne jointly by central silk board, directorate of sericulture and beneficiaries @ 37.5 %, 37.5%, and 25%, respectively.

3. Upliftment of Schedule Castes and Schedule Tribes:- Incentive on mulberry plantation, rearing equipments, and construction of rearing houses is proposed to be provided to 1000 ST and 6000 SC persons by the end of Eighth plan.

IMPROVEMENT IN DELIVERY SYSTEM:

6.1.72 Creation of Sericulture Corporation:- In the present system of payment through treasury, the department is not able to make prompt payment to the rearers which is adversely affecting the development of the industry. To over-come this difficulty, the creation of a sericulture

corporation is very necessary and as such this scheme is proposed with a view to accelerating the pace of development of sericulture in the state.

6.1.73 Creation of Revolving Fund:- The department is facing constant problem of lack of funds for making payment to the rearers. Hence, it is proposed to create a revolving fund for making timely and prompt payment to the primary producers.

6.1.74 Construction of Cocoon Warehouses :- Owing to extreme climatic conditions only four crops are produced in U.P. Consequently, reelers require huge working capital for purchase of large quantity of cocoons for reeling during lean months. Proper storage space for cocoons is also not available either with the sericulture Directorate or with private reelers. The proposed warehousing arrangement would enable private reelers to store their requirement of cocoons in scientifically designed warehouses, without having to immobilise large amounts of working capital. It is also envisaged that the raw silk yarn produced by the reeler may be kept in the Departmental warehouse and mortgaged against purchase of cocoon on credit, till he is able to get proper price. This arrangement will protect the reelers from distress sale of their product.

6.1.75 Scheme for Improvement in Productivity and Quality:- This scheme is proposed to generate quality consciousness among beneficiaries and they will be acquainted with the latest technical know-how. After completion of training each beneficiary will be provided with a kit worth Rs 500 for adopting new technology.

6.1.76 Creation of Sericulture Department in Agricultural Universities and R & D support:- With a view to create awakening in the masses and extend the sericulture programme in the state. It is proposed to open a department of sericulture in selected agricultural universities, where sericulture will be introduced as a new subject. It is also proposed that other universities will also be requested to carry out researches relating to various aspects/problems in the field of sericulture, for which required financial support can be provided under this scheme.

6.1.77 Establishment of Training Institution and Demonstration centre at Lucknow:- To cater to the training needs of eastern and plain districts of the state, where sericultural activities are on the increase gradually, one training cum demonstration institute is proposed to be set up at Lucknow. training programme will be conducted for interested farmers, staff and private entrepreneurs on various aspects of sericulture in the institute.

6.1.78 Strengthening of Directorate and existing Infrastructure:- With a view to increasing the capacity of existing infrastructure, following developmental schemes have been proposed so as to attain maximum capacity utilization and improve the overall efficiency in the department :-

(I) Strengthening of the Directorate:

- (i) Establishment of planning and monitoring cell.
- (ii) Establishment of internal audit cell.
- (iii) Construction of office and residential buildings.
- (iv) Replacement /purchase of vehicles.
- (v) Motor cycle advance to field staff.
- (II) Strengthening of infrastructure:-
 - (i) Strengthening of farms.
 - (ii) 'Model chawki keet palan yojna'.
 - (iii) Establishment of tassar grainage and strengthening of existing grainages.

6.2 INDUSTRIES

U.P. State Cement Corporation : The main objective of the corporation is to produce ordinary portland cement (OPC), portland blast furnace slag cement corporation (PBFC) and other types of cement. The production capacity of factories is as under:-

	lakh M.T.
1. Churk	4.80
2. Dalla	4.00
3. Chunar	16.80

	25.60

6.2.2 The production by these factories was as under:-

Year	Cement Production (lakh M.T.)
1988-89	11.34
1989-90	9.30 (Estimated)
1090-91	13.00 (target)

6.2.3 The corporation had been making efforts to reach the level of production to the installed capacity for which the services of the consultants are being utilized. These factories are running at loss. It is under consideration of the Govt. to involve private organisations in the operation of these factories.

6.2.4 Auto Tractors Ltd.:- The company was started with the objective of producing 6000 tractors and 2000 engines per annum.

6.2.5 The company has continued to incur losses due to under utilization of capacity and highly competitive tractor market. Re-imbursment of cash losses is being done by the State Government.

6.2.6 The Government is negotiating transfer of this company to private sector.

U.P. State Electronics Corporation

6.2.7 Electronics Industry in U.P. is being Developed by this Corporation which has proposed to take up the following Activities in the Eighth Five Year Plan period:

1. Flat square and 14" colour picture tube
2. Communication equipment
3. Technological upgradation of electronics components
4. Defence electronics
5. Micro electronics components
6. Medical electronics
7. Interest subsidy
8. Electronics research & development centre
9. Computer & electronics training institute (Etawah)
10. Promotion & monitoring of small electronics
11. Promotion of co-operative societies for electronics products
12. Recurring grant for electronic testing and development centre Panki (Kanpur)

6.2.8 A sum of Rs.120.00 cr. for Eighth Plan & Rs. 18.50 cr. for the year 1991-92 are proposed to meet the above requirement.

Sugar Industry

6.2.9 There are 105 sugar factories in Uttar Pradesh including 31 in co-operative sector and 35 in the corporate sector with a total crushing capacity of 2.21 lakh TCD by the end of seventh plan as against the production of 1016.86 lakh tonnes of sugarcane. Sugar industry, being the largest industry in the organized sector of the State, is quite important and the economy of the State heavily depends upon its prosperous growth. About 2.7 million cultivators are dependent on this industry, which provides for employment to about one lakh persons, in addition to a large number of people engaged directly and indirectly, in it. This industry alone contributes Rs. 85 to Rs 100 crores as excise duty to the Central exchequer and Rs 40 to Rs 50 crores to the State Govt. in the shape of purchase tax. The sugar factories set up in various areas function as growth centres for improving the rural economy of the State which depends heavily on the prosperity of this industry and sugar cane, a cash crop, being the basic raw material for sugar factories.

6.2.10 The strategy for eighth plan has been chalked out with a view to crush 42% of the sugarcane for the production of sugar which has been hitherto less than 30 %. In this context more sugar mills will be established together with increasing the capacities of the existing sugar mills being run by State Sugar Corporation and sugar co-operative federation during the Eighth plan period. An outlay of Rs 150.00 crore has been proposed for the Eighth plan of which Rs. 25.00 crore is proposed for the annual plan 1991-92.

6.2.11 U.P. Co-operative Sugar Factories Federation:- For planned development of new co-operative sugar factories and to give guidance for efficient working of the existing units. U.P. Cooperative sugar factories federation ltd., was set up in the year 1963. As a result of concerted efforts, there has been a rapid expansion of cooperative sugar factories in the state. At present, there are 31 working cooperative sugar factories in the state having a total crushing capacity of 50300 T.C.D. Besides

this , there are also 6 working distilleries in the cooperative sugar sector having a production capacity of 2,30,00 ltr/day alcohol.

6.2.12 In the Seventh plan period 5 new co-operative sugar factories were established by which a capacity of 7500 TCD was generated. Besides new cooperative sugar factories the expansion of existing sugar factories was also taken up. In the seventh plan period expansion of 4 existing sugar factories upto 2500 TCD, was done . During seventh plan period two new distilleries were established and 90,000 ltr.alcohol/day capacity was generated. An outlay of Rs. 77 crore has been allocated for the cooperative sugar industry in the Eighth plan.

6.2.13 Establishment of New Co-operative Sugar Factories : During seventh plan period letters of intent for establishment of 7 new factories of 2500 TCD at Sneh road (Bijnor), Dhuriyapar - Bangaon (Gorakhpur),Chailwariya (Bahraich), Jewar (Bulandshahar). Rupapur (Hardoi), Shakumbri (saharanpur) and Mainpuri were issued, of which the new factory at Sneh road has been completed in seventh plan. Letter of intent for a new sugar factory is likely to be issued shortly.

6.2.14 The construction work at Dhuriyapar-Bangaon (Gorakhpur) is in progress. The construction work at Jewar (Bulandshahar) and Chilwariya (Bahraich) has also been taken up. Construction work for factories at Shakumbri (Saharanpur), Mainpuri and Rupapur (Hardoi) will be taken up shortly. It is expected that during eighth plan 6 new factories will be commissioned. An additional capacity of 15000 TCD will be generated by the establishment of the new sugar factories.

6.2.15 Expansion of Existing Cooperative Sugar Factories:- During Eighth plan proposed expansion scheme of seventh plan for expansion of Sixteen cooperative sugar factories-Sampurnanagar, Bialpur, Bazpur, Sitarganj, Gadarpur, Nanpara, Morna, Pooranpur, Powayan, Gajraula, Majhola, Semikhera, Bagpat, Anoopshahr, and Mahmudabad etc. will be completed, for which letters of intent have been issued. Other than this letters of intent for expansion of cooperative sugar factories - Pooranpur, Powayan and Tilhar have also been issued. Applications have also been forwarded for expansion of some more cooperative sugar factories. Thus, during eighth plan expansion of total 21 cooperative sugar factories will be taken up, of which the expansion of 16 factories will be completed. Thus an additional capacity of 19200 TCD will be generated.

6.2.16 Establishment of new distillery units: During Eighth plan the work for 6 new Distillery units will be taken up of which 4 new distilleries will be established in eighth plan, which includes the completion of two spill over distilleries of eighth plan at Sampurnanagar and Gonda.

6.2.17 Effluent Treatment Plant: During the eighth plan effluent treatment plants will be installed in all the distilleries, of cooperative sector.

6.2.18 Other schemes: Besides the above, during Eighth Plan units for production of chemicals, based on alcohol and units on bagasse based products are also proposed.

6.2.19 Uttar pradesh state Sugar Corporation Ltd.: The U.P.State Corporation Ltd. was set up as a Govt. Company in march 1971. The main objective for the establishment of the sugar corporation was to take over and run old and sick sugar factories of the state with a view to safeguard the interest of labourers, cane growers and consumers. The Corporation was also entrusted with the task of completing and commissioning incomplete sugar factories and establish new factories in different parts of the state. At present the corporation is running 35 sugar factories in the state with a total crushing capacity of 59,453 TCD. An outlay of Rs 13.00 crores has been allocated for the state sugar industry during the Eighth plan period.

6.2.20 The corporation has taken up modernisation -cum- expansion programme in respect of some of its units, brief details of which are given as follows:

Table 6.2.1
Modernisation - cum - expansion of Sugar
Factories under State Sugar Corporation

Location	Estab- lished	Present capacity (TCD)	New capacity (TCD)	Year of comple- tion	Remarks
1. Meerut	1944	1219	2500	1993	Letter of intent pen- ding with Govt. of India
2. Bareilly	1932	1016	2500	1993	- DO -
3. Baitalpur	1934	914	2500	1993	Letter of intent obtained work under progress
4. Ghughli	1926	982	2500	1993	- DO -

6.2.21 Besides 3 distilleries each at Khadda, Chandpur and Siswa Bazar are proposed to be set up having a capacity of 30,000 lpd each. The state govt. has disbursed a sum of Rs.110.00 lakh 55 lakh and 60 lakh respectively for these units. Financial Institutions will be moved for loans and applications have been sent to Govt. of India for letters of Intent. State govt. has already allocated the requisite quantity of molasses for the above distilleries.

U.P. State Textile Corporation Ltd.

6.2.22 Modernisation/Diversification Schemes in 7 old State Spinning Mills:- The announcement of the new Textile Policy by the Government of India on the 6th June, 1985 has given a new orientation to the textile industry, including the spinning sector. The over-all thrust of the textile policy is on modernisation and technological upgradation leading to reduction in cost of production and better quality of textile products for the benefit of the consumers.

6.2.23 The proposed requirement of funds and sources thereof as emerged after detailed appraisal by Central Financial Institutions are as under:-

(Rs. in lakh)			
	TOTAL COST	EQUITY	TERM LOAN
(1)	(2)	(3)	(4)
UPSTC			
Modernisation & Diversification of 4 mills	1936	976.28 (including 75.28 for D.G. set)	900
UPSSC			
Modernisation & Diversification of 3 mills	1700	861.00 (including 30 for D.G. set)	828
	3636	1837.28	1728

6.2.24 Modernisation/diversification of Existing Akbarpur unit of UPSSC: The Akbarpur mill of UPSSC also falls under the category of old mills which need modernisation / diversification in it. It is therefore further proposed that Akbarpur unit of UPSSC be taken up for modernisation in Eighth five year plan. It is estimated that the total project cost of the project will be Rs. 500 lakh. On the basis of debt-equity ratio 1:1, the amount of equity for the project would be Rs.250 lakh which is to be provided by state govt. and long term loan of Rs.250 lakh to be had from all india term lending institution like IFCI, IDBI, etc. An outlay of Rs 250 lakh is envisaged for Eighth Five Year Plan and Rs 250 lakh for 1991-92.

6.2.25 Setting up of a Spinning Mill at Jaspur: U.P. State Textile Corporation proposes to establish a 100 % export oriented cotton yarn spinning mill of 25000 spindle in the state of Uttar Pradesh. The project is proposed to be established in the joint sector. The total cost of the project is estimated to be around Rs. 2400 lakh. The application for grant of the licence has been submitted to the Govt. of India.

6.2.26 Equity will be provided by the State Government on the 1:1 debt-equity ratio.

6.2.27 Modernisation of Co-operative Spinning Mills of U.P. Co-operative Spinning Mills Federation : The cooperative spinning mills Etawah, Bulandshahar, Naghar and Nagina are to be modernized during Eighth plan. Rs. 15 crores are required for the above work during 1990-95.

6.2.28 Co-operative Spinning Mill Etah : A Cooperative spinning mill is proposed to be established at Etah. The project cost of the mill is Rs.1500 lakh. It is to be established in 80 acres of land.

6.2.29 Debt Equity ratio is proposed to be 1:1. The share capital to the extent of Rs. 737.50 lakh is required. The share capital will be raised by Rs. 663.75 lakh as state govt's contribution and 5% (Rs. 73.77 lakh) from trades.

6.2.30 Tool Room Project :- The institute of tool room training of uttar pradesh has been established with the financial and technical collaboration of the Government of Federal Republic of Germany. The three main activities of the institute are (a) conducting training courses (b) offering consultancy and (c) common facility service for manufacturers of dies, tools, jigs and fixtures.

6.2.31 It is expected that the project will largely raise its own resources.

The Pradeshiya Industrial & Investment Corporation of Uttar Pradesh (PICUP)

6.2.32 PICUP presently provides financial assistance technical services and institutional support for industrialisation of the state and also engages in direct project promotion in the joint assisted sector. The details of Seventh Plan activities and Eighth Plan perspective are as under.

6.2.33 Development Banking : In the field of industrial development banking the corporation is primarily concerned with providing financial assistance by way of term loans , and equipment finance. The performance in each of these is enumerated below.

6.2.34 The term loan sanctions have increased from Rs.70.11 crore (115 units) in 1985-86 to Rs.138.27 crores (229 units) in 1989-90. Similarly, the figure of disbursement increased from Rs.33.04 crores in 1985-86 to Rs.92.38 crore in 1989-90. The cumulative sanctions and disbursement of term loans till 31.3.90 work out to Rs.703.60 crores and Rs.403.21 crores respectively.

6.2.35 Joint/Assisted Sector Projects :- As an effective instrument of direct attack-on industrial backwardness, PICUP encourages entrepreneurs to set-up projects in Joint/assisted sector. Presently, fifteen Joint/Assisted sector projects of PICUP are under commercial production and 40 projects are at various stages of implementation making a total of 55 projects (50 projects in backward and 5 in non-backward district of the state). The joint sector projects envisage total investment of over Rs. 3600.00 crores involving PICUP's equity of Rs.225 crore in addition to these projects, PICUP has applied for 31 new letters of intent/SIA Registrations which are for setting up projects in backward Districts of the state.

6.2.36 Interest Free Sales Tax Loan Scheme: PICUP has been implementing this scheme as an agent of U.P. Government. The scheme has been terminated w.e.f. 31.3.87 and, only the old eligible units are now being provided this assistance.

6.2.37 Feasibility study subsidy scheme : Under this scheme, PICUP on behalf of State Govt. undertakes the preparation of feasibility reports through approved consultants and the cost of the same is subsidised. The State Govt. extends subsidy to the extent of 75% of the total cost of the feasibility report prepared through PICUP.

6.2.38 The schemewise targets of Development Banking and agency schemes for the year 1990-91 and 1991-92 have been given below.

Development Banking Scheme

(Rs. in lakhs)

<u>Terms Loan</u>	<u>1990-91</u>	<u>1991-92</u>
Sanction.	12000.00	12000.00
Disbursement.	9500.00	10000.00
Investment in joint sector	1000.00	1500.00
Equipment leasing.	200.00	200.00

AGENCY SCHEME

Interest free sales tax loan	100.00	40.00
Feasibility study subsidy.	5.00	15.00
Disbursement of seed capital.	100.00	150.00

U.P. State Industrial Development Corporation Ltd. Kanpur (UPSIDC)

6.2.39 The UPSIDC was established in March 1961 to accelerate the pace of industrial development in the State. To achieve its objectives, the corporation is engaged in the following key activities.

1. Development of industrial areas possessing necessary infrastructural facilities so as to provide industrial and amenity plots.

2. Identification & promotion of large and medium scale projects in joint/assisted sector.

3. Extension of financial assistance to limited companies by way of under writing their public issues and through direct participation in equity.

4. Execution of construction work for public & semi public organisation and providing consultancy services in architecture and town planning.

Performance in Seventh Plan

6.2.40 At 59 locations, 19689 acres of land was acquired during the seventh plan period at 59 locations. With this, the number of Industrial areas have gone to 116 by the end of seventh plan while total land acquired has crossed the 38000 acres mark. Similarly 10616 acres land was made available for allotment after development during the period, taking the gross total to 21160 acres. The allotment during Seventh plan was of the order of 10827 acres. About 87% of the developed land stands allotted to about 10,000 entrepreneurs. Over 5000 units have been set up in various Industrial areas generating estimated investment of Rs.5500 crores. Besides, over Rs. 3000 crores worth of investment is in pipeline

6.2.41 New projects were identified in high growth/sunrise industries a few of which are envisaged to be implemented during the Eighth plan period. These projects range from agro-based to petro chemicals/pharmaceuticals, plastics metals & its products etc. and projects that will utilise natural gas available through HBJ pipelines. The corporation has already been appointed as nodal agency for optimum use of natural gas in the state.

6.2.42 Equity Participation & Underwriting :- Under equity participation scheme a sum of Rs. 515 lakh was disbursed to over 60 companies during the seventh plan. Majority of the assistance has gone to units in backward areas. Rs.30 lakh were disbursed under the underwriting scheme leading to cumulative achievement of Rs. 582 lakh by 1989-90.

6.2.43 The total expenditure on various developmental activities during the seventh plan totalled Rs. 138 crore of which Rs. 44.48 crore (30.8%) were received from the state Govt. while the rest was mobilised through internal generation/external sources including loans.

6.2.44 The main thrust during Eighth plan will be on ensuring optimum use of existing investment, particularly in Industrial Areas, implementation of such new projects as would have greater linkages with agriculture and greater employment potential and have rural bias. In short, the plan would seek to correct prevalent structural imbalances in industrial sector and promote greater industrialisation in backward/rural areas.

6.2.45 Overall expenditure during the eight plan is projected at Rs. 495.87 crore including Rs. 150 crore for five New Growth Centres (NGCs). In addition 30 new Industrial areas encompassing about 5400 acres land are proposed to be developed at an estimated cost of Rs. 294.37 crores which includes besides new works spill over works of the seventh plan, redevelopment of existing areas, and provision for facilities like power, telecom, industrial housing, water supply, common facility centre and business development centres in major industrial areas.

6.2.46 Under joint sector it is proposed to implement 15 projects having estimated cost of Rs. 800 crores with the corporate investment placed at Rs. 2750 lakhs during the Eighth plan. Also, it is planned to disburse Rs. 1050 lakhs and Rs. 100 lakhs under equity participation and underwriting schemes respectively.

Proposal for 1991-92

6.2.47 It is proposed to acquire 3250 acres of land (2750 acres in NGSs) at a cost of Rs. 2840 lakhs while Rs. 4900 lakhs are proposed for payment of compensation in respect of earlier acquired land. The acquisition proposals include besides 4 NGSs, Azamgarh, Ballia, Ghazipur, Barabanki, Trans-Yamuna areas in Allahabad and Bulandshahar. Against the total acquisition cost of Rs. 990 lakhs, land subsidy of Rs. 200 lakhs has been proposed in the outlay which will be grossly insufficient and will cause a set back to industrialisation of Backward districts in Eastern Region.

6.2.48 A sum of Rs. 3574 lakhs (Rs. 200 lakhs for NGCs) is proposed for developmental works for which as much as Rs. 900 lakhs is earmarked for infrastructure facilities in existing as well as new areas. Efforts would also be made to develop one or two areas as model Industrial Areas equipped with all necessary industrial environs.

MEGA growth centres

6.2.49 The Government of India in its desire to promote industrialisation in backward areas alongwith concomitant infrastructure development has announced a scheme of Growth Centres. The cost of each such centre has been estimated at Rs. 25 to 30 crs. to be financed as follows:-

(Rs. Cr.)

(1) Equity contribution of the Govt. of India	10
(2) Equity contribution of the State Govt.	5
(3) Equity contribution of All India Financial Institution	2
(4) Term loan from all India Financial Institution.	2
(5) Nationalised Banks	1
(6) Market Borrowing	10

6.2.50 Uttar Pradesh has been allotted a total of 18 such centres out of which seven are to be set up in districts of Gorakhpur, Jaunpur, Shahjahanpur, Jhansi, Moradabad, Etawah and Pauri Garhwal have been sanctioned during the year 1990-91.

GREATER NOIDA

6.2.51 The State Government has developed NOIDA in district Ghazabad in the vicinity of the Union Territory of Delhi. A total of more than 4000 small scale industrial units are already functioning in this scheme. Due to proximity to Delhi, development of communication, Transport facilities and infrastructure around the area of NOIDA are attracting a lot of investment. To ensure planned development of these areas, it is proposed to identify a greater NOIDA Zone wherein industrial commercial and social infrastructural facilities on the pattern of NOIDA would be developed.

Sathariya Industrial Development Authority (SIDA)/Gorakhpur Industrial Development Authority (GIDA)

6.2.52 It is proposed to develop comprehensive industrial townships on the pattern of NOIDA in districts Gorakhpur and Jaunpur

New Industrial Policy

6.2.53 The State Government while formulating its new policy announced certain additional incentives like State Capital Subsidy, Transport Subsidy, modified its existing scheme of pioneer & prestige units and subsidising the cost of land in industrially backward districts. It also decided to discontinue the scheme of subsidising the cost on purchase of Generating sets but provision will be made to meet outstanding liabilities.

6.2.54 Subsidising The cost of land in Industrially Backward Districts :- The Government in its desire to attract industries in industrially backward districts has been making available to industries land at reasonable cost which often calls for an element of subsidy. The amount of subsidy would depend on the location of the land in question.

6.2.55 State Capital Subsidy :- The state Government has, in its new industrial policy, announced a scheme of capital subsidy. A subsidy to the extent of 10% of the cost subject to a maximum of Rs. 10 lakh, 15% of the cost subject to a maximum of Rs. 15 lacs is admissible to thrust industries having investment in plant and machinery not exceeding Rs. 5 crores and set up in an identified Industrial Estate/Area/Zone.

6.2.56 Special Transport Subsidy: The government in its desire to take industry to the interior of the hills has, in its new industrial policy, announced a scheme of special transport subsidy for partly meeting the cost of transportation of raw materials and finished goods of industrial undertakings set up in the border districts of Uttarkashi, Chamoli & Pithoragarh. Under this scheme 50% of the

cost of transportation of finished goods and raw materials within the hills would also be available. These subsidies would be in addition to the subsidy available under the Govt. of India scheme.

6.2.57 Development of Tea Industry in Uttar Pradesh: The Tarai districts of Uttar Pradesh used to have tea plantation which over the periods have withered substantially. It is proposed to revive these plantations. A provision of Rs. 50 lakhs has been made for preparation of plans for revival of these plantations during the year 1991-92.

6.2.58 Assistance to Pioneer & Prestige Units:- The State Government in its new industrial policy has revised the definition of pioneer and prestige units.

6.2.59 A Pioneer units is one having been set up with an investment of Rs. 5 crore or more in a Tehsil which did not have any such unit as on April 1, 1990. A special subsidy of Rs. 10 lakhs over and above other subsidies as might be admissible would be given to such units. An additional subsidy of Rs. 10 lakhs would be given to such units if they promote ancillary industries for manufacture of atleast 30% of its requirement of bought out parts and components.

6.2.60 A prestige units is the first industrial unit set up with an investment of Rs. 25 crores or more in a district which did not have any such unit till March 31, 1990. A subsidy of Rs. 15 lakhs is admissible to the unit. An additional subsidy of Rs. 15 lakh would also be admissible if this undertaking promotes ancillaries for production of atleast 30% of its requirement of boughtout parts and components.

New Okhla Industrial Development Authority (NOIDA)

6.2.61 The New Okhla Industrial Development Authority was established in 1976 under the U.P. Industrial Area Development Act, 1976 for development of a new integrated township on the Delhi U.P. Border in the Dadri Tehsil of Bulandshar Distt. (now transferred to the Ghaziabad District).

6.2.62 According to the Master Plan of the township an area of 3218 Hectares with about 4000 Industrial Units, 5 lakhs population was envisaged to be developed during 16 years from 1976 to 1992. Later on another industrial area of 160 lacs hectares was added and out of this area 83 acres are, being transferred to the Ministry of Commerce, Government of India for setting up the Noida Free Trade Zone.

6.2.63 The following are the main components of the Eighth plan:-

1. It is proposed to acquire 2800 hectares of land under different land uses.

2. Fifty Seven hectares of land of Sector-60 is proposed to be taken up for development. Besides, the on going development of 132 hectares of Hosiery complex and 45 hectares of Sector 59 shall be completed in the 8th plan.
3. About 370 hectares of land comprising of sector-44, Sector 51, sector-54 and Sector-61 is proposed to be developed for residential plots are expected to be allotted in this plan.
4. About 13900 houses are proposed to be constructed for various income groups as follows:-

(Nos.)

E.W.S	4000
L.I.G.	3679
M.I.G.	3209
H.I.G.	2186

5. Fifty eight hectares of land comprising of Sector-18 and City centre is proposed to be developed for commercial uses.
6. Eight hundred and seventy hectares of land comprising of institutional area phase-II, Sector-63 proposed for Government/Semi Government offices to be developed under institutional uses.
7. The special projects proposed for construction in the eighth plan are sports Complex in Sector-21 A, Light Rail Transit System (LRT) connected to Delhi and sewage Treatment plant for the whole township. About 40 crores is expected to be invested for this special project.

PLAN FOR 1991-92

1. Acquisition of 550 hectares of land which includes 305 ha. for residential, 60 Ha for commercial, 135 for institutional and 50 Ha for sewage treatment plant.
2. Development of Sector-60 and Hosiery Complex will be completed for industrial purposes.
3. Development of residential sector-41 & 49 would be completed. Development of residential Sector-51 and Sector-81 will be taken up.
4. Development of 8 hectares of land for commercial use in City Centre will be taken up.
5. Development of 190 Ha. for institutional purposes in Institutional Area Phase-II.
6. Construction of 1476 one room/two room four storeyed flats for labour will be completed. Construction of 1500 houses for industrial labour shall also be completed and further 1500 houses will be taken up.
7. Construction of 2348 flats in Sector-II, 34 & 35 under SFS Schemes will be completed and possession handed over to the allottees.
8. Construction of commercial buildings (about 50000 Sq.mts.) will be taken up in City Centre in Sector-18.
9. Village development works in Villages falling in notified area will continue.

10. Construction of Sports Complex and Sewage Treatment Plant will continue. Works on Light Railway will be taken up.
11. Development and construction works in NEPZ will continue.
12. Construction of Ranney Wells, Water Reservoirs and rising mains.
13. Expenditure during 1991-92 is estimated at Rs. 251.39. A request for Government assistance of Rs. 640 Lakhs is being made. This is to cover the shortfall of Rs. 240 lakhs for the year 1990-91.

U.P. Financial Corporation :

6.2.64 The U.P. Financial Corpn. was established in the year 1954 under the SFC's act, 1951 to encourage the growth of Industries in the State of U.P. by providing Term loan facilities. The authorised share capital continued to be Rs. 50.00 crore as was in the last year. The IDBI had drawn a phased programme for conversion of quasi-equity loan into share capital. The Corporation received from the State Govt. during the year 1987-88, a sum of Rs. 1.8 cr. which has been converted from Quasi-equity to share Capital. The paid up capital of the Corporation has reached Rs. 14.47 cr.

6.3 Mining

During the Eighth Plan period, it is proposed to plan new projects for developing metal mines, chemicals, fertilizer and refractory industry. At the same time necessary inputs would be provided for the development of new mineral products, giving special emphasis to the high value commodities. Potential of constructional materials to meet the new technological demands would also be thoroughly examined.

6.3.2 The following table gives an inventory of important mineral resources which have been developed in public and private sector and which can be exploited in future.

Table 6.3.1
Mineral Reserves of Uttar Pradesh
(In Million Tonnes)

Minerals	Proved	Probable	Estimated
(1)	(2)	(3)	(4)
1. Limestone (Cement grade)	213.3 (Mirzapur and Pithoragarh)	171 (Dehradun and Sonbhadra)	26 (Sonbhadra)
2. Limestone (Chemical and steel grade)	10 (Dehradun)	45.28 (Dehradun & Sonbhadra)	500 (Dehradun & Tehri Garhwal)
3. Silica Sand	-	24.00 (Allahabad & Banda)	-
4. Bauxite	8.4 (Banda)	-	-
5. Dolomite (SMS grade)	12 (Sonbhadra)	-	21 (Nainital)

Table 6.3.1 (Concl'd.)

(In Million Tonnes)

Minerals	Proved	Probable	Estimated
(1)	(2)	(3)	(4)
6. Rock Phosphate	5.1 (Lalitpur)	-	0.9 (Lalitpur)
7. Pyrophyllite- Diaspore	0.3 (Lalitpur, Jhansi & Hamirpur)	-	-
8. Iron ore (low grade)	-	-	100 (Lalitpur)
9. Magnesite	5 (Almora)	3.48 (IBM) (Girichina, & Almora)	7.79 (Pithoragarh)
10. Marl Kankar	-	1.00	-
11. Copper-lead- zinc	1.60 (Pithoragarh)	-	-
12. Talc	-	-	8.65
13. Gypsum	-	-	0.36 (Nainital & Pauri Garhwal)

6.3.3 Under the public sector, mining of limestone marble, magnesite, coal, rock phosphate, dolomite, bauxite and silica sand at present is carried out by U.P. State Cement Corporation, U.P. State Mineral Development Corporation Ltd., Almora Magnesite Ltd. (in joint sector), Coal India Ltd. and Pyrites, Phosphate and Chemicals Ltd.

6.3.4 The bulk of the production of minor minerals and some of the major minerals like limestone, silica sand, magnesite pyrophyllite, diaspore is mostly with the private sector.

6.3.5 During the year 1989-90 about 6 million tonnes of major minerals and 25 million cubic meters of minor minerals were produced in the state valued at over Rs. 270 crores. A sum of Rs. 16.56 crores was earned in direct revenue in the form of sales and other taxes.

6.3.6 Following is the list of mineral based industries setup in Uttar Pradesh.

Factory:	Cost (Rs. in crore)
1. <u>Cement</u>	
a. Dalla Cement Factory, Mirzapur	35.00
b. Kajarahat-Chunar, Mirzapur	120.00
c. Expansion and Modernisation of Churk cement factory	25.00
d. Mini cement plant, Mohanlalganj, Lucknow	1.00

	<u>Cost (Rs. in Cr.)</u>
e. ARC Mini Cement Plant (closed), Dehraun	10.00
f. Venus Mini Cement, Deheradun	5.00
g. Mini Cement Plant, Biloni, Almora	4.00

	200.00

2. <u>Refractories</u>	
Dead Burnt Magnesite plant	10.00
3. <u>Chemicals</u>	
Calcium carbide plant, Deheradun	16.00
4. <u>Abrasive</u>	
Synthetic Emri Plant, Banda	0.30
5. <u>Mining Industries</u>	
Lambidhar project Dehradun (including Rope-way)	22.68
Bhalua Lime stone project, Mirzapur	
Basi Dolomite, Mirzapur	
rock Phosphate, Lalitpur and others	

	22.68

6. <u>Miscellaneous</u>	
a. Soap stone	55.00
b. Ballast crushing	
c. Silica sand	
d. Lime Kiln	
e. Ceramic, tiles etc.	

	50.00

Total	298.98

6.3.7 Employment Generation:- Based on the annual production of 6 million tonnes of major minerals and 25 million cubic meters of minor minerals, the mineral industry provides employment to almost 1 lakh persons.

Progress during the Seventh Plan Period

6.3.8 In the Seventh Five Year Plan greater emphasis was given for the exploration of metallic ores, as well as for outlining additional reserves of industrial minerals. Emphasis was also given to engineering geology problems and for the investigation of construction minerals.

6.3.9 The direction of geology and mining carries out mainly the following.
(i) Mineral Investigations, (ii) Mining Administration and (iii) Engineering Geology.

6.3.10 Mineral Exploration: A list of 35 investigation programmes were taken up on the basis of outlays approved. Out of these programmes 21 were completed during the plan period and 14 have spilled over in the Eighth Plan. The physical targets and achievements of exploration are as follows:-

Table 6.2.2
Targets Mineral Exploration.

Item	1985-90 Target	Achievement During 1985-90
(1)	(2)	(3)
1. Drilling (in mtrs)	35000 (10000)	37250 (9085)
2. Pitting (in cubic meters)	14000 (6000)	14190 (6256)
3. Detailed mapping (in sq.kms.)	90 (40)	94.3 (41.8)
4. Traversing (in sq. kms.)	3000 (2000)	2219 (1096)

NOTE: Figures in paranthesis indicate those for hills.

6.3.11 The exploration programmes include six preliminary surveys, twenty one detailed srveys and eight regional surveys. The minerals reserves outlined during 1985-90 are as follows:

Miniral Reserves

	(In Million Tonnes)
1. Limestone (Sonbhadra, Nainital, Dehradun Almora and Tehri).	34.00
2. Dolomite (Sonbhadra Dehradun, Almora and Tehri).	19.00
3. Granite (Jhansi and Hamirpur).	0.50
4. Magnesite (Almora).	3.90
5. Soapstone (Almora).	3.30
6. Marble (Mirzapur).	9.50
7. Marl and Kankar (Rae Bareli, Barabanki and Unnao).	0.32
8. Rock Phosphate (Lalitpur).	1.64
9. Pyrophillite (Lalitpur).	2.13
10. Copper-lead-zinc(Pithoragarh).	0.10
11. Tungsten ores	0.30

6.3.11 (b) Mining Administration:

- (i) Mines Regulation: During 1985-90, a total of 1023 applications were processed, 1113 inspections and 1457 demarcations were carried out.
- (ii) Royalty Assessment and Realisation: A royalty amounting to Rs. 62.59 crores has been realised during 1985-90. Targets for 1989-90 are 20 crores.
- (iii) Mineral Surveys: Forty nine surveys during 1985-90 were carried out for recommending the suitable type of concession and regulatory system for maximum income to the government.

6.3.12 Engineering Geology: Short term investigations are carried out at the instance of the user department for examining the geological and environmental suitability of construction sites. During 1990-95, 1915 investigations were completed.

6.3.13 Exploration Strategy: The new mineral deposits which are hitherto hidden are now to be searched and evaluated to meet the increasing requirements of the future. In view of this, scientific studies using updated technology are extremely essential for the search of minerals.

6.3.14 The following activities of the Directorate will continue in the Eighth Plan period as well.

(a) Mineral Exploration :

1. Detailed exploration for base metals, for outlining their developmental potential in the plain and hill areas of the state.
2. Exploration for the development of placer gold deposits and search of gold in Bundelkhand and Himalayan areas and diamond in Bundelkhand and Vindhya areas.
3. Preliminary investigation programmes involving the search of basemental, baryte, ornamental stones etc. and exploring the mineral potential of the state.
4. Minerals for the local needs eg clay, building stone, gravel and constructional materials.
5. Regional programme of geochemical survey and search of minerals.

(b) Mining Regulation: It is proposed to intensify regulation of mining by opening quarry offices in each district under the control of respective District Magistrate.

(c) Engineering Geology:
The organization has been considerably strengthened and restructured under a district task force, which provide geologists and mines officers in all the hill districts so that the developmental activities may gain momentum.

The following new programmes are proposed in the Eighth Plan period.

6.3.15 Reorganization of Mineral Exploration Programmes and Computerised data bank: The compilation of basic geologic data for reorganization and classifying the geologic environments would be taken up for predicting specific mineral potential in each type so identified.

6.3.16 The quality and productivity of exploration work will be improved by providing active technical supervision at the senior level. The level of specialisation and sophisticated technology will be improved by imparting training in various disciplines.

6.3.17 The mineral exploration programme are to be planned in accordance with the State's geologic setting which is not known adequately. For this purpose the geologic mapping of selected geological belts would be launched by the State Directorate on 1:20,000. Regional surveys would also be carried out for identify mineral potential.

6.3.18 Strengthening of Geophysics, Geochemistry wings and creation of Remote Sensing Cell:- Geophysics, Geochemistry and Remote Sensing which are valuable tools in modern exploration are to be strengthened with updated technologies.

6.3.19 Mineral Commodity Experts: A cell is proposed to be created in the Directorate for various mineral commodities. This cell will have commodity wise experts.

4. Technical guidance to the mine owners will be provided and R & D efforts in the mineral industry shall be made.

5. Geotechnical and Environment studies shall be undertaken to adopt suitable methods for exploration so that least damage is caused to the environment.

6. Publication of district wise data will be undertaken.

6.3.20 Re-structuring of the Directorate and its Decentralisation:- On the basis of recommendations made by a committee constituted by the State Geological Programming Board and the conclusions drawn by zero based budgeting exercise, the work of mineral exploration will be decentralised.

6.3.21 The following physical targets are proposed for the eighth plan period:

<u>EXPLORATION</u>	<u>Targets 1990-95</u>
Drilling (in metres.)	40,000 (11,000)
Pitting/trenching (in m)	15,000 (7,000)
Detailed mapping (in km ²)	100 (60)
Traversing (in km ²)	3,000 (2,000)
 <u>MINING</u>	
Mineral revenue	Rs. 145.00 crores

6.3.22 The above targets are proposed to be achieved through the non plan allocation. However the strengthening & modernisation programme of engineering geology, geotechnical and environmental studies will be carried out, through the plan allocation.

6.3.23 The mineral exploration and mining administration work which so far continued under the plan scheme in the Seventh plan period has now been transferred under the Non plan schemes. The programmes proposed in the Eighth plan under these schemes suggest modernisation and expansion of the

mineral exploration programme & strengthening of the mining administration wing. Accordingly an outlay of Rs. 900 lakhs has proposed for the eighth plan period.

Proposed Programme for 1991-92

6.3.24 An outlay of Rs. 165 lakhs is proposed for the year 1991- 92, out of which Rs. 100 lakhs is for hill. Following objectives are proposed to be achieved.

1. The study of fragile, degraded and landslide areas in the hills using remote sensing techniques. In addition, mineral bearing areas would also be evaluated.
2. Establishing field laboratories for expediting the mineral exploration activities of the Directorate.
3. Creation of analytical facilities of precious metals and purchase of additional accessories for the emission spectrograph to improve the capacity at the geochemical laboratory.
4. Strengthening in drilling and Geological equipments.
5. Strengthening of the geotechnical programme in the hill areas and reclamation of the mined out areas and degraded slopes.
6. Landscape planning through geomorphological studies in the hills using photogeology and remote sensing techniques.
7. Developing conceptual models for various mineral resources and computerisation of geological data.
8. Publication of information relating to mineral deposits in the State.
9. Posting of technical officers in additional districts with the objective of increasing revenue from minerals.

The U.P. State Mineral Development Corporation Limited

6.3.25 The corporation since its inception has developed six mining and mineral processing projects located in the remote parts of the state, and two manufacturing units for the transformation of minerals into finished products. The progress of the Corporation in respect of production, turn-over and profit during the last five year has been as under.

Table 6.3.3
Seventh Plan progress of U.P. State Mineral Development Corporation

	1985-86	1986-87	1987-88	1988-89	1989-90
1. Production (Lakh tonnes)	4.60	5.54	8.35	13.23	14.57
2. Turn Over (Rs. in lakhs)	404.68	559.39	1026.81	1271.44	1399.01
3. Profit (before depreciation) (Rs. in Lakhs)	133.46	199.83	300.00	444.88	530.81
4. Net profit (Rs. in lakhs)	45.40	117.28	150.00	251.28	352.80

On Going Projects:

- (i) Lambidhar Mining Project district Dehradun:
- (ii) Bhalua Mining Project and Bari Mining Project district Sonbhadra.
- (iii) Dead burnt dolomite project (Sonbhadra)
- (iv) Hydraulic lime manufacture (Sonbhadra)
- (v) Calcium Carbide project district Dehradun:
M/S UP Carbide and Chemicals Ltd., a wholly owned subsidiary of UPSMDC operating a plant for manufacturing 21000 tons per annum Calcium Carbide since 1985.

6.3.26 UPSMDC has visualised the growth of a large chemical complex based on Calcium Carbide, as well as diversification in carbide manufacture in the event of problems in the procurement of proper raw material. The projects presently under consideration are :

- (i) Guanidine Nitrate, Dicyan Diamide and
- (ii) Ferrosilicon an outlay of Rs. 80.00 lakhs has been provided for the Eighth Plan.
- (iii) Silica Sand Mining & Beneficiation:

UPSMDC is developing its mines at Lalapur in Allahabd district to produce about 3.5 lakh tonnes of raw sand, which after beneficiation would produce about 3 lakh tonnes of washed classified sand for the requirements of Float Glass project and other glass and foundry industries. The project is estimated to cost about Rs. 13 crores. On the basis of debt equity ratio as 1:1.5 the contribution, of UPSMDC works out at Rs. 650 lakhs., out of which Rs. 354 lakhs has already been made available in the seventh plan and the balance of Rs. 158 lakhs is required for the completion of project in the eight Plan.

- (iv) Rock Phosphate Beneficiation: The rock phosphate deposits presently under lease with UPSMDC contain about 5 million tonnes reserves. The directly saleable ore is only about one million tonnes which is restricted to few isolated pockets which is being mined and sold to the phosphatic fertilizer and elemental phosphorus industry. For beneficiating and upgrading the low grade ore unsuitable for industry a feasibility report has been prepared by M/S Met Chem, Canada, for integrated mine development and concentration plant to produce

about 3 lakh tonnes/annum of phosphatic rock and 100,000 tonnes per year of concentrate ore at a capital cost of Rs. 43.35 crores.

On the basis of equity debt ratio of Rs. 1:1, Rs. 2100 lakh are proposed for the Eighth plan of which Rs. 55.00 lakhs are proposed to be utilized in 1991-92.

- (v) Float glass Project: UPSMDC is implementing the construction of India's first float glass plant through its joint sector company Continental Float Glass Ltd. Near Baragarh, Banda at a capital cost of Rs. 250 crores. The project is likely to complete by mid 1992.

UPSMDC's equity (at 26% is Rs. 1968 lakhs. For payment of balance equity the estimated requirement of funds in the eighth plan period is Rs. 900 lakhs and Rs. 250.00 lakh are proposed in 1991-92.

- (vi) Laminated glass and down stream projects.

II-NEW PROJECTS:

Some of the new projects are detailed below:-

- (vii) Magnesite Beneficiation-Association Of UPSMDC in Khaitan Refractory Project: M/S Khaitan Refractory Limited are proposing to set up a plant near Aonla, Bareilly to manufacture about 45,000 tonnes per year of high quality sintered magnesite. The project is likely to cost Rs. 105 crores with equity debt ratio of 1:2. The equity amount of Rs. 35 crores is to be shared as 51% Promotor's issue and 49% Public issue. UPSMDC and M/S Khaitan Refractory will contribute 11% and 40% respectively. An outlay of Rs. 197.00 cr. is proposed for the Eighth year to meet the 11% share.
- (viii) Sand Lime Brick Project: Based on the sand deposits of Yamuna river, UPSMDC proposes to set up a project in Ghaziabad near Delhi for making about 3 crores bricks per annum. The cost is estimated at Rs. 4 crores and an equity debt ratio of 1:1. The project is likely to involve a foreign exchange component of DM 10.7 lakhs. UPSMDC's requirements for the project are estimated at Rs. 30 lakhs for the Eighth Plan and Rs. 29.00 lakhs in the year 1991-92.
- (ix) Elemental Phosphorous Project: M/S PICUP have been granted a letter of intent for establishing a project for manufacturing elemental phosphorous and its derivative. They have elected M/S Excel Industries Ltd. of Bombay as joint sector partners for setting up the project in Bundelkhand region. The raw material would be supplied from UPSMDC's rock phosphatic mine near Sonres pur. The project is estimated to cost Rs. 14.00 crores. The State institutions share would work out at 26% of equity. UPSMDC as a co-promotor 11% of the 26% equity component and Rs. 5 lakhs are proposed for the Eighth Year Plan as in 1991-92.

- (x) Development of Multimetal Prospect near Askot, Pithoragarh: About 1.6 million tonnes reserves containing +10% of combined copper-lead-zinc occur near Askot. Detailed investigations by drilling for increasing these reserves are in progress by DGM, UP. UPSMDC proposes to develop this mine and set up a concentrating plant for making Copper, lead and zinc concentrates to be sold to smelters located in various parts of the country. The estimated cost of developing mines and concentrating plant is about Rs. 20 crores. Taking a equity debt ratio of 1:1 Rs. 50 lakhs would be required by UPSMDC in the Eighth Plan Period which Rs. 2.00 lakh are required in 1991-92 the project will spillover to the Ninth Five Year Plan.
- (xi) Training Cell
- (xii) Environment Cell
- (xiii) R & D Cell
- (xiv) Development of Placer Gold and Production of Gold: Large tracts comprising stream beds and adjoining terraces south of Shiwalik hill are known to contain placer gold through the exploration work conducted by the Directorate of Geology & Mining and the Geological Survey of India. The quantities of gold generally vary between 0.1 to 0.5 gms/m of sand and gravel. 30-60 gms gold per toone of sand which can be subsequently upgraded to 150 gms/tonne by mechanical construction. Based on these results large scale mechanical processing of sand would be taken up through plants especially fabricated for the purpose and a small gold recovery unit will be set up for gold extraction. While the details of the scale of operation and the methodology to be followed are yet uncertain, an expenditure of at least Rs. 5 crores is anticipated in the fabrication of these two plants. The quantity of gold recovered would contribute to the operation and development of these units.
- (xv) Vindhyachal Abrasives - Expansion and Development of downstream products:

Financial Requirements in the Eighth Plan

6.2.27 The financial requiremnt for the Eighth Five Year Plan are estimated at Rs. 4100 lakhs as detailed in table 6.3.4 :-

Table 6.3.4
UPSMDC Projects - Requirement for Eighth Plan
 (Rs. in Lakhs)

PROJECT	Apprx. cost	Total Equity of UPSMDC	Requirements of share capital
(1)	(2)	(3)	(4)
(A) CONTINUING			
1. Lambidhar project expansion underground development and increase of ropeway capacity Dehradun.	100	-	-
2. Bhalua and Bari mines modification of crushing units.	70	70	-
3. Calcium Carbide project Dehradun, Addition of Ferrosilicon unit:	100	100	80
4. Silica Sand mining and beneficiation (acid leaching and beneficiation)	1300	650	158
5. Rock Phosphate beneficiation including briquetting plant	4335	2167	2100
6. Float Glass Project	25000	1968	900
			(including overruns provision of Rs.200 lakhs)
(b) NEW PROJECTS:			
7. Khairi Refractory beneficiation association of UPSMDC.	10500	197	197
8. Sand Lime-brick project	400	200	30
9. Elemental phosphorous project	1400	51	50
10. Development of multimetal prospect near Askot, Pithoragarh.	2000	1000	50
			(Hill Area)
11. Training Cell	10	10	10
12. Environmental Cell	50	50	25
13. R & D Cell	25	-	-
14. Development of placer gold and production of gold	1000	500	500
Total	46290	6,962	4,100

-----*

CHAPTER VII

TRANSPORT

7.1 Civil Aviation

7.1.1. The Directorate of state civil aviation, established in August 1980, takes care of V.I.P. flights and conducts training in civil aviation.

7.1.2. The transport and communication facilities have played a vital role in the development of the state. V.I.P.'s high dignitaries and technical teams have to go in the interiors of the state to evaluate schemes and programmes and to maintain effective administration and control. In the event of natural calamities, law and order problems, the V.I.P.'s have to reach the places immediately. This is not possible by rail or road transport. Hence it is imperative to have a quicker mode of transport.

7.1.3. Besides, this State Civil Aviation also imparts Pilot training to youths in the country, in order to inculcate in them the habit of adventure and discipline. The department also provides aircraft maintenance training to meet the dearth of aircraft engineers in the country.

7.1.4. The Directorate of State Civil Aviation also maintains airfields which were found in dilapidated condition after the second world war so as to make them operational for the Aircraft.

7.1.5. During Seventh Plan an outlay of Rs. 541.00 lakh was approved against which an expenditure of Rs. 352.42 lakh was incurred. The following schemes have been executed.

1. Establishment of Civil Aviation Training Center at Faizabad.
2. Award of Scholarship for P.P.L. and C.P.L.
3. Acquisition of Land at Fursatganj, Raebareilly. for Indira Gandhi Rashtriya Uran Academy.
4. Establishment of Aircraft Maintenance Engineering Training Center at Lucknow.
5. Installation of V.H.F. and N.D.B. for providing navigation facilities at Faizabad and Varanasi training centers.
6. Construction of residential colony at Lucknow for officers/ officials of the directorate.
7. Construction of V.I.P. Lounge at Amausi Airport.
8. Strengthening of Engine shop.
9. Renovation of stores.

10. Establishment of Civil Engineering cell for the maintenance of residential/ non-residential buildings/airfields.
11. Construction of Petrol Shed and staff lavatory at Amausi.
12. Creation of post for Muirpur and Faisabad airstrips.
13. Establishment of electrical shop for the proper maintenance of the electrical aircraft spares at the Directorate.
14. Construction of Jhansi Airfield.
15. Installation of Simulator during 1989-90 at the Directorate.

Programmes of Eighth Plan (1990-95)

7.1.6. An outlay of Rs. 1300.00 lakh has been proposed for the Eighth Plan (1990-95) including Rs. 1000.00 lakh for hills. The following schemes are proposed to be taken up during the Eighth Plan :

1. Establishment of two new training centers and construction of Hangers.
2. Purchase of two new Training Aircraft and replacement of old training aircraft.
3. Construction of Administrative Block in the directorate.
4. Construction of Airfields in plains and hills.

7.1.7 An outlay of Rs. 175 lakh has been approved for the Annual Plan 1990-91 including Rs. 150 lakh for hills. For the Annual Plan 1991-92 an outlay of Rs. 240 lakhs including Rs. 200 lakh for hills has been proposed.

7.2 Roads and Bridges

7.2.1. Roads and bridges are the basic infrastructure for socio-economic development of a State as production, marketing and consumption of functions depend upon good road network. The benefit of various development schemes can reach the masses only when important growth centers of agriculture, dairying, mineral development, industries are linked properly with a network of all weather road system. Better roads also help to achieve fuel economy.

7.2.2. Because of certain inherent advantages such as door to door service, flexibility, reliability, speed, the volume of road transport and its share vis-a-vis railways have been increasing rapidly. The estimated share of road transportation

for goods has increased from 11% to 58% from 1951-85. Similarly during the same period share of passenger traffic has increased from 26% to 80%. Both freight and passenger traffic carried by road is expected to increase by 3 to 4 times by 2000 AD.

Requirement for Road Sector

7.2.3. The Road development plan 1981-2001 envisages total road network of 3,55,160 kms. for Uttar Pradesh, comprising 5888 kms. of National Highways, 35,300 Kms. of State Highways, 59,310 kms. of major District Roads and 2,54,662 kms. of rural roads.

Progress of Seventh Plan

7.2.4. An outlay of Rs. 966.26 crore was provided for the Seventh Plan was for roads against which an expenditure of Rs. 1006.00 cores was incurred. The broad objectives were removal of deficiencies of existing main roads, connectivity of villages, conservation of energy, reduction of accidents, employment generation and provisions of roads with divided carriage-way in high density corridors.

7.2.5. The physical and financial targets envisaged were achieved in so far as expansion of road network is concerned. The connectivity of villages having population (1971 census) of 1500 and above is 95.5 percent against the target of 100 percent by the end of 1990. For the villages with the population of 1000 to 1499 the percentage achievement is 57.23 against the national target of 50 percent.

Physical and Financial Achievements During Seventh Five Year Plan

	<u>Target</u>	<u>Achievement</u>
1. Construction of Bridges (Nos)	555	598
2. Weak & Narrow Bridge Reconstruction (Nos)	1000	144
3. New construction of Roads		
(i) Inter coat and above (Kms)	5864	7458
(ii) Kharanja (Kms)	14235	15056
(iii) Earth Work (Kms)	6725	6643
(iv) Hill Roads (Kms)	2225	1258
4. Conversion of major district roads into state roads (Kms)	1000	194
5. Reconstruction of Road (Kms)	3766	3764
6. Strengthening of state roads (Kms)	900	1344
7. Strengthening of City roads (Kms)	900	631
8. Industrial roads (Kms)	-	72

7.2.6. Details of villages connectivity under minimum needs programme is given in table no.7.2.1.

Table 7.2.1
Village Connectivity

Category	Total	Villages	Seventh Plan	Total	Balance	Eighth			
of Villages on the basis of population	no of Villages Census 1971 1981	Connected upto 31.03.1985	Target	Achievement upto the End of Seventh Plan	on 01.04.90 1971 Census	Plan Target 1990-95			
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
i) 1500 & above	10899	15505	7731	3149	2682 (431)	10413 (87)	95.54	486	486
ii) 1000 to 1499	11396	13698	4893	2155	1629 (10)	6522 (139)	57.23	4874 (8)	4874 (8)
iii) below 1000	90271	83363	29194	-	2299	31483	34.88	58788	785 (785)

Note :- Figures shown in bracket are for hills.

Spill Over Works :

7.2.7. The Spillover works after March 1990 are of Rs. 903.00 crore as detailed below.

		(Rs. in crore)
A.	STATE HIGHWAYS	
	1. Plain areas (Roads & Bridges)	330
	2. Hill areas	228
	3. World Bank project	230
	Total of state highways	788
B.	DISTRICT ROADS	115
	Total (A+B)	903

Strategy in Eighth Five Year Plan :

7.2.8. Priority has been given to construction of missing weak and narrow bridges, improvement of state highways and major district roads which carry large traffic, city roads and roads approaching KAVAL towns.

7.2.9. New construction of roads is proposed under minimum needs programme on the basis of 1981 census. The village roads proposed for construction will be upto painting level. The new roads constructed during the previous Five Year Plans were upto kheranja or soling level. To maintain the assets thus created, these will be upgraded upto painting level.

7.2.10. Provision has also been made for externally aided projects which are as under.

World Bank Project

7.2.11. Improvement of Gorakhpur -Sonauli, Gorakhpur -Deoria -Ballia, Allahabad -Dohrighat and Faizabad - Allahabad roads has been sanctioned under this scheme. The total road length is 604 Kms. and the total cost of the project is Rs.231.26 crore. During Eighth Plan an outlay of Rs. 230.26 crore and for the annual plan 1991-92 an outlay of Rs. 70.00 crore has been proposed.

Asian Development Bank Project

7.2.12. The Varanasi -Shaktinagar road is proposed for widening and strengthening in district Varanasi and Mirzapur in a length of 184 Kms. The total cost of the project is Rs. 80.82 crore. During Eighth Plan an outlay of Rs. 80 crore and for the annual plan 1991-92 an outlay of Rs. 10 crores has been proposed.

Tourism Development Project

7.2.13. This is under overseas economic cooperation fund Japan. The roads proposed for improvement are in the area associated with the life of lord Buddha in the districts of Gorakhpur and Basti. The total cost of the project is Rs. 37.57 crores. consisting of improvement of 7 roads and new construction of five bridges. During Eighth Five year plan an outlay of Rs. 37.60 crores has been proposed. During 1990-91 an outlay of Rs. 4 crores and for the annual plan 1991-92 an outlay of Rs. 12 crores has been proposed.

7.2.14. The outlay proposed in the Eighth Five Year Plan and annual plan 1991-92 are as under:

	(Rs, in crores.)		
	Eighth Plan (1990-95)	Annual Plan (1990-91)	Proposed Outlay (1991-92)
Total	2370.00	302.21	352.00
Nilis	370.00	46.50	57.00

7.2.15. The Financial and Physical Targets of Eighth Five year plan and annual plan 1991-92 are given in table 7.2.2:

TABLE 7.2.2.
Outlays and Targets for Eighth Plan
(Rs. in crores.)

Item	Eighth Plan Target (1990-95)		Annual Plan Target (1991-92)	
	Financial	Physical	Financial	Physical
1.	2.	3.	4.	5.
1. Bridges	269.52	722 Nos.	31.68	85 Nos.
2. New Roads	767.38	20348 Kms.	100.04	2628 Kms.
3. District Board Roads.	10.00	N.A.	2.00	N.A.
4. Reconstruction and improvement of Roads.	1025.93	19564 Kms.	181.05	2787 Kms.
4. Miscellaneous	21.16	-	3.06	-
5. Establishment	276.01	-	34.17	-
Total	2370.00	40634 Kms.	352.00	4500 Kms.

Industrial Roads

7.2.16. Emphasis has been laid in Eighth plan for linkage of communication facilities with identified schemes for industrial development. Industries play a very important role in integration of production, marketing, consumption functions through road networks. Schemes have been taken up under industrial roads for the benefit of those areas which have been developed into industrial centers. For Eighth Plan an outlay of Rs. 431 lakh and for the annual plan 1991-92 an outlay of Rs. 53 lakh has been proposed.

Rural Roads (MNP)

7.2.17. The rural road construction programme is an important part of the National Minimum Needs Programme. The proposal for Eighth Five Year Plan is to connect all the remaining 486 villages having population (1971 census) 1000 and above i.e. to connect 486 villages of population 1500 and above and 4874 villages having population between 1000 to 1499 with all weather pucca road. Thus the total no. of villages to be connected by the end of Eighth Five Year Plan is 5360 villages. It is anticipated that these targets will result in 100 percent connectivity for villages with population (as per 1981 census) more than 1000, because only 22% of the connected villages of less than 1000 population as per 1971 census has come in the category of villages with a population above 1000 in the 1981 census as shown in table 7.2.1. In 1991-92 a target of connecting 10 villages with population 1500 and above and 860 villages with population between 1000 to 1499 by all weather pucca road has been fixed.

7.2.18. For rural roads an outlay of Rs. 1353 crore including Rs. 233.16 crore for hills has been provided under minimum need programme in Eighth Five Year Plan. During Seventh Five Year Plan an outlay of Rs. 59537 lakh was approved including Rs. 12050 lakh for hills against which an expenditure of Rs. 56665 lakh was incurred.

7.2.19. For the annual plan 1990-91 an outlay of Rs. 16294 lakh has been approved and for the Annual plan 1991-92 an outlay of Rs. 18078 lakh has been proposed for minimum needs programme.

Employment

7.2.20. During the Seventh Plan period the employment (in person days) was 3012 lakh against the expenditure of 100619 lakh the proposed employment (in person days) during the Eighth Five Year Plan is 4091 lakh against the proposed outlay of Rs. 2370 cores. The norms adopted for the year 1990-91 and 1990-95 are Rs. 40 and Rs. 60 respectively expenditure for one man days of employment generation. The regular employment level was 58946 person year during March 1985, an addition during Seventh Plan period was 5482 person years. It is proposed that in the Eighth Five Year Plan this will further increase by 15395 person years. The norms adopted is one person year of employment generation for additional one Km. pucca road.

7.3 Road Transport

7.3.1. In the surface transport system both for movement of passengers and goods, road transport is of great importance. There is a wide variety of mechanised and non-mechanised vehicles in the country for road traffic which provides some choice to people to travel and transport goods according to their requirements. Motor transport efficiency depends on good road system in addition to quality vehicles adequate repair and supply of fuel. In view of the characteristics of easy availability and flexibility of operation adaptability to individual needs, door to door service and reliability, road transport is ideally suitable for short and medium distances. It is also the main an important means of transport in hilly and rurals areas not served by Railways. Further road transport provides one of the basic infrastructure for economic development of backward areas and serves as a feeder serves to rail traffic.

Non Roadways

7.3.2. Road Transport activities have witnessed phenomenal increase in the recent years. The Non-Roadways activities of the state transport department mainly relate to regulation and enforcement of various provision of Motor Vehicles Act, U.P. Motor Vehicle Taxation Act, Passenger tax act, Good tax act and rules framed there under. Efforts have been made to strengthen the administrative and enforcement machinery which has resulted in substantial increase in states revenue.

7.3.3. During Seventh Plan (1985-90) an outlay of Rs. 731 lakhs was approved against which an expenditure of Rs. 682 lakhs was incurred. Construction of office building at Allahabad, Meerut and Lucknow was completed during this period.

7.3.4. Following scheme were introduced during the Seventh plan in order to improve the organizational efficiency of the Department and bring the modern technology in the transport sphere.

- (1) Construction of tubular structures at the check post.
- (2) Issue of driving licences through driving dice machines.
- (3) Establishment of fitness workshops at Lucknow and Kanpur.
- (4) Establishment of driving testing ground at Lucknow and Kanpur.
- (5) Computerization of records.
- (6) Purchase of Gas analyzers in order to enable a check on Air pollution.
- (7) Introduction of State Transport Research and Training Institute.

7.3.5. During Eighth Plan (1990-95) an outlay of Rs 50 crores has been proposed out of which Rs. 5 crores for hill, areas. During 1990-91, an outlay of Rs. 1 crore and for the annual plan (1991-92), an outlay of Rs. 7 crores has been proposed out of which Rs. 1 crore for hills. An outlay of Rs. 5 crores has been proposed for traffic regulation project in 1991-92 plan.

7.3.6. The following important schemes have been taken during Eighth Five Year Plan (1990-95) and the Annual plan 1991-92.

- (1) Strengthening of organization.
- (2) Strengthening of statistical branch.
- (3) Passenger Tax Branch strengthening.
- (4) Enforcement Branch strengthening.
- (5) Construction of Tubular structures at check post.
- (6) Construction of testing grounds for Drivers.
- (7) Computerization programme.
- (8) State Transport Research and planning Institute.
- (9) Traffic regulation project.

Uttar Pradesh State Roadways Transport Corporation

7.3.7. At the beginning of the Eighth Five Year Plan corporation was plying its buses on 22323 Kms. road out of 65,665 Kms. Motorable roads in the state, which accounted for approximately 34 percent only. In the Eighth Five Year Plan also there is no additional thrust on further nationalization of routes.

7.3.8. U.P. State Roadways Transport Corporation by the end of year 1989-90 was plying its 8161 buses on 2525 routes. The corporation plans to purchase 4121 new buses in Eighth Five Year Plan period out of which 3782 buses are proposed to be purchased for replacement and 339 for further augmentation of

fleet. In the above plan another 3000 buses will be renovated as per schedule for provided adequate and comfortable transport systems in the state. Thus by purchasing another 4121 Buses the fleet strength of UPSRTC will increase upto 8500 by the end of the plan. In the Seventh Plan the corporation made rigorous efforts to reduce its overage in the beginning of the Seventh plan, the percentage of overaged buses was 29 percent which was reduced to 9 percent by 1989-90. In the Eighth Plan, this will further be reduced to 20 percent. In order to coter the increased demand of passenger's need the corporation will make efforts to include hired buses also so that adequate buses are provided on various routes as per the traffic demand.

7.3.9. By improving the quality of maintenance of the buses, the corporation plans for a target of bus utilization of 260 Kms per bus per day by the end of the plan. It is proposed to achieve 74 percent load factor by improving the standard of effective operation by the end of the plan. Similarly for better fuel average, improvement in required technical standard and by use of latest engines fuel average of 4.70 Kms. per liters is proposed to be achieved for the strengthening and upgradation of depots and regional workshops it is proposed to equip these workshops with modern tools & plants. Establishment of nine new depot workshops and strengthening of nineteen existing workshops with upgradation of seven regional workshops has been planned during Eighth Five year plan.

7.3.10. At present 424 bus stations are constructed on different routes of the state, in the owned buildings of various bus stations. Improvement in the facilities of retiring rooms, canteens, ticket windows, toilets are proposed to be constructed. For cleanliness of buses and bus stations and to ensure courteous behavior of the employees towards the passengers, training facilities are proposed to be provided during the plan period.

7.3.11. At the beginning of the Seventh Plan the utilization was just 158 Kms per bus per day, which was increased to 222 Kms per bus per day at the end of the plan. Accordingly bus utilization during the Eighth Plan has been proposed in 1990-91 217 Kms/day, 1991-92 245 Kms/day, 1992-93 250 Kms/day, 1993-94 255 Kms/day and 1994-95 260 Kms/day. As regards occupancy ratio it has been planned at 70 percent in the year 1990-91 to 74 percent in the year 1994-95. The above load factor and bus utilization with a sum of 374.58 crore Kms will ensure an income of Rs. 2153.76 crore. The cost of operation is increasing every year which can be overcome by increasing the fare rates in proportion to the increase in operating cost which will also contribute to additional resources.

7.3.12. In the Eighth Plan to improve effectively the management information systems, the computerization at depot levels has been proposed which will improve the control and monitoring operations at grass root levels.

7.3.13. Total capital expenditure of Rs. 280.00 crore is proposed in the Eighth Five Year Plan, the particulars of the expenditure are given below :

Capital Expenditure

	<u>(Rs. in crores)</u>
1. Expenditure on purchase of buses	164.75
2. Expenditure on bus body building	78.60
3. Expenditure on renovation of buses	16.65
4. Expenditure on tools & plants Land and buildings	20.00
Total	280.00

7.3.14. For the above capital expenditure, the resources are proposed to be raised as follows:

	<u>(Rs. in crore)</u>
1. State Government capital Contribution	80.00
2. Loan from L.I.C.	25.07
3. loan from I.D.B.I.	24.91
4. Internal resources	150.02
1. Depreciation	250.00
2. Profit	0.76
Cash profit	250.76
3. Repayment of loans	100.74
Net Internal resources	150.02
Total	280.00

An outlay of Rs. 41.85 crore has been approved for the annual plan 1990-91 including Rs. 50 lakhs for hills.

7.3.15. To give adequate technical support to keep the fleet fit for operations it is proposed to equip the existing workshops with modern equipments and replace the outdated tools & plants.

7.3.16. Total financial requirement anticipated and resource position of the U.P.S.R.T.C. for purchase of new buses, renovation of old buses, modernization of existing bus stations will be as under:

<u>Name of work</u>	<u>Nos.</u>	<u>Amount</u> <u>(Rs. in crores)</u>
1. Purchase of buses	800	40.00
2. Cost of renovation of bus bodies		1.00
3. Purchase of tools & plants furnitures & fixtures, staff car Land and building		0.35
4. Expenditure on Srinagar workshop		0.50
	Total	41.85

(Rs. in crores)

(i) CAPITAL CONTRIBUTION FROM STATE GOVT.		13.28
(ii) capital contribution from state for hill		0.50
(iii) Loan from		
(a) L.I.C.		7.07
(b) I.D.B.I.		19.88
(iv) INTERNAL RESOURCES		
(a) D.R.F.	43.00	
(b) Additional income due to increase in fares	30.00	
(c) Profit/ Loss	(-) 28.45	
(d) Repayment of Loans	(-) 28.35	
		16.20
(e) Loss due rise etc..	(-) 15.08	
Net internal resources	1.12	

1.12

Total	41.85
--------------	--------------

ANNUAL PLAN (1991 - 92)

7.3.17. An outlay of Rs.54.58 crores has been proposed for the annual plan 1991-92. The total plan envisages the purchase of 881 buses during this period. All these buses are proposed to be purchased for the replacement of old and worn-out buses. The renovation of 585 buses will be taken up during 1991-92.

7.3.18. To give adequate technical support to keep the fleet fit for operation it is proposed to equip the existing workshops with modern equipments and replace the outdated tools & plants.

7.3.19. The total financial requirement for the purchase of new buses, renovation of old buses and modernization of existing workshops will be as under :

	(Rs. in crore)
1. Purchase of 881 chassis @ 3.60 lakhs per chassis	31.72
2. Construction of bus body on 881 chassis @ 1.80 lakhs per chassis	15.86
3. Renovation cost	3.00
4. Land and building tooles & plants etc.	4.00

	54.58

Estimated Resources For Annual Plan (1991-92)

	(Rs. in crore)
1. Capital contribution from state government	15.00
2. Loan from L.I.C.	3.85
3. Loan from I.D.B.I.	2.00
4. Internal resources	33.73

Total	54.58

Internal Resources:

1. D.R.F	45.00
2. Profit/Losses	14.77
3. Repayment of loans	(-)26.04

Internal Resources	33.73

-----*

CHAPTER IX

SCIENCE, TECHNOLOGY AND ENVIRONMENT

9.1. Science and Technology

An outlay of Rs. 1800.00 lakh is proposed to take up programmes / projects which are result oriented; location, need and resource specific; decentralized planning based as to ensure maximum utilization of resources; helpful in developing indigenous technology as to save foreign exchange; and useful in social reformation. Headwise description is as under.

9.1.2. Supported and Contracted Research : Programmes/ projects of applied nature in thrust areas viz-a-viz Post Harvest Technology, Food processing, Biotechnology, Industrial Applications, Computer Applications, Health Care, Rural Development and Energy are planned to be taken up under this head. Programmes of basic nature, as and when required, shall also be taken but at low key.

9.1.3. Poly-Technology Transfer Centre : Funds indicated under this head shall be utilized for extension of proven technologies available with national institutions with an aim to disseminate information to users.

9.1.4. Development of Appropriate Technology : It is the most important head under which indigenous technologies are proposed to develop according to the need of State. In fact, the Council is planning to establish proto-models based on laboratory scale informations obtained under the head supported and contracted research.

9.1.5. Establishment of Planetarium : With an aim to provide permanent facility for conducting Science Popularization programme, a planetarium is being constructed at Lucknow. It is planned that the total work be completed by the year 1992.

9.1.6. Museum of Science & Technology : As an aid to science popularization programme, it is another permanent structure built up at Lucknow with the help of National Council of Science Museums, Calcutta. The grant proposed under this head is a committed amount towards this museum. It has been open to public for the last one year.

9.1.7. Pilot Plants : With an aim to cover risk involved in transferring technologies developed at bench scale, two pilot plants viz-a-viz production of Citric Acid and Gluconic Acid are proposed to be taken up during this plan period.

9.1.8. Research Cell/support for centres of Excellence : In order to strengthen institutional infrastructure in selected area(s) the funds under this head shall be utilized.

9.1.9. District Science Centres/Science Popularization Programme : This part of activity has grown as one of the major activities of State Council of Science and Technology, U.P. It is planned to establish District Science Center in each District of State during the plan period. These Centers shall function with the help of local bodies, educational institutions, voluntary organizations, etc.

9.1.10. Techno-Entrepreneurship Development Programme : Beside Science popularization programme, district Science Centers shall also be used for developing entrepreneurial skill of local people at block level. Programme/project under this head shall aid to demonstrate proven technologies to the local masses and then train them for self employment. It is one of the major thrusts of the national policy for Science and Technology.

9.1.11. Documentation Centre/Library Services : It is planned to establish Documentation Center during the plan period so that Council may be able to disseminate Science and Technology information to the users more efficiently.

9.1.12. Publication/Exhibition/Advertisement : Publications like Annual Report, progress report, highlight etc. are annual features of the Council. Grant under this head shall be utilized for these publications as well as arranging Science exhibitions.

9.1.13. Seminars/Symposia/Conferences/Workshops : Grant in aid for arranging seminars/ symposias/ conferences/ workshops by educational institutions of the state.

9.1.14. Construction of Office Building : At the moment office of the State Council is located in a rented building with inadequate space. It is felt that there is urgent need of an office building to house various Laboratories and work shops for better functioning.

9.1.15. Establishment of Biotechnology Cell : Activities of the council in this vital area of Bio-technology have grown to a large extent. Beside research activities major programmes like establishment of Embryo-Transfer Technology Center, Pilot plants for production of fermented products Bio-technology park etc. have been formulated to take up during the plan period. In order to cope with the likely expansion of these activities biotechnology cell is proposed to establish.

9.1.16. Remote Sensing Application Centre : This centre has developed into an important centre providing scientific service facilities in respect of application of remote sensing technology in the various natural resources sectors. The centre is conducting surveys and is making available useful data. The main thrust areas are :-

1. Landuse and Land-cover : (i) Regional Planning based on Geographical Information System and (ii) Urban Surveys for Planning City Development Programmes;
2. Soil Resources;
3. Water Resources;

4. Ground water Resources;
5. Agriculture
6. Forest Resources; and
7. Mineral Resources and Neotectonism.

9.1.17 State Observatory Manorma Peak, Nainital: The objectives of the Eighth Plan are :

1. Augmentation of Present Facilities :- The Observatory present has 4 telescopes of 38-cm, 52-cm, 56-cm and 104-cm diameter for stellar research. The 104-cm telescope has besides photo-meters, photo-graphic facility, cassegrain spectrograph and a CCO system. All these telescopes need state of the art back-end instruments. Several modifications and improvements in the existing telescopes and their accessories are also proposed.
2. Development of a new site for the existing observational facilities.
3. Development of New Observational facilities : (i) Large Telescope Project, and (ii) Vacuum Optical Spar Telescope Project, and (iii) Installation of French-Schmidt telescope under Indo-French Collaboration.

9.2 Ecology and Environment

Environment protection and control of pollution in water, air and soil occupies a very high position among the priorities of the Eighth Five Year Plan. This subject is assuming greater importance year after year because of the uncontrolled rate of growth of population and rapidly increasing industrialization and other activities concerned with the economic and social progress. The environment protection is essential for a healthy mental, physical and economic growth of the citizen.

9.2.2. State Pollution Control Board shall carry out, among other routine functions, the monitoring of water quality of surface waters (water bodies) receiving effluents from industrial and other sources, the air quality monitoring in selected districts monitoring of carbon monoxide level in the air at major city centres including sensitive locations and noise pollution in KAVAL towns. The Board shall also make efforts for getting effluent/ emission treatment plants/ devices commissioned in all industries, as needed. In addition, the Board shall also be responsible for the collection of water cess and consent fees, and for prosecuting the local bodies and industries in the event of non-compliance of the orders issued by it under legal provisions.

9.2.3. Directorate of Environment is presently functioning with only five scientists, a significant strengthening of the Directorate of Environment is proposed mainly with respect to the scientists and technical personnel and a small number of other supporting staff. In order to carry out the assigned work

efficiently upto the village level in this vast State, new district level offices of the Directorate are proposed to be opened in districts. Thus, these Eighth Five Year Plan proposals are heavily oriented not only towards improvement of the environment but also towards employment generation, decentralization and heavy involvement of children, youth, women, intellectuals and other sections of the rural and urban communities living in different parts of the State.

2.2.4. Details of programme-wise proposals to be taken up during Eighth Five Year Plan are summarized below:

1. Control of Environmental Degradation :

- (1) An appraisal of soil salinity and environmental degradation due to water logging in Sharda Sahayak Command Area.
- (2) Pilot project for the development of briquette for the control of environmental degradation.
- (3) Studies of textile industries effluents on the biology of river Tons in Mau.
- (4) Development of reduction type of catalytic converter, dual type catalytic converter for petro engines and 3 way catalytic converter for diesel engines.
- (5) Development of catalytic converter for the control of noxious gas emission from automobiles (balance amount).
- (6) Environmental degradation and management in urban areas-A case study of Kanpur metropolis.
- (7) Problems and remedies of fatal protozoal contamination of drinking water.

2. Environmental Impact Assessment :

- (1) Assessment of the effects of environmental pollution on birds of U.P.
- (2) Environmental degradation and pollution of ground water in municipal limits of Lucknow city-pilot study.
- (3) Studies on river Sai with special reference to its fauna.
- (4) Epidemiological survey of incidence of dental and skeletal fluorosis with reference to fluoride content in food stuff and water of district Agra and tobacco additives of district Mainpuri.
- (5) Studies on wastes utilization and environmental impact assessment of polluting industries situated in Sonbhadra district.

- (6) Preparation of environmental ATLAS of UP after preparing the environmental status report of all 63 districts of the State.
- (7) Studies on the impact of polluted environment on human eye.
- (8) Mobile laboratories for environmental impact assessment required for selection of environmentally compatible sites for residential commercial, industrial and other developmental works.
- (9) Monitoring of effect on environment in each development block of the State due to Agro chemicals and provision of kits required for analysis of drinking water.
- (10) Intensive monitoring of river Gomti.
- (11) Studies on diagnosis and amelioration of water soil and crops of Varanasi region polluted by metals like cadmium, lead, copper, zink, iron, manganese and chromium.

3. Strategy on the Conservation of Natural Living Resources:

- (1) Environmental status evaluation of natural living resources.
- (2) Pilot project for the environmental improvement and management of national parks and sanctuaries.
- (3) Special projects for endangered species.
- (4) Establishment of environmental parks.

4. Eco-Development :

- (1) Organization of Eco-development camps.
- (2) Environmental improvement of Archaeological monuments, cultural places, and tourist resorts etc.
- (3) Development of selected ecosystems.
- (4) Preparation of environmentally compatible development plans.

5. Environmental Education, Awareness, Training Research Information System :

- (1) Provision for K M Munshi Paryavaran Puraskar.

- (2) Organisation of mass awareness programmes such as world environment day etc.
- (3) Organisation of training programmes.
- (4) Production of awareness, publicity and educational materials and organisation of seminars.
- (5) Financial assistance to eco-restoration clubs and voluntary environmental organizations.
- (6) Mobile exhibition vehicles (Paryavaran Rath) for publicity.
- (7) Environmental awareness programmes in rural areas.
- (8) Establishment of environmental information system.

Strengthening Of Directorate At Headquarter And Opening Of New District Level Offices :

- (1) Strengthening of Directorate at Headquarters, Lucknow.
- (2) Establishment of new regional offices at divisional headquarter (10 offices)
- (3) Establishment of new district offices at District Headquarters.

(i) Phase - I	8 district level offices
(ii) Phase - II	4 district level offices
(iii) Phase - III	15 district level offices
(iv) Phase - IV	16 district level offices
- (4) Establishment of Paryavaran Parisar at Lucknow headquarter.

9.2.5. Through annual plans, during Seventh Plan period an outlay of Rs. 883.00 lakh (including Rs. 170.00 lakh for hills) was approved for Ecology and Environment programmes against which Rs. 1026.20 lakh (including Rs. 52.37 lakh for hills) was spent. Out of Rs. 1026.20 lakh Rs. 249.85 lakh (including Rs. 52.37 lakh for hills) was spent on environmental research and ecological regeneration while Rs. 776.35 lakh was spent on prevention and control of pollution.

9.2.6. For Eighth Plan period Rs. 1650.00 lakh (including Rs. 300.00 for hills) is proposed for Environmental Research and Ecological Regeneration and Rs. 972.00 lakh (including Rs. 700.00 lakh for hills) is proposed for Prevention and control of Pollution. Thus Rs. 2622.00 lakh (including Rs. 1000.00 lakh for hills) is proposed for Ecology and Environment.

9.2.7. For the current year (1990-91) Rs. 297.00 lakh (including Rs. 135.00 lakh for hills) has been approved for the Ecology and Environment Sector consisting of Rs. 68.50 lakh

(including Rs. 35.00 lakh of hills) for Environmental Research and Ecology Regeneration and Rs. 228.50 lakh (including Rs. 100.00 lakh of hills) for Prevention and control of pollution. Rs. 122.00 lakh has been approved for Ganga Pollution by Leather Industries at Kanpur.

9.2.8. An outlay of Rs. 400.00 lakh, including Rs. 150.00 lakh for hill areas is proposed against Ecology and Environment for the year 1991-92 consisting of Rs. 130.00 lakh for Prevention and Control of Pollution. For Eighth Plan period and for 1991-92 Rs. 700.00 lakh and Rs. 100.00 lakh respectively are proposed for Bhagirathi-Bhilangna Ghati Project of hill areas. For the year 1990-91 Rs. 100.00 lakh has been approved for this purpose.

-----*

CHAPTER X

GENERAL ECONOMIC SERVICES

10.1 Secretariat Economic Services

State Planning Institute

The State planning institute was set up in 1972 to provide technical and professional input to States planning process. The institute has the following ten divisions:-

1. Planning Research and Action Division
2. Evaluation Division
3. Training Division
4. Perspective Planning Division
5. Area planning division
6. Man power planning division
7. Plan monitoring and cost management division
8. Project formulation and appraisal Division
9. Hill Division
10. Economic and Statistics Division.

Planning Research and Action Division

10.1.2 The planning research and action institute (PRAI) was established in 1954, mainly with a view to furnish the Community Development Programmes with new ideas, methodology and technologies suitable for widespread adoption in the rural areas. The recommendations of the Institute were to be based upon intensive action research in various fields, the usual pattern of working comprising identification and diagnosis of problems, launching of pilot projects, rigorous evaluation of results and further testing in representative areas before passing these on for widespread adoption by the operational agencies. The Institute operated through three wings, namely, the Pilot Project Wing, the Evaluation Wing and the Communication Wing. The Institute already had a number of very significant achievements to its credit in the field of rural development by the time the State Planning Institute was set up in 1971 and the PRAI became one of its principal divisions. The structure of the Planning Research and Action Division (PRAD), and the methodology of its working have remained largely unaltered despite its absorption in the State Planning Institute.

10.1.3 General Economic Activities:- Research work in the field of Environmental Sanitation, Rural Pottery, Design and Construction Cell, Minor Irrigation and improvement of Field Service Cell are proposed in this sector. The items to be taken up under this Sector will not only help in increasing the employment opportunities but will also help in improving village life.

10.1.4. Economic Service Sector:- In the Research oriented sector the following programmes which were taken in previous plan periods are being proposed for 8th plan period also.

10.1.5. Environmental Sanitation:- The study of the extent of cooperation of villagers for the improvement of rural sanitation and its scope of extension in the rural areas is of vital importance. Hence, it is proposed to impart training to 3,000 officers/employees working in the various wings of health department. Further, it is also proposed that in 400 houses of every unit, "smokeless chulhas," PRAI type latrines, soak pits and washing bathing platforms will be got installed.

10.1.6 Research Activity:- Pilot project for revamping panchayat institutions. This project proposes to strengthen the village panchayat, both functionally, financially and structurally through the action research activities in 5 Village panchayats in different regions of Uttar Pradesh on the basis of their suitability, utility and acceptability for 5 years in the Eighth Five Year Plan.

11.1.7 Pottery Project:- In the year 1971-72 Planning Research and Action Division had started a pilot pottery project at Phulpur (Allahabad). The objective of this project is to establish small economically viable pottery units to increase production of pottery goods, standardisation of appropriate technology and training of village potters with a view to increase rural employment. During Seventh plan period, 12 units were established for allotment to the entrepreneurs. The programme is to be continued during Eighth Plan Period.

10.1.8 Design and Construction Cell:- The Division has a design cell for development of new process for appropriate rural technologies. Drawing for conducting various experiments including those for mini-sugar technologies are prepared in this cell. The cell is working on detailed construction drawing for Soyabean oil expeller and cheap stove since 7th five year plan. The cell will continue activities on similar lines in this plan period also.

10.1.9 Field Service Cell (Khandsari):- The Division has developed an open pan sugar process unit and about 6000 mini-sugar plants are now operating in the State based on this process. Some further improvements specially in the development of efficient furnaces using wet bagasses and increasing in expeller efficiency leading to higher sugar recovery have been made through recent experiments conducted in collaboration with the Appropriate Technology Development Association, Lucknow. The experiments are not yet complete and will continue in the 8th Plan Period.

10.1.10 Cooperative Hospitals:- Cooperative Section of PRAD launched a special project on cooperative hospitals before 7th plan with the objective of providing medical facilities in remote rural areas through cooperative societies. At present, 7 hospitals in Lakhimpur, Sitapur, Barabanki, Varanasi, Deoria and Basti districts are functioning. The most significant feature of these hospitals is that the hospitals are operating successfully in the remote areas and their overhead expenditure is less as compared to the government dispensaries. But these hospitals are still in testing stage and there is need to solve the problems

thrown up by the working of these hospitals and as such a feasible model is to be evolved with respect to the organisational, operational and administrative structure of these institutions.

10.1.11 - To perfect such a model, it is proposed that the project should be extended to the 8th Five Year Plan. Seven new hospitals will be opened so as to develop a replicable model.

10.1.12 Minor Irrigation:- Research work on hydram was conducted by PRAD during the period 1976-78 resulting in the establishment of this technology for irrigation in hills. The scheme has been handed over to the Minor Irrigation Department for extension work. Further experiments are, however, continuing in the Division aimed at improving the technology to reduce costs. In addition, the following research and trial works in minor irrigation which could not be completed during past are being proposed for the 8th plan period:- (1) Reduction in conveyance losses in the field channels. (2) Sprinkler irrigation specially in ravinous land. (3) Drip irrigation system, specially for horticulture cultivation.

10.1.13 It is also proposed to study the effects of some new species of aromatic grasses and plants in water and soil conservation by planting in the marginal lands of ravines. The detailed projects are in preparation. Since the project is not final, separate outlay is not proposed. In case it is approved, the savings of Special Area Development sector will be utilized.

10.1.14 Ashmoh Cement Project:- In the past few years some research work on the project was done after establishing pilot plant at Diulapur, Etawah. The produced material was used for construction work and its properties were tested by different laboratories. In the Eighth plan it is proposed to work on the improvement of chemical and physical properties of the produced cement according to Indian Standards. Lime kiln will be designed to burn the musk, work is also proposed to be done on the reduction of production cost so that cheaper cement may be available to the rural sector. Its utility for making tiles, bricks, pipes etc will also be tested.

10.1.15 Mobile sugar laboratory:- The open pan sulphitation technology developed by planning research and action division has found very wide acceptance in rural areas of India. Still about 2 to 3 percent recovery gap is there between these two processes, i.e. VPS and OPS for manufacturing crystal sugar. To overcome this gap it is proposed in the 8th plan that proper technology be evolved to minimise the sugar losses in the entire process. Studies on ion exchange in mini sugar factories is proposed. Studies will be done in the formation of Soft and Flake Like crystals in khandhari sugar formation. Soil plant and juice testing is proposed. Standardisation of lime sulphitation process will be done. System of payment on the basis of total sugar in cane will be evolved to give maximum advantage to the farmers. Use of khandhari molasses in the formation of liquid sugar/capsule sugar will be studied. Training of entire process is also proposed.

Training Division

10.1.16 The Training Division as a separate entity was created in September, 1981 within the overall set up of the state planning institute, with a view to arrange training programmes for senior and middle level officers of development departments in order to expose them to modern techniques of planning and implementation.

10.1.17 At present, this Division is organising training programmes for State, regional and district level officers concerned with formulation and implementation of development programmes with the help of in-house faculty of different Divisions of the State Planning Institute and with the assistance of reputed external training institutions in the country.

10.1.18 For the Seventh Plan period, a target of organising 100 training programmes had been fixed. Against this target, the year wise achievement is given below:-

Table 10.1.1
Progress of Training Programme

Year	No. of Training Programmes	No. of Officers Attended.
1986-87	21	564
1987-88	26	738
1988-89	39	1109
1989-90	35	1125
Total	140	4047

10.1.19 As is evident from the above table, the Training Division has organised in all 140 training programmes workshops during Seventh Plan and a total number of 4047 officers have been trained. During Eighth plan a target of 150 training courses has been fixed. Against this a target of 28 training courses has been fixed for the year 1990-91 in which 26 training courses have been organised the end of October, 1990 and 789 officers have been trained. For the year 1991-92, a target of organising 30 training courses has been fixed. The subjects of training courses mainly cover "District Level Decentralised Planning", "Hospital Planning Project Identification, Formulation and Appraisal", "project Implementation, Monitoring and Evaluation" and "Programme Evaluation Methodology and Techniques" etc.

10.1.20 An outlay of Rs. 5.00 lakhs has been allotted for 8th plan.

Area Planning Division

10.1.21 The Area Planning Division was established in 1971 as a part of the State Planning Institute with the objective of making systematic indepth studies of the problems of intra-state

disparities in the levels of development so as to suggest effective measures for their reduction. Consequently, it is involved in studies which would lead to developing multi-level planning framework on the basis of which the planning process could be reoriented to derive fullest advantages of the natural resource endowments and the potentials created through appropriate provision of infrastructural support. It is also engaged in evolving suitable methodologies for the formulation of integrated development plans at various levels. The division provides consultancy services to other departments/agencies in the field of spatial planning and furnishes technical guidance for and methodological inputs in the formulation of district plans.

10.1.22 The Area Planning Division has brought out a brief report on Disaggregation of Planning Activities with a view to identifying appropriate levels for decentralizes planning in the state. This work is being extended further to find out the basis for apportioning total plan outlays between the state district and block components. In addition, the division is engaged in the pilot exercises on district and block planning in order to devise guideleines for the formulation of integrated area development plans for the use of field functionaries.

10.1.23 The Division has also prepared an Atlas of state/district block indicators in three parts ranking districts in respect of 63 selected indicators of development, besides Producing district-wise indicators of development for 1988-89.

10.1.41 While pursuing for concretising the methodology for formulation of Comprehensive development plan (1990-2000) at the district level, the division has formulated district development plan of Fatehpur in three volumes namely:-

- (1) General and sectoral profile,
- (2) Statements,
- (3) Planning Atlas.

10.1.24 At the instance of the planning Commission, Government of India, the division has started the task of formulating comprehensive districts development plans for 5 districts, each district representing one of the five economic regions of the state. It is proposed to extend this exercise further and formulate comprehensive development plans for all the districts of the state during the eighth plan.

10.1.25 With a view to achieving the objective of balanced regional development in the state, it is also proposed to carry out a programme for accelerated developmet of Eastern and Bundelkhand regions. Under this programme, the following steps are proposed to be under taken:

- (i) Identification of Special schemes required for development at the district level,
- (ii) Formulation of proposals for special schemes:
- (iii) Approval of the proposals by the District Level Committee of official and non-official functionaries,

- (iv) Submission of the proposals to the state Government,
- (v) Examination of the proposals by the Area Planning Division of the state planning institute for final recommendation, and
- (vi) Sanction of outlays for implementation of the finally approved schemes by the state Government.

10.1.26 The division will be over- all responsible for coordinating and monitoring the progress of different schemes/ projects to be carried out under this programme. To cope up with this voluminous task, the Division will have to be adequately equipped with additional staff consisting of two Joint Directors, four Senior Research Officers, six research officers, eight Research Assistants and ten Statistical Assistants.

Plan Monitoring and Cost Management Division

10.1.27 The main functions of the division are :

- (a) to carry out detailed studies at the project level for supervision, control, decision making and policy formulation and to define the functional responsibilities for various activities and also identify the bottlenecks in various projects and programmes:
- (b) to examine the current procedures for project identification, investigation, feasibility and formulation as well as project management and suggest modifications required:
- (c) to impart training in project management and monitoring techniques:
- (d) to watch actual progress/performance, identifying shortfalls and problem areas:
- (e) to provide feed back of the decision taken to the implementing levels by developing and maintaining data bank etc.

10.1.28 This Division has also taken up studies on various subjects entrusted to it by the State Government from time to time. Latest among them are Planning & Monitoring in U.P. and State of Technical Education in U.P. The division has also developed cost indices for building, roads, bridges, irrigation and multipurpose projects, thermal projects etc. , which are being utilised in the revision of estimates.

Project Formulation and Appraisal Division

10.1.29 Main responsibility of project formulation and appraisal division of the state planning institute is to undertake ex-ante appraisal of large projects/ programmes from technical, financial, economic and social points of view, and to motivate various development departments to have 'shelf of projects' and to prepare guidelines for formulation of carefully conceived and detailed projects.

10.1.30 During the eight year plan , the state government intends to adopt project approach for development programmes under different sectors. This could imply a radical change in

whole culture of developmental planning and would require a massive effort in formulating not only suitable projects but shelves of projects in different sectors. Another implication of this decision would be that a scrutiny of all the ongoing schemes of various departments will have to be under taken so that these are integrated into a comprehensive project. The project Formulation and Appraisal Division is expected to assist various development departments in project formulations. Similarly, this work would also have to be organised at district level so that district plan programmes are also given the shape of viable projects to be implemented in a time bound manner.

Hill Division

10.1.31. The hill division has been conceived as a miniature institute to provide multi-disciplinary expertise to carry out systematic diagnostic survey and applied research with a view to improving the process of planning and implementation in hill regions of uttar pradesh. Besides, a multi-disciplinary team at the state headquarter, two divisional field units one each stationed at Garhwal and Nainital are also functioning to assist in monitoring and concurrent evaluation of ongoing programmes and other studies entrusted to them by the Hill division. The hill division also regularly prepares some vital documents incorporating basic data and information of area development plans, evaluation of programmes and for developing planning expertise for the proper development of hill region.

10.1.32 The division is providing feedback to the government and the programme implementing agencies in respect of plan formulation and proper implementation of plan programmes, by providing necessary technical inputs to the nodal officers of the various development departments sectoral officers in scrutiny and appraisal of projects. The division collects regularly the quarterly progress reports for the various development departments and analyse them with a view to identify the shortfall (financial as well as physical) and the problems faced by the departments in the implementation of the programmes and to suggest suitable remedial measures.

10.1.33 In addition to works relating to studies and data bank the division has been actively involved in works relating to projectisation of schemes and monthly monitoring of programmes.

Other Offices

10.1.34 State bureau of public enterprises :- The Bureau acts as a Central coordination agency for rendering specialist advice and service to the state public Enterprises. The bureau was established in 1974 with the following objectives:

1. To review periodical the monitoring of individual units as also to undertake in- depth analysis.
2. To provide a central point of reference, consultation and advice in important aspects of management of public enterprises.

3. To provide consultancy on request to departments and enterprises.
4. Laying down policies for career planning and conducting training relevant to each enterprise.
5. To advise steps to improve the productivity and profitability of the enterprises.
6. To explore all avenues of the economy in the functioning of the enterprises.
7. to act as a store house of information relevant to the enterprises and departments.

10.1.35 Keeping in view the above objectives the bureau has played a vital role in coordinating the functioning and monitoring the programmes of various schemes and projects implemented by the corporations. It has also paid due attention to development of healthy personnel policies and in laying down efficiency norms for each enterprise, prescribing monthly and quarterly formats for operational monitoring.

10.1.36 The bureau has also been assigned some additional work connected with co-operative Institutions and Local Development authorities. The Bureau is required to monitor important schemes and projects implemented by these agencies and to evaluate their performance and help them in better management and improving performance.

10.1.37 Instititunal Finance:- A plan outlay of Rs.300.00 lakh has been proposed for Institutional Finance during the eighth plan period, out of which Rs. 45.00 lakh will be utilized during annual plan 1991-92. This amount is proposed to be utilized for matching share capital of regional rural banks so that they may provide more financial assistance to small and marginal farmers, rural artisans, landless agricultural labourers and facilitates to economically weaker sections of the society. The ultimate aim being to provide better banking services including credit facilities on easier terms and conditions in rural areas.

10.1.38 Regional Rural Banks :- With a view to provide adequate financial assistance in rural areas, cooperative institutions were set up and branches of commercial banks were opened in the country. But inspite of having the same objective these institutions could not fill in the credit gap in rural areas because of lack of coordination and varied organisational structure. Therefore it was felt necessary to set up an institution which may prove to be efficient for credit disbursal in rural areas, particularly the assistance may flow on easier terms & conditioins to cater to credit needs of weaker sections of the society.

10.1.39 The share capital of these RRBs is contributed by government of india (50%), sponsoering bank (35%) and the state government(15%). The share capital of these RRBs is increased by Govt. of India from time to time. The State Government has made a provision of Rs.3.00 crore for its matching share capital in these RRBs during Eighth five years plan period.

10.1.40 **Small Savings :-** The importance of national savings can will be assessed by its contribution to state plan resources. In the seventh plan, against the target of mobilisation of net deposits of Rs.2561.57 crore, the achievement was Rs. 3876.67 crore. Consequently, the central assistance which accrued to the state is Rs 2696.22 crore, although the target was Rs 1793.10 crore. In the Eighth Plan, it is proposed to mobilise net collection of Rs. 6488.74 crore, on the basis of which central assistance amounting to Rs.5190.99 crore can be claimed. out of this, central assistance of Re.935.00 crore has been targeted for the year 1990-91 and Rs. 1029.00 crore for 1991-92.

Machinery for Planning

10.1.41 The State has a well established machinery for planning going right to the level of development blocks. It needs further strengthening in the context of plan formulation at the district level as per guidelines of the Government of India for 1989-90. Decentralised planning in our state was initiated in 1982-83. The State has already taken some steps to improve the data base for formulation of plans at district level under the scheme of decentralisation of planning machinery.

State Planning Commission

10.1.42 The State Planning Commission is an apex body of the state which was established in 1972 on the advice of National Planning Commission. The main functions of the State Planning Commission are to advice and help the State Government in the formulation, implementation, monitoring of states plans, to assess states resources and to render advice for their optimal utilization. It has also to determine plan priorities within the frame work of the National Plan priorities and to identify factors which tend to the economic and social development.

10.1.43 **State Land use Board :** The Central Sector Scheme of strengthening of State Land Use Board was sanctioned by Government of India during Seventh Five Year Plan. From 1991-92 onwards the State Government will have to bear the expenses. The expenditure under this scheme is as follows :

1. Support for nucleus staff
2. Support for infrastructure such as data Bank Library, Documentation, Furniture and Jeep etc.
3. Support for conducting regional studies on perspective land use planning, seminars, trainings etc.

10.1.44 Yearwise expenditure incurred during Seventh Five Year Plan is as follows :

(In Lakh Rs.)

Year	Amount Sanctioned	Expenditure incurred
1987-88	3.75	3.71
1988-89	7.00	6.74
1989-90	13.39	8.03
Total	24.14	18.48

10.1.45 The break up of the outlay proposed for Eighth Five Year Plan is as follows :-

Year	Outlay (Proposed) (Lakh Rs.)
1990-91	20.00
1991-92	32.00
1992-93	33.00
1993-94	34.00
1995-95	36.00
Total	155.00

10.1.46 The basic functions of the State Land Use Board are :

1. To prepare 25 years Perspective Plan for balanced and optimum management of State Land and Water resources so that this may provide rational frame work for yearly and five yearly plans for land and water.
2. To review existing land uses in the state and explore the possibilities of ensuring the land to be used according to their capabilities and issue necessary guidelines on appropriate use of land.
3. To take effective measures to protect good agricultural land against depletion on account of soil erosion water logging, loss of fertility, urbanisation and industrialisation etc.
4. To implement the programmes of command area Development Project, Catchment Area Development Project and Dry Land Farming Techniques.
5. To reclaim alkaline, saline, acidic soils and ravinous land
6. To review the agricultural and forest laws.
7. To increase land and water efficiency by adopting suitable cropping pattern.
8. To consider and review proposals concerning soil survey and general assessment of land resources within the state.

9. To create public opinion and awareness about an optimum use of land for agricultural and non-agricultural purposes.

10.2 Tourism

Uttar Pradesh, replete with tourism potential, has always been a centre of attraction for the tourists. Its snow clad mountain peaks, glaciers bush green villages, sacred rivers and ponds and above all places of religious and historical importance interest the tourists all the year round. Till the beginning of seventh Five Year Plan period an amount of nearly Rs. 26.00 crores was spent and apart from many development works, accomodation for 3826 beds also constructed in various units all over the state. Organisational structure of the Department was also suitably strengthened.

Seventh Five Year Plan

10.2.2 An outlay of Rs 3650.00 lakh was approved for tourism sector for seventh five year plan 1985-90 including Rs. 1700.00 lakhs for plains and Rs. 1950.00 lakhs for hills. Against this approved outlay on expenditure of Rs. 2780.01 lakh in plains and Rs. 2804.77 lakh in hills was incurred during the entire plan period. Apart from publicising various tourist places of the state, 1144 additional beds were also constructed for the tourists. Among the major projects taken up during this period, some of the important ones, were, the construction of the convention centre, development of Mumtajbagh of Agra, development of Ramkatha Park at Ayodhya, development of Barkasagar at Jhansi, development of Buddhist circuit in the state, development of Ramgarh Tal at Gorakhpur, Winter Sport facilities at Auli (Joshimath) and development of George Everest Estate at Mussorie, Buddhist circuit project is expected to get some foreign exchange from Japan. As a result of implementation of plan schemes, nearly 32.23 lacs mandays of employment was generated during the five year plan. It includes 76 lakh mandays in plains and 26.53 lacs mandays in Hill. After completion of construction schemes of seventh plan, 1144 bed were made available to the tourists and 3153 person got direct employment including 1753 persons in hill and 10134 persons got indirect employment including 5634 persons in hills and 4500 in plains.

Eighth Five Year Plan (1990-95)

10.2.3 In view of the growing tourists traffic in the state, and outlay of Rs 13500 lakhs is earmarked for tourism during Eighth plan including an outlay of Rs 6500.00 lakhs for hills and Rs. 70,00.00 lakh for plains. Against total outlay of Rs 13500.00 lakh there will be a need of Rs 6249.47 lakhs for continuing schemes of constructions. This figure of Rs 6249.47 lakhs includes Rs. 3669.00 lakhs for continuing construction schemes. Rs. 3862.42 is required for the continuing schemes of Revenue and Rs 1365.39 lakhs in the hill for the same schemes. Rs. 2445.61 lakh is earmarked for the new

schemes for five year plan, including Rs 1325.61 lakhs for hills. Rs. 540.00 lakhs is earmarked for the hill sector schemes. On the completion of Eighth Five Year construction schemes, 97 lakhs mandays will be provided in the state and 4800 persons will get direct employment after implementation of construction schemes for Eighth Five Year Plan. An outlay of Rs 5150.00 lakh is proposed for rural sector against the total outlay of Fifth Five Year Plan of Rs. 13500.00 lakh which is about 38% of total outlay. Main programmes of proposed schemes are given below

Table 10.2.1

Main programmes

Programme	(Rs in lakhs)	
	Total (in U.P.)	Hill
1. Tourist accommodation	8695.08	4994.61
2. Tourist Transport Service	300.00	-
3. Assistance to public sector and other under taking	800.00	-
4. Director and Administration	25.00	-
5. Tourist centre	148.92	24.39
6. Training	140.00	40.00
7. Publicity and promotion	10,00.00	200.00
8. Others expenditure	2391.00	1241.00
Total	13500.00	6500.00

Annual Plan 1990-91

10.2.4 1990-91 is the first year of eighth five year plan 1990-95. An outlay of Rs. 1135.00 lakh is earmarked for the year 1990-91 for tourism sector in the state, including Rs. 750.00 lakhs for the hill region. An outlay of Rs. 50.00 lakhs is proposed for Buddhist centres.

10.2.5 An outlay of Rs. 1900.00 lakh is proposed for the year 1991-92 in tourism sector for the state, including Rs. 900.00 lakhs for the hills. An outlay of Rs. 1380.19 lakh is proposed for the construction schemes against the proposed outlay of Rs 1900.00 lakhs. An outlay of Rs. 746.29 lakhs is proposed for the construction schemes of the hills. An outlay of Rs. 200.00 lakhs is proposed for the joint venture for the schemes of plains. Apart from this an outlay of Rs. 25.00 is proposed for the share capital and assistance to the public sector. Main items are given in table 10.2.2 :-

Table 10.2.2

Share capital and assistance to public sector
(Rs. in lakhs)

Items	Total (in U.P.)	Hills
1. Tourist accommodation	1379.93	746.29
2. Assistance to the public sector and other under taking	50.00	-
3. Direction and Administration	4.00	-
4. Tourist Centra	29.82	17.46
5. Training	50.00	-
6. Publicity and promotion	200.00	50.00
7. Others	186.25	86.25
Total	1900.00	900.00

10.2.6 An outlay of Rs.699.84 lakh is proposed for rural sector against the outlay of Rs. 1900.00 lakh, in the year 1991-92. After completion of the construction schemes of 1991-92, 526 beds will be made available to the tourists, and 53 persons will get direct employment after completion of the schemes, 1700 persons will get indirect employment in the year 1991-92 and 14.39 lakh mandays will be provided to the state in tourism sector in the same year.

10.3 Survey and statistics

The main function of the economics and statistics division is collection, processing and analysis of data collected through the national sample survey, annual survey of industries, employees censuses, electricity consumption and other departmental surveys of adhoc nature from time to time. Secondary data is also collected from various state and central government departments and a number of official and non-official agencies. A large number of valuable publications based on the primary and secondary data are being regularly brought out by this division with a view to help the state government and policy makers to evolve appropriate strategies for the planning process in the state. The division also provides adequate statistical support to the block and district levels in the preparation of district and local level plans. This division also plays an important role in ensuring the reliability of rural developmental statistics and also in monitoring and evaluation of development programmes at various levels. The following schemes are being proposed for the eighth five year plan (1990-95) and the annual plan (1991-92)

Continuing Schemes

10.3.2 Installation of computer/P.Cs. :- In the interest of speedy data processing, a UNIVAC-1100 computer was installed in this division during the sixth plan period, its operation has since been handed over the UPDESCO. However, the operational and management cost of this computer is being borne by this division.

An outlay of RS.750.00 lakh is being proposed for meeting this cost during the eighth plan period (1990-95) and an outlay of Rs.150.00lakh for the annual plan 1991-92, with the same objective, installation of personal computers in 63 districts and 13 divisions is being proposed to be taken up in the eighth plan. For smooth operation of personal computers, 767 post of asst programmers in the pay scale of Rs. 1400-2600 are also proposed to be created along with other requisite infrastructure. Besides, 10 data entry machines are also proposed to be purchased. Thus a total outlay of Rs. 1035 lakh is being proposed for this scheme during the entire eighth plan period (1990-95)

10.3.3 Construction of Yojana Bhawan:- The construction phase of yojana bhawan is almost complete. However, for the remaining work and for furnitures and fixtures an outlay of Rs. 30.00 lakh is being proposed during the eighth plan period (1990-95) and of Rs. 15.00 lakh for the annual plan 1991-92.

10.3.4 Decentralisation of Planning machinery for hill region: In order to improve the data base for planning at lower levels, scheme for decentralisation of planning machinery was taken up by the economics and statistics division in the sixth plan and has continued since then for in the hill region. An outlay of Rs.28.00 lakh is being proposed in this scheme (hill region) for the entire eighth plan period (1990-95) and of Rs.7.00 lakh for the annual plan 1991-92.

New Schemes :

(i) Improvement of industrial statistics : The reliable statistics in respect of various industries is required to be made available timely for planning and avaluation of development of industrial sector. Before 1987-88, this division was conducting every year the survey of 50 percent of non-census factories registered under factories act.1948. the number of factories to be surveyed by the state govt has substantially increased in the year 1987-88 due to the change in definition of census factories and introducing revised sampling design. Economics and statistics offices are required to be created for the 12 districts having more than 200 factories like Saharanpur, Muzaffarnagar, Meerut, Gazhiabad, Aligarh, Agra, Bijnore, Moradabad, Kkanpur nagar, Lucknow, Varanasi. and Nainital and eight district having 80 or more but less then 200 factories like Bulandshahar, Mathura, Bareilly, Sahajanpur, Allahabad, Unnao, Faizabad, and Dehradun. Thus the total posts of assistant economics and statistics officers to be created for the field are 32. besides, the continuous increases in the number of factories has also resulted in increased work load at state head quarters. Accordingly, it has become very difficult to bring about the publication in time with a view to reduce the time-lag in the publicaiton of A.S.I. report, 4 additional post of assistant. Economics and Statistics Officers and 2 post of Economics and statistics inspectors are also required to be created

at the state headquarters. Thus an outlay of Rs.85.00 lakh (including Rs.7.00 lakh for the hill region) is being proposed under this scheme for the eighth plan period (1990-95) and of Rs. 17.00 lakh for the annual plan 1991-92.

(ii) Establishment of a cell for the hill development work at the state hqrs :- It has become essential to maintain separate statistics for the Hill region of the state as plans for hill region are being prepared separately. Besides, periodical information is also required to be furnished to hill development department and necessary guidance is to be imparted to field officers from the hqrs. of the division. This scheme requires an outlay of Rs.30.00 lakh for the eighth plan period (1990-95) and of Rs 5.00 lakh during the annual plan 1991-92.

(iii) Improvement of Housing Statistics : Housing statistics is being collected by Economics and statistics Division on the request of National Building Organisation, Govt. of India since 1969-70 . Originally a nucleus staff was provided only at the hqrs, and the field work is since then being done by the existing staff posted in the Office of the district Economics and Statistics officer. An outlay of Rs.120.00 lakh (including 12.00 lakh for the Hill region) is proposed under this scheme for the eighth plan period (1990-95) and of Rs. 24.00 lakh for the annual plan 1991-92.

(iv) Improvement of Employees Statistics : The Economics and Statistics Division has been bringing out an annual publication based on the data collected on the number of various categories of employees, their salaries, wages and other allowances. This publication provides crucial information to the pay commission, finance commission and finance department.

(v) Establishment of a cell for the coordination & monitoring of Decentralised planning : The objective of this scheme is to create a cell at the head quarter of economics & statistics and division to establish coordination with the state planning commission in the formulation and appraisal of the district & divisional plan being formulated under decentralised planning and to monitor the financial and physical progress of these plans through the quarterly progress reports being received at the state headquarters. It is proposed that this cell will undertake rapid evaluation studies of the progress made under the district plans from time to time so that appropriate measures could be taken up for their effective implementation. This cell would be headed by a joint director in the pay scale of Rs. 3700-5000 and would be assisted by some supporting technical and non-technical staff. The work of the cell would require extensive touring and, therefore, one jeep for the Joint Director is also proposed to be

purchased Thus an outlay of Rs.70.00 lakh is being proposed for this scheme during the eighth plan period (1990-95) and an outlay of Rs.16.00 lakh is proposed for the annual plan 1991-92.

(vi) Establishment of a cell for monitoring state economy :- This scheme envisages establishment of a cell at the head-quarters of the Economics and Statistics Division for monitoring the State economy regularly and to make indepth studies from time to time relating to the changes taking place in the structure of the same. These studies will be of much help in deciding the strategies for the formulation of five year and annual plans. This cell would be headed by an additional director in the pay scale of Rs. 4100-5300 and assisted by a deputy director, two statistics officers and some supporting staff. Till this cell acquires expertise in the work of monitoring and analysis provision for availing the consultancy services from outside agency or experts is also being proposed to be made in this scheme. An outlay of Rs. 35.00 lakh is being proposed for this scheme during the eighth five year plan (1990-95) and of Rs. 12.00 lakh is proposed in the annual plan 1991-92.

(vii) Re-organisation & improvement at head quarters/division/district level & strengthening according to administrative needs: The implementation of the decentralisation of Planning process has resulted into creation of a number of posts in technical cadre and there by increasing the establishment work at the head quarters of this division. The decentralisation of the work of A.G.,U.P. has also resulted into increasing the work load and to ensure the quality and improvement in the work, it has become necessary to reorganise and strengthen the state head quarters of the division. In order to improve the quality and reliability of data, inspection of field work becomes more and more important. At present, there is paucity of vehicles at the head-quarters. It is , therefore, proposed to create some posts fo the ministerial cadre and to purchase two staff cars and two jeeps at the head-quarter level of the division. An outlay of Rs. 66.00 lakh is being proposed for the head-quarters scheme during the eighth plan period (1990-95) and of Rs. 8.00 lakh is proposed for the annual plan 1991-92. An outlay of Rs. 45.00 lakh (including Rs.11.00 lakh for the Hill region) for strenthening the divisional offices of the division is proposed during the eighth plan period (1990-95) and of Rs. 22.00 lakh (including Rs.3.00 lakh for the hill region) in the annual plan 1991-92.

In order to increase the efficiency of the district level offices of the division, these offices have already been provided with costly equipments. The cyclostyling work in these offices has considerably

increased under the decentralised planning process. It is, therefore, essential to further strengthen these offices. Accordingly, it is proposed to create one post each of a cyclostyle-operator and a chaukidar in each of the district offices of economics & statistics officer. An outlay of Rs.56.00 lakh has been proposed for strengthening the district level offices of the division during the eighth plan period (1990-95) and of Rs. 11.00 lakh for the annual plan 1991-92.

Thus, a total outlay of Rs. 167.00 lakh (including Rs.11.00 lakh for the hill region) has been proposed during the eighth plan period (1990-95) and of Rs. 41.00 lakh (including Rs. 3.00 lakh for the hill region) is proposed in the annual plan 1991-92 for this entire scheme.

(viii) District sector strengthening of the offices of district economics and statistics officers :- In order to increase the efficiency of the district offices of economics and statistics officers, it is necessary to equip them with modern equipments and fixtures. Besides, it is also proposed to provide one personal computer to these offices during the eighth plan. With a view to smooth functioning of these offices, it is necessary to provide office building to these offices. An outlay of Rs.100.00 lakh is being proposed for this scheme during the eighth plan period (1990-95) and of Rs.56.00 lakh for the annual plan 1991-92.

(ix) Centrally sponsored scheme- economic census 1990:- The work relating to economic census 1990 in U.P. has been entrusted to this division, by the Govt. of India. This scheme is being financed totally by the Govt. of India. The Govt. of India has approved this scheme till 1991-92. An outlay of Rs.36.00 lakh is proposed for this scheme during the eighth plan period 1990-95 and of Rs.9.92 lakh is proposed for the annual plan 1991-92.

10.4 Civil supply

To provide for the better protection of the interests of consumers and to redress in their grievances speedily and to create awareness amongst the consumers the consumer protection act 1986 has been promulgated by Government of India. In order to regulate the provision of the act the state Government has notified " The Uttar Pradesh consumer protection council has been set up and this programme has been introduced from 1987 by state Government. According to the provision of the act 63 district forums and state commission have been set up. These district forums are set up as primary units to register the complaints of consumers.

10.5 Other general Economic services

Metric weights and measures:- The reformatory scheme of weights measures is of a permanent nature and continuous scheme. Every weight, measure, weighing & measuring instrument used in trade and commerce are required to be verified in the working standard laboratories of the department and are to be stamped, once in every 12 months.

10.5.2 The Govt. has approved Rs. 10.00 lakh outlay for weights & measures scheme (plans) for 1991-92 against approved outlay Rs.150.00 lakh of 1990-95. Following are the schemes of this department (plans) for effective enforcement of departmental act & rules for sanction :

Table 10.5.1
Annual plan 1991-92

(Rs.in lakh)

Item/Unit	Anticipated Expenditure			Remark
	Recurring	Non-recurring	Total	
1. Establishment of one secondary standard lab at Allahabad regional hqr.	(for 10 month 0.60	3.62	4.22	14 persons will be entitled to direct recruitment as a result of
2. Establishment of two mobile squads at Moradabad & Allahabad hqrs. (one at each)	2.39	3.00	5.39	formation or proposed new units
3. Strengthening of staff at state level at hqr. of head of Department (controller)	0.39	-	0.39	
Total	3.38	6.62	10.00	

Table 10.5.2
Summary of the eighth five year plan

(Rs. in lakh)

Year	Expenditure		
	Recurring	Non recurring	Total
1. 1990-91	-	-	-
2. 1991-92	3.38	6.62	10.00
3. 1992-93	13.79	26.21	40.00
4. 1993-94	23.10	16.90	40.00
5. 1994-95	40.50	19.50	60.00
Total	80.77	69.23	150.00

10.5.3 Approval of the proposed plan would not only strengthen the department but also give solace to the rural consumers as well as to the peasants. 209 persons would get direct employment & 432 persons would get the benefit of indirect employment.

-----*

CHAPTER XI

EDUCATION

11.1 General Education

Education is the basic need for social, economic and cultural development of a nation. It promotes socialism, secularism and democracy and hence builds up an enlightened and humane society. It is the means for human resource development, which is the pre-requisite for economic growth and national progress. Thus it is rightly said that education is a unique investment in the present and the future.

Thrust Areas :

11.1.2 Looking at the importance and immensity of the task of educating people a judicious planning has to be made at all stages so as to achieve an effective goal. The Seventh Five Year Plan being over, the following areas have been decided to be treated as the thrust areas for planning during the Eighth Five Year Plan period. Effective means and serious efforts will be made not only expand and enlarge coverage but also to ensure quality upto a desirable standard in each of these areas:

1. Universalisation of Elementary Education.
2. Checking Dropout Rate
3. Improvement in Formal and Non-formal systems of education.
4. Expansion of facility for girls education by opening Govt. Girls Secondary Schools in unserved blocks.
5. Expansion and improvement in science education at all stages.
6. Vocationalisation of Secondary Education linking with Industry and Agriculture.
7. Consolidation and qualitative improvement of secondary Education.
8. Implementation of three year degree course programme in true perspective.
9. Consolidation of existing Degree and post graduate Colleges and providing effective control over opening of new institutions.
10. Expansion of Non-formal Education.
11. Provision of coaching centres in backward areas for general awareness and upliftment of their merit.
12. Giving boost to functional/vocational literacy programmes in Adult Education.
13. Establishing "Jan Shikshan Nilayam" and providing liberal financial help to voluntary organisations.

14. Development of professional efficiency and competence of both the teachers and administrators.
15. Developing quality of the syllabi and text books at all stages of education.
16. Development of promising talents in the state.
17. Strengthening the state Council of Educational Research and Training.
18. Providing facility for learning languages of non-Hindi speaking areas so as to promote mutual understanding and national integration.

Physical targets

11.1.3 The following table indicates the gradual increase in educational facilities and enrolment at various levels of education during the Eighth Plan and proposed target for 1991-92.

Table 11.1.1

Physical targets and Achievement

Item	1989-90 Level	Eighth Plan (1990-95) Target	1990-91 Target	1990-91 Anticipated achievement	1991 -92 Tar- get
1	2	3	4	5	6
Elementary Education					
(a) <u>Primary</u>					
1. No. of schools	74277	79287	76731	76734	77492
2. No. of students (cum 000)	14018	19816	14340	14340	15460
3. No. of teachers (cum 000)	261	279	268	268	271
(b) <u>Junior High School</u>					
1. No. of Schools (cum)	14549	15582	14687	14687	14937
2. No. of Students (cum 000)	4158	6082	4470	4470	4880
3. No. of Teachers (cum 000)	95	100	96	96	98
(c) <u>Secondary Education</u>					
1. No. of Schools (cum)	5966	6549	6078	6078	6198
2. No. of Students (000 cum)	2881	3467	2964	2964	3088
3. No. of Teachers (000 cum)	96	110	99	99	102

11.1.4 There are 11374 unserved areas, but only 5010 new primary schools will be opened during the Eighth Plan because of limited outlay. 2457 schools were opened in 1990-91 and only 758 schools are proposed to be opened in 1991-92. 1033 Junior High Schools are proposed to be opened during the Eighth Plan. 292 Higher Secondary Schools were opened during the Seventh Five Year Plan against the target of 196. It is proposed to open 583 Higher Secondary Schools during the eighth plan. A target of opening 120 higher secondary schools has been fixed for the year 1991-92.

Financial Position

11.1.5 The outlay of Seventh Five year plan for General education was Rs. 42062 lakhs. The anticipated expenditure during the seventh plan period is likely to be Rs. 46024. An outlay of 15030 lakh was earmarked for the general education during the year 1990-91 (including Rs. 23 crores for hills). An outlay of Rs. 15125 lakh has been proposed for the year 1991-92. The sectorwise position is given in the following table.

Table 11.1.2
Outlay and Expenditure

(Rs. in lakh)						
Sector	Seventh Plan (1985-90) outlay	Actual expenditure	Eighth Plan (1990-95) Proposed outlay	1990-91 Approved outlay	Anticipated Expenditure	Proposed outlay
1	2	3	4	5	6	7
1. Elementary Education	26486	27186	50562	9972	10932	6492
2. Secondary Education	9069	10029	25628	2615	4270	2906
3. Higher Education	3737	6408	29700	1730	1708	5457
4. Adult Education	2375	1607	2625	627	627	694
5. Language	234	327	2462	72	527	85
6. General	161	467	1523	14	804	91
Total	42062	46024	112500	15030	18868	15725
General Education						
National * Integration	24	57	60	50	106	10
Education deptt.	42038	45967	112440	14980	18762	15715

* Included in item 5.

11.1.6 From the above table it is quite clear that the approved outlay of Rs. 420.62 crores of seventh plan has been fully utilised. An outlay of Rs. 1125.00 crores has been proposed for the eighth plan. For 1991-92 an outlay of Rs. 157.25 crores has been earmarked out of which Rs. 77.64 crores is for the state sector and Rs. 79.61 crores for District sector. For hills an outlay of Rs. 27.75 crores has been earmarked for the year 1991-92 of which Rs. 12.00 crores is for the District sector and Rs. 15.75 crores for the State Sector.

Elementary Education

11.1.7 Universalisation of elementary Education :- It is a fact that universalisation of Elementary education should receive the urgent attention. It is, therefore, proposed to achieve compulsory universalisation of elementary education for children in the age group 6-13 by the end of 1995.

11.1.8 Universalisation of Elementary education involves three basic requirements :

- (a) Universal provision of schooling facilities
- (b) Universal enrolment
- (c) Universal retention.

11.1.9 At present the norms for provision of primary and middle schooling facilities under the formal system are:

- (1) A primary school within 1 km. in plains and a population of 300 or more in Hills.
- (2) A middle school with in a radius of 3km. and habitation of 800 or more population.

11.1.10 During the Seventh Plan as many as 1315 primary schools and 437 new middle schools were opened.

Table 11.1.3

Elementary schools opened during Seventh plan period and proposals for 1990-95

Item	Achievement Seventh Plan	Eighth plan (1990-95)	Target 1990-91	1991-92
(1)	(2)	(3)	(4)	(5)
1. Primary schools	1315	5010	2457	758
2. Senior Basic schools	437	1033	138	388

11.1.11 Elementary School buildings : There were 5086 buildingless primary schools by the end of the Seventh Plan. Building being necessary for running the schools, it was decided to construct building for all such schools during 1990-91. However, there are still 6671 schools which have quite old buildings worth reconstruction. An outlay of Rs. 9.59 crores have been laid down for constructing 1065 building during 1991-92. There are 1660 buildingless senior basic schools. Therefore, Rs. 27.65 crores have been proposed to be spent during the Eighth Plan for constructing buildings for 1536 senior basic schools.

Enrolment Target

11.1.12 The percentage of enrolment in formal schools based on projected population in the age group 6-10+ years was 75 percent (98 percent boys and 50 percent girls) at the end of Sixth Plan. In terms of enrolment the position at the end of Seventh Plan along with projected child population for the Eighth Plan period is given in the following table :-

TABLE 11.1.4
Enrolment at the end of seventh plan and Eighth Plan

Item	Age group 6-10 years			Age group 10-13+ Years		
	Boys	Girls	Total	Boys	Girls	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Enrolment						
(1989-90) (in 000)	9120	4898	14018	3017	1141	4158
Child population						
(1990) (in No.)	8687 (100)	8029 (58)	16716 (80)	4931 (58)	4350 (25)	9281 (43)
Coverage in percentage						
Enrolment						
(1990-95) (in No.)	10298	9518	19816	4412	2210	6622
Child Population						
by 1995	10298 (100)	9518 (100)	19816 (100)	5846 (75)	5156 (43)	11002 (60)

Note : Figures in bracket are percentages.

Checking Dropout Rate

11.1.13 Efforts are being made to activise Village Level School Committees for achieving the objectives of universal

enrolment and retention. Co-operation is being also sought from influential people to get the support of community. Enrolment of girls in the age group 6-10+ yrs has to be increased, for which incentive scheme such as distribution of free text-books to children of weaker sections and grant of scholarships to meritorious students have been proposed in the Eighth Plan.

Non-formal Education

11.1.14 Non-formal part-time education system for children of elementary age group is proving quite successful and hence it has been decided to continue the scheme in the Eighth Plan. The following table shows achievements in non-formal education during 1985-90 :-

Table 11.1.5
Enrolment in Non-formal Education (Enrolment in '000)

Item	1989-90 level	1990-95 target	1990-91 target	1991-92 Proposed level
(1)	(2)	(3)	(4)	(5)
1. Projects (No.)	336	596	596	596
2. Enrolment (000)				
A. Total	864	1508	1508	1508
B. Girls	496	650	650	650

11.1.15 Three hundred and thirty six Projects were sanctioned in the Seventh Plan, and 260 projects were added in 1990-91. An outlay of Rs. 31 Crores has been proposed as the State share during Eighth Plan.

Decentralisation of Administration

11.1.16 It has been proposed to set up an administrative office at the Block level so as to promptly attend the service matters of the teachers and also to ensure effective guidance and monitoring of teaching and learning activities in schools. An outlay of Rs. 25.67 crores has been proposed for the Eighth Plan period.

Improvement in Science Education

11.1.17 Science kits is proposed to be supplied to 10316 primary schools and 2898 upper primary schools. An outlay of Rs. 1.45 crores has been proposed. Similarly, an outlay of Rs. 10.59 crores has been proposed for providing teaching aids and equipments. These will surely help in raising the standard of teaching and learning of Science in elementary schools.

Secondary Education

11.1.18 Secondary Education begins to expose student to the differentiated roles of Science, Humanities and Social Sciences. This is also an appropriate stage to provide children a sense of history and national perspective and offer opportunities to understand their constitutional duties and rights as citizens. Secondary Education is a connecting link between primary and higher education. It is also a terminal course for students who can not pursue higher education because of their social and economic conditions and ultimately join the world of work. Thus it plays a very important role in nation building. Keeping in view the key role played by Secondary Education the following major schemes have been proposed during the Eighth Plan.

Facility for Girls Education

11.1.19 Special efforts were made to promote girls education in unserved areas during the Seventh Plan 94 girls Higher Secondary Schools were opened during the period, still at present there are 488 Blocks which are without girls higher secondary schools. It was proposed, therefore, to open 100 girls higher secondary schools in 1990-91 and cover the remaining blocks during the remaining years of the Eighth Five Year Plan. An outlay of Rs. 2.50 crores has been proposed in 1991-92 for this scheme. For the encouragement of girls education, facilities for girls studying in Boys Secondary Schools is being provided. An outlay of Rs. 38.46 lakh has been proposed for 1991-92 for this purpose.

Improvement in Science Education

11.1.20 In order to improve the quality of science education in Secondary Schools, various schemes have been proposed during the Eighth Plan. For example, 210 laboratories will be set up in such Govt. Higher Secondary Schools which do not have proper lab facilities. An outlay of Rs. 8.32 crores has been laid down for it. 40 labs are proposed to be constructed during 1991-92. An outlay of Rs. 1.52 is proposed for it.

11.1.21 Creation of posts of Science and Mathematics teachers in aided Secondary School is another major scheme for quality improvement in science Education. An outlay of Rs. 5.00 crores has been earmarked for this scheme. Posts for 500 lecturers and 5000 assistant teachers are proposed to be created during the Eighth Plan. However, only an outlay of Rs. 60 lakh has been proposed under this scheme in 1991-92. The creation of posts of teachers will also solve the problem of unemployment among the trained youths.

11.1.22 Granting recognition in science subjects to Secondary Schools and providing grants for purchasing science equipments

and apparatus are also sound measures being proposed to be taken up specially in Hill areas. An outlay of Rs. 19.70 Lakh has been proposed for it.

Vocationalisation of Education

11.1.23 Introduction of Systematic, Well planned and rigorously implemented programme of Vocational education is crucial in educational reorganisation. A beginning was made in 1985-86 in the State. By 1988-89, Vocational Education at +2 stage was introduced in 440 Higher Secondary Schools through State resources. Under the centrally sponsored scheme of Vocationalisation of Education 200 new secondary school have started Vocational Courses in 636 classed section since 1989-90.

11.1.24 Another 260 secondary schools have been provided grants for infrastructure facilities so as to start vocational courses from the next academic year. It is proposed to cover 800 more secondary schools by the end of the Eighth Five Year Plan. An outlay of Rs. 2.21 crores is required for 1991-92 as the State share for this scheme but only Rs. 36 lakhs could be proposed because of paucity of funds.

Consolidation and quality Improvement of Secondary Education

11.1.25 The contribution of private management in the field of Secondary education is a well established fact. But due to lack of financial resources, the privately managed unaided recognised secondary schools are failing to meet the required standard. Hence the Govt. has decided to bring over 500 schools in the grant-in-aid list during the Eighth Five-Year Plan. 100 such schools have been proposed to be taken up on the grant in aid list in 1990-91.

11.1.26 An outlay of only Rs.11.50 crores has been proposed for this scheme during 1991-92 due to limited resources; of course this amount is not sufficient to meet even the committed liability of the preceding year.

11.1.27 There are 596 Higher secondary schools in the state which have no building of their own or have in-adequate buildings to meet additional requirement due to growing student population. An outlay of Rs. 9.04 crores has been proposed for building construction, extension and electrification.

11.1.28 It is essential that inservice training facilities be available for teachers, administrators and the supporting staff for the quality improvement in respective areas of activity. It has, therefore, been proposed an outlay of Rs. 34.25 lakh for 1991-92 to run this scheme.

11.1.29 Library plays an important role in the social, political and cultural development of the society. An outlay of Rs. 54.97 lakhs has been allocated for the development of district libraries in the State.

11.1.30 Decentralisation of the Intermediate Board of Education has proved an effective programme for conducting High school and Intermediate examination, evaluation and certification. Therefore, it is proposed to set up a regional board at Gorakhpur in 1991-92.

Non-Formal Education through Correspondence

11.1.31 Distance learning is the most effective and useful way for those who want to study in their leisure time following their own pace of learning. Secondly the child population in the age group of 14-18 years is rapidly increasing and at present it is too difficult to provide the formal schooling for all. Therefore, to provide education through correspondence to the candidates intending to appear privately at the Board of High School & Intermediate Examination, U.P. the Institute of Correspondence Course was established in 1980-81. An outlay of Rs. 75 lakh has been made in the year 1991-92 to give a boost to correspondence Education at secondary level.

Free Secondary Education

11.1.32 Education was free (tuition fee free) up to XII standard for girl students only. It was decided to make it free for boys too from 1990-91 academic session. This will provide an opportunity to receive secondary education even to the poor section of the society. A sum of Rs. 1 crore has been earmarked for paying compensation to the Non-Government aided/unaided secondary schools under this scheme.

Universities and Higher Education

11.1.33 The National Policy on Education emphasises contribution of Higher Education to the national development through dissemination of specialised knowledge and skill. There were 5 Universities and 16 Degree Colleges during 1946-47 which have risen to 25 Universities including 4 deemed Universities and 415 Degree Colleges out of which Colleges are exclusively maintained by the State Govt.

Dr. B.R. Ambedkar University

11.1.34 Dr. B.R. Ambedkar University has been established at Lucknow in the year 1989-90. It will have the teaching facilities in modern subjects like Bio-technology, Computer Science, Fibre optics, etc. An outlay of Rs. 157.18 Crores is

proposed for 1990-95 out of which Rs. 29.00 crores is earmarked for 1991-92.

Second Campus of Lucknow University

11.1.35 Keeping in view the pressure of number of students, opening of need based new faculties/subjects and implementation of various schemes, it is essential to establish another campus of Lucknow University. An outlay of Rs. 42.82 crores has been proposed for the Eighth plan which includes Rs. 11.00 crores for the annual plan 1991-92.

Strengthening Higher Education Department

11.1.36 For the quick disposal of urgent matters, it is necessary that a camp office of the Higher Education Directorate be established at Lucknow. an outlay of Rs. 14.00 lakh is proposed for the Eighth plan out of which Rs. 2.20 lakh is for 1991-92.

Construction of Govt. College Buildings

11.1.37 At present the State has 55 Govt. Colleges out of which 32 Colleges are still without building. Non-availability of proper building is the greatest hurdle in the process of all round development of these colleges. Therefore, an outlay of Rs. 3000.00 lakh is proposed for the year 1990-95, including Rs. 600.00 lakh for hills out of which Rs. 480.00 lakh is earmarked for 1991-92 including hills.

Decentralisation of Administration

11.1.38 At present there are two Regional Offices, one at Gorakhpur and the other at Lucknow. In order to remove the difficulties of distantly situated non Govt. Colleges for getting their accounts audited and for getting regular periodical inspections conducted in collaboration with respective Universities, more Regional Offices are required. At least four Regional Offices are to be established in the Eighth Plan for which an outlay of Rs. 299.64 lakh is proposed. An outlay of Rs. 66.43 lakh is proposed for the establishment of one Regional Office in the annual plan 1991-92.

Programme for Quality Improvement

11.1.39 In order to bring about the qualitative improvement in the existing Government Colleges, additional staff, improvement in laboratories, library, reading rooms and other physical amenities are required. This is absolutely necessary to strengthen the existing Govt. Colleges for which an outlay of Rs. 334.86 lakh is proposed in 1990-95 out of which Rs. 37.54 lakh is for 1991-92 including hills.

11.1.40 Under the U.G.C matching share existing Govt. Colleges are consolidated by sanctioning them either non-recurring grant or matching share against U.G.C. grant. With this view an outlay of Rs. 20.50 lakh is earmarked for 1991-92 including hills.

11.1.41 The total outlay earmarked for Higher Education during 1990-95 is Rs. 29700.00 lakh out of which Rs. 3500.00 lakh is for hills. For the annual plan of 1991-92 an outlay of Rs. 5457.25 lakh is proposed which includes Rs. 257.25 lakh for hills.

Adult Education

11.1.42 Under the 8th Five Year Plan 1990-95, it is proposed to run the Adult Education Programme in U.P. from 100% financial support of Government of India and State Government respectively for R.F.L.P. and SAEP on the pattern it was operated under the Seventh Five Year Plan. Similarly the programme is also being run under Non-government agencies, University Grant Commission, Nehru Yuvak Kendras, Voluntary Organisations and mass programme of Functional Literacy like 'Each One Teach One' scheme is proposed to be run from the financial resources of Government of India and the objective being to eradicate illiteracy in 15-35 age-group of adult illiterates.

Eradication of Illiteracy Programme

11.1.43 During the Sixth and Seventh Five Year Plan period, a total number of 71.69 lakh illiterates benefitted from all agencies operating the programme in the State. Taking into consideration the average growth rate of the population in 15-35 age-group, the projected figure of adult illiterates, by the year 1995 is estimated to be 228 lakhs. As desired by the Planning Commission Govt. of India, 50% of this population i.e., 114 lakhs is to be covered under the adult education programme during the 8th plan 1990-95, for which an outlay of Rs. 58.78 crores and Rs. 26.25 crores has been proposed respectively from the Central and State Resources. For the year 1990-91, it is targeted to cover a total of 12.90 lakh adult illiterates of 15-35 age-group from all the agencies, operating the adult education programme.

11.1.44 In order to achieve the above target, 43000 adult education centres are proposed to be run under 63 RPLPs financed by State Government together with involvement by V.As., U.G.C. and NYKs. For this an outlay of Rs. 24.30 crores and Rs. 6.27 crores has been proposed respectively from the Central and State Sector.

11.1.45 In addition to the above, 12 new SAEPs have been proposed under the state sector for the year 1991-92 which will operate 3600 additional adult education centres. Thus in the year 1991-92 a total of 13.98 lakh adult illiterates in the age-group 15-35 are proposed to be covered from all the agencies,

out of which 6.21 lakh adults shall be covered under the State Programme. For this an outlay of Rs. 12.10 and 6.94 crores is proposed respectively under the Central and State Sector.

State Council of Educational Research and Training

11.1.46 State Council of Educational Research and Training, being an apex body in the department of education, is responsible for conducting educational researches, action researches and innovations; providing consultation, guidance and academic inputs to the existing educational institutions upto secondary school stage, and also the teachers training colleges. Keeping in view the central role played by S.C.E.R.T in the qualitative improvement of education at different stages, the following major schemes have been proposed for the Eighth Plan and 1991-92 in particular.

Reorganisation of the S.C.E.R.T.

11.1.47 Reorganisation of the units of the S.C.E.R.T. has become essential because of the vast expansion of qualitative improvement in programmes and establishment of DIET. An outlay of Rs. 8.00 lakh has been proposed for 1991-92 under this scheme.

Science Exhibitions

11.1.48 District and state level science exhibitions are organised so as to develop scientific talents and also to increase students interest in science and technology every year. Rs. 5.30 lakh has been earmarked for this programme for 1991-92.

Establishment of Psychological Centres

11.1.49 With the increasing demand for Psychological and guidance service to students, teachers and guardians, it is proposed to establish psychological Centres at Moradabad and Allahabad, the remaining two regions of the state. It is also proposed to construct the buildings for the psychological centres at Lucknow, Faizabad, Jhansi and Nainital which are being run in rented building.

An outlay of Rs. 33.12 lakh has been proposed for the Eighth Plan and Rs. 6.00 lakh for 1991-92 for this scheme.

Strengthening of State Educational Technology Cell

11.1.50 The State Educational Technology Cell has been very efficiently operating since its inception. It prepares nearly 140 educational T.V. programmes which are being televised on national level. It is proposed to further strengthen this cell so as to enlarge its scope of activities. An outlay of Rs. 11.00 lakh has been provided for this scheme.

Establishment of Training Institute
for the officers of the Department

11.1.51. There is no special Training Institute for the officers of Education Department. Hence it has ever been felt that an officers training institute should be established which can fully train the newly recruited officers and also provide in service training to the officers of the department whereby they can learn about their changing roles and duties, various emerging educational concepts and dimensions, new techniques and methods of planning and management. An outlay of Rs. 12.00 lakh has been provided for this purpose in the year 1991-92.

Publication of the State
Journal of Education

11.1.52 It is proposed to bring out a state journal which can throw light on latest educational researches, innovative practices in teaching and administration, recommendations of state level educational seminars and workshops, Govt. orders, etc. A sum of Rs. 8.50 lakh is proposed as the outlay for this scheme for 1991-92.

11.1.53 The total outlay proposed for S.C.E.R.T. for 1990-95 is Rs. 15.23 crores. An outlay of Rs. 90.60 lakh has been allocated in 1991-92 as against Rs. 14.20 lakh in 1990-91.

11.1.54 This shows recognition of the importance of S.C.E.R.T. in the qualitative improvement of teaching and administration in the department.

LANGUAGE DEVELOPMENT

Grants to Sanskrit Pathshalas

11.1.55 Sanskrit is not only one of the classical languages of the world, but also the mother of most of the languages of India. It is a deep source of Indian culture too. There are nearly one thousand sanskrit Pathshalas in the state which teach sanskrit in traditional ways. An outlay of Rs. 67.85 lakh has been proposed for providing development grants to such pathshalas in the Eighth plan. Rs. 9.88 lakh has been earmarked for 1991-92.

Grants to Arabic Madarsas

11.1.56 There are 242 aided Arabic Madarsas which impart knowledge in Arabic and Persian languages. Madarsas are being managed by private bodies. Formerly 50 percent salary component was paid by the Govt. and 50% by the management. But now the whole salary is paid by the state Govt. Therefore, an outlay of Rs. 22.25 crores has been proposed for the Eighth Plan for payment of salary of teachers and non teaching staff and Rs.

62.67 lakh for developmental grants.

NATIONAL INTEGRATION

11.1.57 The Uttar Pradesh Urdu Academy is the premier autonomous institution established by the State Government for the propagation and development of Urdu language. It is wholly financed by Government.

11.1.58 The office of the Academy is presently accommodated in a rented building. It has therefore, decided to shift it in a building of its own. With this idea the State Govt. provided a sum of Rs. 21 lakhs during the year 1986-87 for the purchase of land and further Rs. 1.26 lakhs for the registration of land in 1987-88.

11.1.59 The Academy is constructing its building through Uttar Pradesh Rajikiya Nirman Nigam Limited in Lucknow. Against the sanctioned estimate of rupees 1.01 crores, a grant of Rs 15 lakhs in the year 1988-89 and Rs 20 lakhs in 1989-90 was given.

11.1.60 An outlay of Rs. 60 lakhs is proposed during Eighth Five Year Plan. An outlay of Rs 50 lakhs was earmarked during the year 1990-91. An outlay of Rs 10 lakhs has been proposed for the year 1991-92 for the above purpose.

11.2 Technical Education

In technical education, state will make an earnest endeavour during eighth plan to have planned, systematised and coordinated development for stressing more on quality than on quantity particularly in view of fast developing computerisation, emerging technologies and sophistication in industrial practices.

11.2.2 The total outlay for the eighth plan will be Rs. 375 crore will be for diploma institutions. The outlay for Hill areas is Rs. 50.00 crores and is included in Rs. 230.00 cr. A project for the upliftment of Diploma level education with the aid of World Bank has been started with an estimated cost of Rs.200.00 cr including Hill area's part of Rs. 42.00 cr.

11.2.3 The salient parts of the eighth plan are

1. Infrastructure Development and Previous Liabilities The incomplete infrastructure in terms of building, equipment and staff will be taken care of alongwith establishing new infrastructure for new courses and new Polytechnics.
2. A curriculum development centre and a centre for

developing teaching and instructional material will be established for the qualitative improvement of technical education.

3. Expansion in Capacity enhancement in intake will be carried out and new courses will be started keeping in view the optimization of resources, cost effectiveness, regional need and emerging technology. Diversified courses will be given preference.

11.2.4 Growth in number of institutions(Diploma) during eighth plan is likely to be 91 from 82 and intake 13710 from 8300. Nine new institutions will be established during Eighth Plan with a view to :

- (i) Providing opportunity of Technical Education to women for which 4 Women Polytechnics at Allahabad, Moradabad, Jhansi and Ghaziabad will be established.
- (ii) Providing opportunity of Technical Education to rural and backward areas for which two institutions in Tribal Areas (Chakrata and Khatima) will be established.
- (iii) Copeup with emerging areas of technology, two new type of institutions (Institute of Electronics and Communication and Institute of Cinematography) will be established.
- (iv) A polytechnic will be established in District Firozabad during this plan period.

11.2.5 In addition to above opportunities, Continuing Education programme will be started in 10 already running Polytechnics for technician already employed in a technical/engineering organisation having technical education below Diploma level.

11.2.6 Morning shift for women will also be continued and introduced in few more polytechnics during this plan period.

Quality Improvement

11.2.7 Following activities are being proposed to be undertaken for improvement in quality of the technical education :

- (1) Modernization : The buildings and staff already provided to institutions will be made upto the mark as regards norms. The libraries as per plan will be modernized, by providing trained librarians, coolers and reprographic facilities. Computer

facilities are being provided to all polytechnics. By the end of Eighth Plan, this facility is likely to be provided to 82 polytechnics.

- (2) **Staff Training** : The element of obsolescence in the staff will be removed by training and hence updating their knowledge. A 'human resource development' unit will be established in every polytechnic to impart induction training. Every teaching staff will have to undergo training in subject matter, Industrial Practices, Maintenance and Store Management etc. Senior faculty will be sponsored for various management trainings, seminars, workshops and foreign training. The diploma holder staff will be given opportunity of degree level education so that they may have better prospects as regards their career and may also contribute to improve the standard of polytechnic teaching.
- (3) **Industry-Institute Interaction** : There has to be a continued dialogue between industry and institution to make education process more meaningful. It will help in updating curriculum in line with needs of industry, better employment facilities for our diploma holders, development in technical knowledge of staff, improvement in training facilities for students and staff in industry. This scheme is being proposed to be pursued vigorously during Eighth Plan. A cell in each institution will be created. State level Liaison Board shall be revitalized. The directorate shall coordinate the activities of this scheme.

11.2.8 **Improvement in Management System and Efficiency** ; Management system of Directorate of Technical Education, Board of Technical Education, Institute of Research, Development & Training and Polytechnics shall be strengthened. Uptil now maintenance of buildings and equipment of polytechnics was in neglected state. For this work five skilled workers shall be provided in each polytechnic and two central units shall be established at Kanpur and Moradabad. Modern facilities like Personal Computer, Word Processor, Reprographic equipment etc. will be provided in the Directorate for its strengthening and a Zonal Office is proposed for Kumaon Commissioner.

11.2.9 Board of Technical Education will be provided with additional equipment and posts. Curriculum Development Centre will be expanded to revise old courses and to develop syllabus for the new courses being started during Eighth Plan period. Additional responsibility for revising syllabus after every three years to meet the needs of industry is being also made.

11.2.10 as a Learning Resource Development Cell is also being established in I.R.D.T. which will develop different types of educational material and teaching aids.

11.2.11 Decentralization and New Experiments Autonomy is being given to three institutions. They are Govt. Polytechnic, Kanpur, Govt. Girls Polytechnic, Lucknow and Northern Regional Institute of Printing Technology, Allahabad. I.I.T. Allahabad being already autonomous. Multi Point Entry System is being started for the first time.

11.2.12 In addition to already established Zonal Offices a new Zonal Office in Kumaon Commissionary is proposed

11.2.13 Community Polytechnics and Rural Development : Fifteen Community Polytechnics are already existing which are helping in development in Rural Area by transfer of technology. During Eighth Plan period 25 more Community Polytechnics will be developed out of which proposals of 11 have already been sent to Central Govt. in the year 1990-91

11.2.14 Zero Based Budgeting Twelve Secondary Technical Schools and Courses of Accountancy, Agricultural Engg, Automation, Post Diploma in TVe and Post Diploma in Instrumentation are proposed to be conducted under this scheme. The surplus infrastructure thus created shall be utilized in other institutions.

11.2.15 Creation of Employment due to Development Programmes New posts shall be created when new programmes of Eighth Plan will be implemented. New schemes, new institutions, new courses being started in Technical Education Department will not only create new employment potential but will create specialised technical manpower which will have more employment opportunities.

11.2.16 One thousand and thirty eight teaching and 1400 non-teaching posts are estimated to be created during Eighth

11.2.17 Emphasis on Time Bound Implementation of Programmes Modern Units are being proposed at State level and Zonal level and Polytechnic level to implement the programmes in scheduled time. One State Monitoring Cell is also proposed at Secretariat Lucknow. These units will also help in sorting out the difficulties faced during implementation of programmes at various levels. Post-graduate programmes, M.Tech, M.T. H. B.T. I.I.T. Kanpur, M.T. H. B.T. I.I.T. Kanpur, M.T. H. B.T. I.I.T. Kanpur. In the year 1991-92 an amount of Rs 6182.00 lakh has been proposed for engineering colleges and polytechnics. This includes Rs 4500.00 lakh under World Bank project for diploma institutions. The total outlay also includes Rs 850.00 lakh for hills. An amount of Rs 641.70 lakh has been proposed under World Bank project for hills.

11.2.19 In the year 1991-92, it is proposed to establish Institute of Cinematography at Gaziabad. It is also proposed to start some new courses in emerging technologies in some running polytechnics in 91-92.

Degree Level Technical Institutions

11.2.20 At present 10 engineering colleges are running in this State whose total admission intake capacity is 1985 candidates per year in different branches of engineering and technologies. These institutions are listed below :

1. Roorkee University, Roorkee
2. Moti Lal Nehru Regional Engineering College, Allahabad.
3. Harcourt Butler Technological Institute, Kanpur.
4. Kamala Nehru Technological Institute, Sultanpur.
5. Madan Mohan Malviya Engineering College, Gorakhpur.
6. Bundelkhand Engineering College, Jhansi
7. College of Technology, Pantnagar, Nainital
8. Government College of Architecture, Lucknow.
9. Government Central Textile Institute, Kanpur
10. Institute of Engineering and Technology, Lucknow.

11.2.21 All the above institutes, except Government College of Architecture, Lucknow and Government Central Textile Institute, Kanpur are autonomous bodies and have their own managing committees. It has been decided to open two engineering colleges one in Dwarahat and the other in Pauri by the State Government and the construction work is in progress.

11.2.22. In this state degree level Technical Education is available for 239 persons per lakh of population while on National level it is available for 5.38 persons per lakh of population. Thus it is clear that total intake capacity of the state is much less in comparison with national average intake capacity. In addition to this, percentage of women at degree level in state is only 4.1 where the national percentage is 5.96. Due to admission being available by donations in private engineering colleges in Southern India especially in Karnataka a good number of boys and girls take admission there which directly or indirectly affect the state resources. Keeping this point in view new engineering colleges should be established in this state.

11.2.23 Out of these institutions only Roorkee University is fully developed for taking up undergraduate, post-graduate and doctoral programmes. Post-graduate programmes were started in H.B.T.I., Kanpur, Motilal Nehru Regional Engineering College, Allahabad, Kamla Nehru Institute of Technology, Sultanpur, Madan Mohan Malviya Engineering College, Gorakhpur, Institute of Engineering and Technology, Lucknow, Pant College of Technology, Pantnagar, Govt. Central Textile Institute, Kanpur but they will strengthen post-graduate and doctoral programmes in Eighth Five Year Plan. Bundelkhand Engineering College, Jhansi, Engineering

College, Dwarhat and Engineering College Pauri will develop their Under-Graduate programmes during Eighth Plan. They are getting ready to start their first phase programmes. Main proposals of Eighth Plan are as given below :-

- (1) Development of Institutional Management and Modernization, Giving autonomy to institutes and reorganisation of Academic Council.
- (2) Programmes of Computer Education, Entrepreneurship development, infrastructure improvement, new emerging technologies, continued education and development and Modernization of Programmes of Distance Learning.
- (3) Integrated Rural Development, Industry-Institute Interaction and Programmes of Consolidation and Net Working.
- (4) Development of Infrastructure, Modernization of Laboratories and Equipment, Write off of Obsolete equipment and techniques. Expansion of Library Buildings, Learning Resource Centre, Development and Expansion of Hostel facilities and other student Amenities.
- (5) Development of Engineering Faculty and Training in Appropriate fields for Faculty Members and other Staff.
- (6) New experiments on research and Development.
- (7) Development and improvement in Teaching Process.
- (8) Establishment of new engineering colleges, their strengthening and development.

11.2.24 In addition to establishment of new engineering College, following new degree level courses in new fields are proposed to be started during envisaging the national and state level technological needs :

1. Energy System Engineering.
2. Environmental Engineering.
3. Instrumentation.
4. Petro-chemical Engineering.
5. Water Resource Development Engineering.
6. Bio-technology.
7. Pharmaceutical Engineering.
8. Ceramic Engineering.

11.2.25 To fulfil the preliminary requirements of Eighth Plan, requirement of Rs. 255.514 crore has been estimated out of which it is proposed to obtain Rs. 110.554 crores from Central Govt. and the balance amount of Rs. 144.96 crore has been proposed in State Plan. The estimated requirements for various engineering

colleges to achieve the targets of Eighth Plan⁶Rs given as under

<u>Name of Engineering College</u>	<u>Requirement (Rs. in Crores)</u>
1. College of Technology, Pantnagar	6.48
2. G.C.T.I., Kanpur	10.72
3. College of Architecture, Lucknow	6.47
4. H.B.T.I., Kanpur	15.17
5. I.E.T., Lucknow	45.45
6. K.N.I.T., Sultanpur	20.30
7. M.M.M. Engineering College, Gorakhpur	8.52
8. M.N.R. Engineering College, Allahabad	1.59
9. Roorkee University, Roorkee	7.01
10. New Engineering colleges	21.27
11. Engineering College, Dwarahat (Kumaon)	1.00
12. Engineering College, Pauri (Garhwal)	1.00
Total	144.96

11.3 Sports and Youth Welfare

Sports department degree level Technical Institution is functioning in the State since 1974 and it has succeeded in promoting the cause of sports by way of providing coaching facilities and tournament opportunities to youngsters. It has been proposed, during the Eighth Five Year Plan (1990-95) to expand its activities and provide more infrastructure to sports-persons, so that the number of players to be benefited by these schemes is increased. The main schemes which are necessary for any planned development of sports have been included in the eighth plan period.

11.3.2 It is hoped that with the added facilities of Infrastructure and coaching schemes, the state will be able to produce Sport - persons who would be able to compete in National and International tournaments with flying colours.

11.3.3 Keeping in view the targets fixed for the eighth five year plan period, it has been decided to lay emphasis on construction of infra-structures and providing modern facilities like synthetic track, astro-turf and expansion of coaching schemes. A total outlay of Rs. 1094.00 lakh including Rs. 115.00 lakh for hills has been proposed for the year 1991-92 as against a total outlay of Rs. 838.76 lakh for 1990-91 which includes 100.00 lakh for hills. Government has taken a policy decision to provide a stadium/multipurpose hall/and swimming pool in each district of State. So far 42 stadia/13 multipurpose hall and 4 swimming pools have been completed. A sum of Rs. 483.73 lakh including Rs. 70.00 lakh for hills has been set aside for completion of existing stadia under construction which need completion and

also a few new stadia are likely to be taken up during the financial year 1991-92. A sum of Rs. 200.00 lakh is proposed for providing synthetic tracks at Varanasi, Rampur, Meerut and Sports College, Lucknow. A sum of Rs. 70.00 lakh is proposed for providing solar heating system in the olympic size swimming pool at Lucknow, to make it use worthy through out the year for coaching and tournaments.

11.3.4 A Sports Complex at Ghaziabad is under construction for which a sum of Rs. 46.05 lakh has been set a side. On completion it is likely to be one of the biggest sports complexes in the country which will cater not only to the need of players of the State but also other parts of the country. For organisation of tournaments, a sum of Rs. 73.76 lakh is being provided including a sum of Rs. 6.00 lakh for hill areas.

11.3.5 A sum of Rs. 20.00 lakh is being proposed for construction of dormitories at Sports College, Lucknow and a sum of Rs. 30.00 lakh for construction work at Sports College, Gorakhpur, which was set up during the year 1988-89.

11.3.6 Other major schemes include organisation of coaching camps and central coaching in all major items of sports like hockey, football, gymnastics, badminton, table-tennis, judo, kabaddi, weight-lifting, cricket, basketball, wrestling, volley ball etc. for which a sum of Rs. 37.00 lakh is being provided, which includes a sum of Rs. 7.00 lakh for hill area.

Pradeshik Vikas Dal

11.3.7 The Government have allotted an outlay of Rs. 2000.00 lakh and 500.00 lakh (Total 2500.00 lakh) for plain and hills respectively for the Eighth Five Year Plan. For the year 1991-92, an outlay of Rs. 588.93 lakh and Rs. 115.00 lakh (Total 703.93 lakh) has been earmarked for plain and hills respectively. During the year 1991-92 the following schemes are being proposed by the department.

11.3.8 Enrolment, Training and Honoraria of the member of P.V.D. : According to the provisions of PRD Act 1948, Block Commander in every Block, One Halka Sardar at Nyaya Panchayat and Dalpati, Toli nayak & Rakshaks are being enrolled at gram sabha level. These Volunteers are given training and provided uniforms. This trained force is utilised in maintenance of law and order and developmental programmes with a view to achieve objects. The scheme consists of following three parts :-

11.3.9 Initial Training : During eighth five plan 20,000 Dalpatis are proposed to imparted 22 days training, including rifle training with uniform. An estimated expenditure of Rs. 2.00 crore is likely to be incurred for this purpose, during Eighth five year plan. During the year 1991-92, 6500 Dalpatis are proposed to be trained and provided uniform on which and expenditure of Rs. 6500.00 lakh is proposed.

11.3.10 Refresher Training with Uniform: During seventh five year plan, 896 Block Commanders, 8813 Halka sardars and 62278 Dalpatis/Toli Nayaks/Rakshaks have been provided uniform and given initial training. During eighth five year plan all 896 Block commanders and 8813 Halka Sardars are proposed to be given ten days refresher Rifle training.

11.3.11. This refresher training shall be imparted only to those Block Commanders, Halka Sardar, who have undergone initial training before three years.

11.3.12 On uniform and refresher training of above mentioned 9709 volunteers, an expenditure of Rs. 67.963 lakh is proposed during Eighth five Year Plan. In the 1991-92, 2427 volunteers including 224 Block Commanders and 2203 Halka Sardars, are proposed for refresher training and providing new uniform, on which an estimated expenditure of Rs. 16.99 lakh is likely to be incurred.

11.3.13 During Eighth Five year Plan, it is also proposed that those Dalpatis, who were provided terycot uniform five year, ago and cotton uniform three years ago shall again be provided with terycot uniform. Thus during Eighth Five Year Plan a target of providing terycot uniform to 20000 Dalpatis has been fixed, for which an expenditure of Rs. 90.00 lakh has been proposed.

11.3.14 An expenditure of Rs. 22.50 lakh has been proposed for providing uniform to 5000 Dalpatis during the year 1991-92.

11.3.15 Honoraria : The honorary services of Block Commander and Halka Sardars are utilised in law and order duties and developmental activities and they play very important role in activising and organising volunteers at lower level. Therefore, an honoraria of Rs. 75/- and Rs. 50/- per month is paid to Block Commander and Halka Sardar respectively. For payment of Honoraria to 9709 trained volunteers (Block Commander and Halka sardar) an expenditure of Rs. 243.624 lakh has been proposed during 8th Five Year Plan and in the year 91-92 and expenditure of Rs. 40.50 lakh has been proposed for payment of Honoraria to 2700 trained volunteers.

11.3.16 Financial assistance for strengthening of Yuvak and Mahila Mangal Dals and honoraria to Mahila Organisers : During the Seventh Five Year Plan the materials and equipments worth Rs. 1000 were being given to Yuvak/Mahila Mangal Dals. During the eighth five year plan, it is proposed to give financial assistance of Rs. 1000/- to three best Yuvak and Mahila Mangal Dals of each block.

11.3.17 Thus, during the Eighth Five Year Plan an amount of Rs. 448.00 lakh has been proposed to assist 44800 Yuvak/Mahila Mangal Dals. This assistance shall be repeated to yuvak/mahila Mangal Dal after five years.

11.3.18 During the year 1991-92 it is proposed to spend an amount of Rs. 89.60 lakh for 8960 Yuvak/Mahila Mangal Dals.

11.3.19 It is also proposed to have Honorary Mahila Mangal Sangthaks at the rate of Rs. 300/- per month to organise Maahila Mangal Dals. During the Eighth Five Year Plan a Mahila Sangthak at the rate of Rs. 300/- per month honoraria in each block has been proposed on which an amount of Rs. 162.28 lakh will be incurred. During the year 1991-92 an amount of Rs. 32.260 lakh has been earmarked for payment of honoraria to these Mahila Sangthaks in each block. These mahila Sangthaks will organise Mahila Mangal Dals and apprise them of various development scheme of State & Central Govt. and ensure their involvement in these schemes.

11.3.20 Organisation of rural sports competitions: A majority of Youth is living in rural areas in which the department is working to develop the sport activities at various levels. This envisages to organisation of sports daily by Yuvak/Mahila mangal Dals at village level. The sports competitions are organised from village level to national level every year for different age groups.

11.3.21 To participate at national level, sports competitions of boys and girls below the age of 16 years are organised each year by this department.

11.3.22 These competitions are organised in 4 groups : During the Eighth Five Year Plan an amount of Rs. 50.00 lakh has been proposed to organise national competitions of one group each in our state. During the year 1991-92 an amount of Rs. 12.50 lakh has been proposed to organise this national competition.

11.3.23 Construction and management of Vyayamshalas : The department has already fixed a target to establish one Vyayamshala in each block for physical development of youths. Vyayamshala willl comprise of building construction and fixing equipment. An amount of Rs. 2.50 lakh is needed for one Vyayamshala which also includes honorary Vyamshala Instructor at the rate of Rs. 300/- honoraria per month. During the Eighth Five Year Plan an amount of Rs. 300.00 lakh has been proposed for establishing 120 Vyayamshalas. In 1991-92 an amount of Rs. 188.00 lakh is to be incurred for establishing 75 Vyayamshalas.

11.3.24 Youth Awards : The birth day of Swami Viveka Nand Ji is celebrated as Youth Day/Youth Week since 1935 by the department. A cash award of Rs. 500/- and shield worth Rs. 1000/- is provided to the best Yuvak Mangal Dal and Mahila Mangal Dal in each district. Thus an amount of Rs. 12000/- is fixed for each district every year. Ist, IInd and IIIrd Award of Rs. 100000/-, 50000/- and 25000/- respectively are also given to best yuvak and Mahila Mangal Dal of State at State level. As such during the Eighth Five Year Plan an amount of Rs. 53.50

lakh has been proposed. In 1991-92 an amount of Rs. 13.00 lakh has been proposed for the same.

113.25 Publicity and Exhibition: For the welfare of Youth different schemes are being implemented by the department. The publicity of these schemes is awfully needed for masses. It will be done by wide publicity and holding exhibition etc. at various places. During the Eighth Five Year Plan a target to spend an amount of Rs. 5.00 lakh has been fixed. In 1991-92 an amount of Rs. 25 lakh has been proposed.

113.26 Establishment of State level training Centre: During the eighth five year plan an amount of Rs. 32.00 lakh has been proposed for establishing the State level Training Centre. During the year 1991-92 a target to spend an amount of Rs. 8.00 lakh has been fixed for the youth leaders camp and other training programmes for the officers of the department.

113.27 The scheme of gram sabha level establishment of sports centres: During the eighth five year plan rural Stadia will be established in 1990-91.

113.28 For the physical and mental development of youth in rural areas and to provide facilities, the schemes for establishing other rural Sports Centres in each block has been proposed in Eighth Five Year Plan.

113.29 During the Eighth Five Year Plan construction of 8 Rural Sport Centres in each block has proposed. Thus an amount of Rs. 2587.00 Crores has been proposed for establishing 7168 Rural sport Centres.

11.3.30 During the year 1991-92 an amount of Rs. 71.68 lakh has been proposed for establishing 1792 rural sport centres two at each blocks.

113.31 During the eighth five year plan arrangements for kit of important equipment has been proposed for two Mahila Mangal Dal in each block.

113.32 The training of tailoring and embroidery will be provided to members of Mahila Mangal Dal and tailoring and embroidery machines will be provided to them after training by youth welfare department.

113.33 Training will be imparted to members of Yuwak Mandal for various trades and concerned equipment will be provided to them. The training will be provided to two members of Yuwak Mandal and one member of Mahila Mangal Dal. The training will be provided to six members of Yuwak Mandal in each block. An amount of Rs. 4000/- and 2000/- will be paid to two Yuwak Mandal and two Mahila Mangal Dal respectively for purchasing concerned equipment in each block. This during the eighth five year plan an amount of

Rs. 430.08 lakh has been proposed for purchasing the equipments after training to 7168 yuwa and 7168 mahila mangals dalas at the rate of Rs. 4000/- and 2000/- respectively. During the year 1991-92 an amount of Rs. 187.32 lakh has been proposed for financial assistance to purchase the equipments to be provided to 1792 yuwa and 1792 mahila mangal dalas (after training) at the same rate.

11.4 Art and Culture

While formulating the eighth plan, care has been taken to provide for the development of all the areas of art and culture, but greater emphasis/priority has been given to schemes intended to conserve the art and cultural heritage for posterity. The proposed schemes include fine arts education and promotion of the folk and classical art and culture, creation of infrastructure and conducive development of art and culture, protection of classical and folk arts of Uttar Pradesh at national and international level, development of academies of plastic and performing arts and the culture, archeology, Archives, music and Museums. A couple of schemes provide for the dispensation of benefits to old artist and grants to voluntary cultural organisations. Brief description of the schemes included in draft eighth plan is as under:

11.4.2 Direction and Administration The Directorate of Cultural Affairs will be further strengthened and developed so as to enable it to become fully capable to successfully implement the various developmental schemes and to exercise effective control and supervision over the subordinate offices and field units of the Deptt. A centrally located old building at Kaiserbagh Lucknow is being converted into a cultural complex. A grand auditorium and Jawahar Shankar Prasad Conference Hall has already been developed. It will be fully equipped in the eighth plan period. Its old and historic building will be renovated and strengthened. Facilities for a cultural Centre, library on art & culture, etc will also be provided.

FINE ARTS

11.4.4

11.4.4 Setting up of Cultural Resource and Training Centre The cultural resources and training centre is proposed to be established for teachers in various facets of Indian history, culture and art, to give them cultural kit consisting of models of sculptures of different periods, slides of various types of architecture, monuments and various styles of dance and folk theatre, slide projector and relevant cyclostyle literature. The trained teachers are expected to disseminate the knowledge acquired by them to their students.

11.4.5 Creation of Awareness of Art Heritage amongst the Students Community : The cultural department sponsors lectures and demonstrations by eminent musicians and dancers and also organise mobile exhibitions in the Universities and colleges during the working hours exclusively for the student-audience all over the State.

11.4.6 Preparation of Films for Education and other purpose on art and culture : Documentary films, primarily for exhibition in schools and colleges will be made on various subjects, dealing with our art traditions and cultural heritage. Documentary films for exhibition in museums and various cultural centres will also be made.

11.4.7 Strengthening of Bhatkande Sangeet Mahavidyalaya: Bhatkanda College of Hindustani Music, Lucknow is the premier institution of classical Indian music and dance in the country. There is already great demand for admission to this college but due to limited staff and accommodation a large number of students have to go disappointed. In order to promote music and dance, it is necessary to strengthen this institution and develop it further to enable it to cater to the needs of maximum number of music and dance lovers and to raise the level of classical music & dance in the State.

11.4.8 Setting up of a Board of Music Education: In order to regulate the teaching of classical and Folk music and dance in the state, it is considered necessary to set up a Board of Music Education. It will lay down standards, prescribe syllabi and make arrangements for taking examinations of music and dance course upto Intermediate level. It will also award certificate for Prathama (High school level) and Diploma for Madhyama (Intermediate level) examinations in Music and Dance. At present there is no proper recognised Board or University for Music exams with the result that even the Govt. Music Colleges are affiliated to private examining bodies besides having no statutory backing. Hence this scheme is absolutely necessary which will support itself to some extent by making earnings by way of examination fees.

11.4.9 Scholarship, Fellowship, Research Grants, Travel Grants etc: Scholarship to talented children in the age group of 10 to 14 years under the scheme of Cultural Talent Search Scholarship is already being given. Scholarship is also given to talented artists in the age group of 18 to 28 years, study fellowship in the age group of 28-65 years is given for research and creative work for specific scheme and project. It will be continued and the number of scholarship and fellowship etc. will be increased.

11.4.10 Development of Existing Music Teaching Institutions in Hills : Branches of Bhatkande Music College have been established at Almora and Dehradun during the Seventh Plan.

These branches will be strengthened & developed during Eighth Plan Period.

11.4.11 Scheme of Financial Assistance to Music Institutions : The grant-in-aid will be given to non government music institutions to rationalise their teaching norms, syllabi, grades of pay, etc. and thereby ensuring raising the standard of music teaching in the state.

11.4.12 Institute of Folk Art : The Institute of Folk Art has been established in the Kumaon region. It will be strengthened and developed during the Eighth Plan that it may effectively carryout survey, documentation, research and publication etc. connected with the rich heritage of Folk and traditional art in this state.

11.4.13 Construction of Building for Institute of Folk Art : The department is finding it very difficult to get a suitable building to meet the requirements of the institute on rent or lease at Almora. It is therefore proposed to acquire some land and construct modest building for the institute.

11.4.14 Cultural Festivals in the State : Uttar Pradesh is a large State comprising of various regions which have distinct sub-culture of there own. Historically speaking Braj, Avadh, Bhojpur, Roohalkhand, Bundelkhand, Purvanchal, Garhwal, etc. are the main distinct cultural regions which have got merged together to form what is to be known as Uttar Pradesh. It is necessary that in all schemes and programmes for the dissemination of the art and culture, the regional aspirations of the people of these cultural regions are kept in view.

11.4.15 Other Cultural Programmes: On occasions such as celebration of national and regional festivals, celebration of the days connected with artists and writers, national and international conferences, regional level fairs and exhibitions in various parts of the state, cultural performances/seminars, lectures are sponsored with a view to promote artists of the State and take their art and our cultural heritage to as large number of the people as possible.

11.4.16 Cultural Programmes in Rural Areas: Under the impact of the commercial Cinema, traditional folk arts are being obliterated whereas the classical arts have not reached to villages. Under this schemes the objectives is two fold, firstly, to revive the dying folk art tradition, and secondly, to take the sophisticated classical programmes on music dance theatre, opera ballet and plastic arts to the rural areas.

11.4.17 Promotion and support to publications on Art, Culture and Literature: Magazines and journals exclusive dedicated to art and culture, not supported to big businesses and publishing houses are subscribed for distribution to libraries of various Universities and Colleges.

11.4.18 Establishment of Cultural Centres at District Headquarters: It is proposed to establish cultural centres at every district headquarter in the state. This centre will function as the district level field office of the department, which will have an audio-video library, library of books on arts and culture, an open air amphitheatre as auditorium, space for organising exhibitions and requisite staff and equipment to promote and co-ordinate art activities in the district.

11.4.19^A Construction and Maintenance of Auditoria: The State of Uttar Pradesh have very few auditoria and for this reason cultural activities in the state suffer a great deal. It is therefore, considered necessary that each district headquarter of the state should have at least one auditorium of different capacities according to the population of respective city. The grant-in-aid will also be given to voluntary cultural organisation for renovation and equipments of auditorium.

11.4.20 Construction of auditorium at Gorakhpur: An Auditorium is being constructed at Gorakhpur. It was started in the end of Seventh Plan and Rs. 100.00 lakh have already been spent on it. But it is not possible to complete within limited ceiling provided for this department. Hence, only a token provision has been made for this scheme. Additional ceiling for this project is being requested separately.

11.4.21 Construction of Amphi Theatre at Gorakhpur: Land has been acquired for amphi theatre in Ram Garh Tal Project and it has been partly constructed. It is proposed to complete this project in the Eighth Plan.

11.4.22 Grant-in-aid to Ravindralaya: It is proposed to give enhanced grant-in-aid to the Ravindralaya auditorium at Lucknow for renovation and improvement of its sound and light equipments and furniture, furnishing etc. so as to meet the needs of the state capital.

11.4.23 Uttar Pradesh Parva: A national level cultural festival of U.P. is organised once every year in an important city outside the state, which is called the Uttar Pradesh Parve. It is organised usually at the capital of that state to provide opportunities to artist of U.P. to project their art outside confines of the state and to provide an opportunity to the people of the state visited to get a glimpse of art tradition of U.P. It goes a long way in strengthening and promoting the spirit of national integration and enables the artist of U.P. to inter act with artist and art lovers of other states. This scheme will be continued and further developed during Eighth Plan Period.

11.4.24 Subsidy to artists and U.P. Cultural Troupes going abroad: Travel grant is proposed to be given to deserving cultural troupes and eminent artist etc. going abroad to establish project art and culture of Uttar Pradesh, in the country. Rules have already been framed to regulate grant under

this scheme.

11.4.25 International Seminar on Art and Culture : It is proposed to organise every year international seminar/symposia on specific subject concerning art and culture in the state to remain abreast with the latest advances and researches in this field.

11.4.26 Establishment of Punjabi Academy : Punjab has been a citadel of our ancient most civilization and its mooring are embeded in the time tested values of cultural. The need to preserve and disseminate this rich heritage to the posterity following the historic partition of the country is imperative. With this end in view, a nucleus of punjabi academy has been formed in the last year of the Seventh Plan which is proposed to be fully developed during the Eighth Plan.

11.4.27 Construction of building for Sangeet Natak Academy : Land for the building of Sangeet Natak Academy has been acquired and a building has to be constructed thereon.

11.4.28 Construction of Building for Bhartendu Natya Academy : Land has already been acquired for Bhartendu Natya Academy and the building has to be constructed to meet the specialized of the institute.

11.4.29 Construction of Building of Repertory Company at Almorah : It is considered necessary to construct its own building for the Repertory Companies to enable them to develop fully.

ARCHAEOLOGY

11.4.30 Strengthening of Existing State Archaeological setup : It is proposed to strengthen the existing archaeological setup in the State, so as to make it worthy of the challenges of doing survey, conservation, documentation research, publication etc. on the tremendous archeological wealth in this vast state.

11.4.31 Maintenance and Conservation of Monuments : There are about 100 monuments under protection of the State Government at present and it is under consideration to have major monuments under protection. Repairs have to be carried out to maintain these protected monuments for which adequate funds have to be made available.

11.4.32 Public Libraries : Education department is also providing facilities for self study by means of public libraries in the state. In the seventh plan emphasis has been laid on children's libraries, strengthening of public libraries at district and divisional level and provincialization of libraries of state level importance. It has also been proposed to construct buildings for Government district level libraries, which are either in a dilapidated condition or in some rented old buildings.

11.4.33 For achieving the above mentioned activities and programmes an outlay of Rs. 318.48 lakh was provided in the seventh plan and an expenditure of Rs. 521.64 lakh was made for public libraries upto the end of seventh plan.

ARCHIVES

11.4.34 Strengthening of the Existing State Archival Set UP: The Government of U.P. has got a State Archives at Lucknow with regional unit at Varanasi, Allahabad, Agra, Dehradun and Nainital, besides a Manuscript Library at Allahabad. It is necessary to provide additional staff, storage facilities, modern equipments, conservation laboratory and other facilities for the up-keep of valuable records in these archives.

11.4.35 District Wise Village to Village Survey and Documentation of Sites, Monuments and Collection and Preservation of Surface Finds : The state of U.P. is very rich from the point of view of archaeological sites and monuments. After Connigham and Marshall, no systematic survey to locate important archaeological sites and monuments has so far been undertaken. It is, therefore, proposed to set up a survey and documentation unit under the State Archaeological Organisation to undertake district wise village to village survey to bring on record all the archaeological sites and monuments in that area.

11.4.36 Financial Assistance and Guidance to Universities for Archaeological Survey: Universities have been undertaking schemes of excavation, survey and exploration of archaeological sites through their departments of Ancient History, Archaeology and Culture. Universities have got man power for such work in their students but there is lack of financial resources for undertaking these projects. If the State Government provides them financial assistance as also technical guidance through trained archaeologists of the Department, useful excavations and explorations can be carried out. This scheme will also provide opportunities for practical training to the students of archaeology in the Universities and at the same time develop their interest in this field.

MUSEUMS

11.4.37 Strengthening of the Existing Government Museums: The State Museum at Lucknow and Government Museums at Mathura, Jhansi and Almora will be further developed and strengthened. Ram Katha Museum, Ayodhya, Budh Museum at Gorakhpur, Sultanpur Museum and Lok Kala Museum, Lucknow established during the Seventh Plan period as a nucleus, will be strengthened and additional funds will be provided to these museums for acquiring antiquities and art objects.

11.4.38 Establishment of New Museums: Taking into consideration the large size of the State of U.P. and its rich

cultural heritage the number of museums in the State so far are much too few. For want of adequate resources, new museums could not be set up earlier. It is proposed to set up new museums at Kushinagar and in Garhwal in the State during the eighth plan. Besides, it is proposed to take over and develop like a Government Museum the existing private Museum at Kannauj and the defunct Educational Museums at Muzaffarnagar, Bulandshahar and Etawah. The children's Museum at Lucknow which is languishing for want of adequate resources will also be strengthened or taken over.

11.4.39 Second Phase of Jhansi Museum Building: The first phase of Jhansi Museum building completed. It is proposed to complete the remaining work of this phase in 1991-92 to make it functional.

11.4.40 Construction of Building of Mathura Museum: The present building of Mathura Museum is proving insufficient now and needs early expansion. It is one of the most prestigious museums of India. A large number of Indian and Foreign Tourists come to see it. It has, therefore, been decided to construct additional galleries there in eighth plan, for which land is available.

11.4.41 Construction of Building of Buddha Museum, Gorakhpur: Buddha Museum has been established at Gorakhpur. A land has been purchased for the building of Gorakhpur Museum. Construction work has also been started, and it is expected that the building will be completed during the eighth plan period.

11.4.42 Construction of Building of Ram Katha Museum, Ayodhya: Ram Katha Museum has been established at Ayodhya in a rented building. It is proposed to construct its own building during the eighth plan period, so as to ensure proper display of objects and development of this unique Museum.

11.4.43 Construction of 4th Wing of Lucknow Museum: In order to meet the need of ever growing collection of State Museum, it is proposed to add the 4th wing to the building of State Museum, Lucknow.

11.4.44 Construction of Building for Sultanpur Museum: A new Museum at Sultanpur is being established. The first phase of the building for this Museum is proposed to be constructed, during the eighth plan, so that it may be set up properly.

11.4.45 Monthly Pension to Aged Artists and Writers in Indigent Circumstances: Aged and poor artists and writers who dedicated their lives for the cause of performing/plastic/literary arts, but on account of their advanced age or ill health are now not in a position to earn their bread are being given suitable pension, not exceeding Rs. 500/- per month. This scheme will be further augmented during the eighth plan.

-----*

Chapter XII

MEDICAL AND PUBLIC HEALTH

Emphasis is being given to wider coverage and development of health services in the form of a package programme, in which other social services programmes like education and women welfare will be amalgamated, schools situated near the hospitals may be directed to prescribe lectures of para medicals.

12.0.2 Greater emphasis is being laid on mitigating disparities among and within the districts of the state. The programmes aimed at spreading benefits to rural areas will be given top priority and outlay to the extent of fifty per cent will be allocated to rural areas. Another important point to be adhered to is the decentralization and formulation of plan at local level, by involving Panchayati Raj Institutions in plan formulation and implementation.

12.0.3 Population growth is another important factor to be looked into. Attention is to be focused on reducing birth rate, by effective and permanent methods. Strategy under population control and family welfare programmes is to be so adopted that it improves the status of women, their education level and effectively check mortality rate. Family welfare programme progress is to be measured in terms of reduction in birth rate instead of birth control.

12.0.4 Health for all by 2000 A.D. is another important goal to be achieved by adopting primary health care as the main instrument. It is important to mention that upto sixth plan health planning was curative oriented. During latter planning era drastic changes were made in the health policy to include preventive, and rehabilitative aspects of human services. Upto the end of seventh plan much head-way has been made in this direction.

12.0.5 Minium needs programme has been assigned top priority for extending health services in rural areas. Achievements made under the programme have been shown in the following table :-

Table 12.0.1
Achievements upto the end of Seventh plan under M.N.P.

Item	Level at the end of Six Plan	Seventh Plan ----- Target Achivment		Level at the end of 7th Plan
1	2	3	4	5
1. Sub Centre	15653	6559	4500	20153
2. Primary Health Centre	1169	1591	1831	3000
3. Community Health Centre	74	132	103	177

Table 12.0.1(Concl.)

Item	Level at the end of Six Plan	Seventh Plan		Level at the end of 7th Plan
		Target	Achivment	
1	2	3	4	5
4. Allopathic Beds	54556	8216	6112	60868
5. Urban Malaria control unit	14	10	-	14
6. Filaria control Unit	24	10	4	28
7. Leprosy control Unit	32	-	47	79
8. <u>Prevention of Blindness :</u>				
(a) District hospital	55	-	-	55
(b) Primary health centre	175	-	364	539
(c) Mobile Unit	17	-	19	36

12.0.6 During 1989-90, partially 103 PHC, 32 CHC were sanctioned hence these are not included in the achievements shown above. Accordingly 1500 sub centres, 2 urban Malaria control units, 2 Filaria control units, 20 leprosy control units, 75 PHCs, 24 Mobile units under eye relief programme are not included in the achievement. Building position under Minimum needs programme is as follows:-

Table 12.0.2
Present status of number of buildings under M.N.P.

Programme	Sub Centre	PHC	CHC
(1)	(2)	(3)	(4)
1. Buildings at the end of sixth plan	3493	682	84
2. Seventh plan target :			
Spillover works	773	148	145
New sanction works	635	183	9
	1408	331	154
3. Works completed during seventh plan	1195	211	130
4. Works sanctioned during seventh plan	1121	141	55
5. Building at the end of seventh plan	4688	893	214

12.0.7 Out of 63 districts in the state 56 district have got district hospitals. Most of the district hospitals are not able to cope with the work load of growing population. Buildings have gone very old. During seventh plan 8 district hospital buildings were reconstructed and completed.

12.0.8 National programmes relating to control of communicable diseases have been implemented successfully in the state and effective control has been registered. During Eighth plan main emphasis has been laid on :-

1. Completion of spill over works.
2. Implementation of minimum needs programme on priority
3. Provision of health services in slum areas of scheduled caste and scheduled tribes.
4. Strengthening and consolidation of Health Infrastructure and mitigation of disparities.
5. National programme.

12.0.9 Targets proposed under minimum needs programme during eighth plan and Annual plans are as under:-

Table 12.0.3
Targets of M.N.P Under Eighth Plan

Item	Eighth Plan		Target	Annual Plan 1990-91		Annual Plan 1991-92
	Total	Backlog out of Total	Target	Anticipated Achievement	Target	Proposed
(1)	(2)	(3)	(4)	(5)	(6)	(6)
1. Sub Centre :						
Establishment	4000	1500	444	444	2000	
Construction	2135	699	+1500	+1500		
	+750 (PP)		230 (PP)	230 (PP)	245	
			+100 (N)	+100 (N)	+250 (PP)	
			+579 (SO)	+579 (SO)	120 (SO)	
2. Primary Health Centre :						
Establishment	1000	703	523	523	154	
Construction	636	97	+103	+103		
			103 (N)	103 (N)	72 (N)	
			47 (SO)	47 (SO)	49 (SO)	
3. Community Health Centres :						
Establishment	237	32	19	19	49	
Construction	255	70	+32	+32		
			26 (N)	26 (N)	50	
			27 (SO)	27 (SO)	43 (SO)	
4. Hospital for Newly created districts :						
Establishment	4	-	-	-	-	
Construction	4	-	2	2	2	
5. Rural deferent Units :						
Establishment	4	-	1	1	2	
Construction	4	-	-	-	-	
6. Diesel generator in CHC						
	100	-	10	10	17	

Note : N = New SO = Spill over PP = Population Project

12.0.10 Besides above, schemes relating to land purchase, strengthening of engineering cell, and provision for 6th I.P.P. have also been included in this group. A new scheme dental Health awareness in rural areas is proposed during the plan period. Staffing pattern of the P.H.C. has been reviewed and it is proposed to slash down some posts to reduce the expenditure on salary etc. while on Medicine provision will be made on higher rates.

12.0.11 Under the Hospital/Dispensary programme Health services in urban areas is proposed to be strengthened by way of providing 200 bed district hospitals in district having population upto 10 lakh, 300 bed district hospitals in districts having population more than 10 lakh and 500 bed hospitals at divisional head quarters where medical colleges are not existing efforts will also be made to complete the on going construction works. Specialist services like intensive care units, dialysis units and pathology units have also been envisaged during eighth plan period. Balrampur Hospital, Dufferin hospital and Civil hospital of state capital Lucknow will be strengthened by way of providing extra inputs in terms of buildings, staff and equipments. Emergency services at district hospitals are not functioning in a desired manner and are not able to cope with various emergencies reaching there. As such it is proposed to strengthen the emergency services by establishing a separate emergency complex to bring about a desired improvement in the services.

12.0.12 National programmes relating to control and eradication of diseases like Malaria, Filaria, T.B. Leprosy, Blindness, and Goitre will continue in the Eighth plan on the pattern as indicated by central Government. These programmes have to be extended in the newly created 7 districts during eighth plan period. Targets proposed under the programmes are as under:-

Table 12.0.4
Proposed Targets of National Programmes

Item	Eighth Plan Target	1990-91 Target	1991-92 Target
(1)	(2)	(3)	(4)
1. Urban Malaria control Unit	10	2	2
2. Filaria control Unit	5	1	1
3. District T.B. Centre	7	-	2
4. T.B. Isolation beds	150	-	60

12.0.13 Kalazar and Encephalitis is also causing a threat of fresh outbreak in the eastern district of the State. Proper arrangements will be made to control these diseases effectively. Programme for strengthening of school health services has also been included.

12.0.14 Schemes relating to grant in aid and strengthening of planning, monitoring, evaluation and organisation have found place in general. It is also proposed to construct office complex at divisional district head quarter. Office structure will be provided in the newly created division and districts. Financial implications of the programmes have been shown in the statement IV.

Employees State Insurance Scheme :

12.0.15 The Employees State Insurance scheme which is social security scheme was implemented on 24th February, 1952 in this State. This scheme is expanding gradually with the development of the industries. The E.S.I. Act provides certain benefits and medical treatment to insured person and their families in respect of sickness, injury and maternity benefits. The expenditure incurred on the medical care of insured persons and their families is shared between the E.S.I. Corporation and the State Govt. in agreed ratio 7:1. As per new policy of the Corporation, the expenditure incurred on medical care for extension of scheme to new areas will be 100% percent to be borne by the corporation for first three years and thereafter agreed ratio.

12.0.16 Before June 1988 E.S.I. scheme was running under Medical and Health Department of the State. From June 1985 this scheme has been put under the Administrative control of Labour Department a separate Directorate was established by providing some additional staff.

12.0.17 Establishment : Till the end of the Sixth Five Year Plan, there were eight ESI Hospitals functioning in the state having 1036 bed strength. During Seventh Five Year plan 5 new ESI Hospitals and 100 bed annexe in ESI Hospital, Pandunagar has been established. Thus 60 beds have been increased for indoor and specialised treatment under the scheme in the State.

12.0.18 Besides above a I.C.C. unit in ESI Hospitals, Pandunagar and the T.U.R. unit in Sarojininagar Hospital, has been established. One I.C.C. unit in ESI Hospital Sarojininagar has also been established by strengthening medical ward.

12.0.19 Establishment of new E.S.I. Dispensaries : Till 1984-85 only 114 allopathic and one Ayurvedic and one Homeopathic dispensary were functioning in the State to provide outdoor treatment to the insured persons and their families. During seventh five year plan seven allopathic

dispensaries in plains and one dispensary in Hills have been established. Besides this 10 Ayurvedic and 10 Homoeopathic dispensaries have also been established. Thus at present 122 allopathic, 11 Ayurvedic and 11 Homoeopathic dispensaries are functioning.

12.0.20 Establishment of Regional offices under E.S.I. scheme: After the separation from medical side to Labour Deptt., need for establishing the Regional Offices was experienced and therefore, the administration of ESI scheme in the state was divided into nine zones.

12.0.21 Provision of Ambulance Vans under the ESI scheme: Fifteen Ambulance vans were provided till the end of 1984-85 under the ESI scheme. Two more Ambulance Vans have been sanctioned during Seventh five year plan for transportation of insured patients and their family members.

Eighth Five Year Plan (1990-95)

12.0.22 To improve the Medical Services and to extend the E.S.I. scheme in new areas, the following proposals are made, keeping in view the policy of the Govt. and outlay proposed for the scheme is Rs. 60.00 lakhs during Eighth five year plan.

12.0.23 Establishment of New ESI Hospitals : The construction work of 60 bedded hospitals at Pipri (Sonbhadra) and Varanasi are likely to be completed soon. For the commissioning of these hospitals Rs. 5.00 lakhs have been allocated during 1990-91 and Rs. 8.00 lakhs (state share) during 1991-92. 194 persons are proposed to be employed under this programme. Rs. 39.49 lakhs outlay have been proposed for the whole of eighth plan.

12.0.24 It is proposed to open five new ESI Dispensaries during the financial year 1990-91 and seven during 1991-92. Four dispensaries in 1992-93 and 1993-94 and two dispensaries during 1994-95 are proposed to be established. Outlay for the year 1990-91 to 1991-93 have not been proposed as the expenditure on medical care for establishing the new dispensaries in new areas will 100 percent be borne by the E.S.I corporation for three years. Thereafter expenditure will be shared in agreed ratio. As such an outlay of Rs. 3.40 lakhs has been proposed for 1993-94 and Rs. 8.40 lakhs for 1994-95. 342 persons are proposed to be employed under this programme.

12.0.25 The E.S.I. Hospitals and dispensaries which are presently functioning are not fully equipped. It is therefore proposed to equip them. A sum of Rs. 3.00 lakhs (State Share) has been allocated during the year 1990-91 and Rs.3.05 lakhs in the year 1991-92. The insured persons and their families will get better medical facilities with this proposal.

12.0.26 At present the facilities as referred to above are available in ESI Hospitals and the cases are referred to Medical College for investigation and treatment. By establishing the above units better medical treatment and facilities could be provided in ESI Hospitals. These units are proposed to be established during the year 1990-91 and sum of Rs. 0.38 lakhs as outlay has been proposed for this programme.

12.0.27 Under this proposal the condemned Ambulance, Mobile Van and staff care etc. are proposed to be replaced. During the year 1990-91 six Vehicles are proposed to be replaced, and an outlay of Rs. 1.62 lakhs has been proposed for this proposal. Rs. 0.38 lakh has also been proposed for 1991-92.

Indian System of Medicine :

12.0.28 Indian System of Medicine (Ayurveda & Unani) is playing important role in the field of Medical & public Health activities, both in rural & urban areas. The people are attracted towards these systems, due to being harmless and their effective methods for eliminating the diseases. These systems are based on sound principles and have developed out of great experience. It is, therefore, needed that adequate funds should be provided for the development of this system during Eighth Five Year Plan.

12.0.29 A great handicap is experienced in extending the medical relief programme through these systems in the remote areas, as these programmes could not be taken under MNP and thus paucity of Funds remained the main factor in consolidating the facilities in Ayurvedic and Unani Hospital/Dispensaries. The existing State pharmacies could not be expanded to the required extent.

12.0.30 The course recommended by the Central Council of Indian Medicine has been introduced in Ayurvedic Unani Colleges but the facilities could not be provided in accordance with the prescribed norms as recommended by the above council.

12.0.31 Residential/Non-residential buildings of State Ayurvedic/Unani Dispensaries and Colleges which are under construction have been taken so that these buildings may be completed during Eight plan. A scheme has also been taken for expansion of Ayurvedic/Unani Colleges and attached Hospitals. Priority has also been given for creation of additional employment, training and Research Programme. Besides this, scheme for establishment of Ayurvedic/Unani Hospitals in rural and urban areas, expansion of existing pharmacies and Drug Control Act has been taken over.

12.0.32 A target to establish 60 Ayurvedic/Unani Hospitals in Urban areas and 500 new dispensaries in Rural areas, preferably under Special Component Plan and Tribal Sub Plan for the benefit of Schedule Castes and Schedule Tribes has been

proposed for Eighth Five Year Plan. 33 Hospitals in Urban and 70 Dispensaries in Rural areas have been sanctioned during 1990-91 and 10 Hospitals in Urban and 100 Dispensaries in rural areas are proposed for establishment during 1991-92.

12.0.33 An additional employment of 4188 is likely to be created during eighth five year plan and 1405 is to be created during 1991-92.

12.0.34 An outlay of Rs. 3936.83 lakh (Rs. 235.00 lakh for Hills) has been proposed for Eighth Five Year Plan (1990-95) and Rs. 555.55 lakh (Rs. 49.35 lakh for Hills) has been proposed for annual plan 1991-92. An amount of Rs. 564.01 lakh (38.78 lakh for hills) has been allocated during the year 1990-91. Out of this proposed outlay of Rs. 3936.83 lakh Rs. 1845.00 lakh for eighth plan has been proposed for capital work and against an outlay of Rs. 555.55 lakh an amount of Rs. 234.60 lakh for capital work has been proposed for the year 1991-92. There are 10 State Homoeopathic Medical Colleges with attached Hospitals. All the 10 State Homoeopathic Medical colleges were earlier run and maintained by their respective Private Managements which were subsequently provincialised by the State Government. These colleges, presently do not have the required Library facilities, Laboratory facilities and teaching and non teaching staff as prescribed by the Central Council of Homoeopathy.

12.0.35 During the seventh five year plan period an outlay of Rs. 100.00 lakh was proposed for the constructions of the Hostels for the boys and girls and accordingly, the scheme of construction of Hostels was sanctioned, in the first instance for the State Mohan Homoeopathic Medical College and Hospital, Lucknow and the State K.G.K. Homoeopathic Medical College, Moradabad which are under construction. During the year 1990-91 an outlay of Rs. 41.00 lakhs is being provided for their completion. During the eighth five year plan period an outlay of Rs. 249.70 lakhs is being proposed for the construction of Hostels for boys and girls for the other state Homoeopathic medical Colleges.

12.0.36 District Homoeopathic Medical Officers are being posted to ensure adequate supervision and control of the State Homoeopathic Dispensaries at the District level. The State presently consists of 63 Districts (including 8 hill Districts) Officers have been posted against the posts of 40 District Homoeopathic Medical Officers. The remaining 23 Districts are yet to be provided the posts of District Homoeopathic Medical Officers at their offices at the District level.

12.0.37 During the eighth plan period it is proposed to establish 500 State Homoeopathic Dispensaries in the rural and urban areas of the State including the areas/localities which have sufficient Scheduled Castes/Scheduled Tribes population so that the benefits

of Homoeopathic system of Medicine could accrue to them on priority basis. Accordingly 30 such State Homoeopathic Dispensaries are proposed during the year 1990-91 and 55 State Homoeopathic Dispensaries during the year 1991-92.

12.0.38 There are about 5000 Homoeopathic Doctors who possess the recognised Homoeopathic Medical qualifications but there are no avenues available for absorbing them in the State services therefore.

12.0.39 It is proposed to financially assist help these qualified and Registered Homoeopathic Doctors so that they could set up their own Homoeopathic Clinics/Dispensaries in the selected rural/urban areas by way of sanctioning grant-in-aid to them under various heads. For this purpose an outlay of Rs. 60.00 lakh is proposed to be set apart during the eighth plan period out of which an outlay of Rs. 2.00 lakhs is proposed during the annual plan 1991-92.

12.0.40 During the Eighth Plan Period an outlay of Rs. 393.00 lakh for urban health services, Rs. 643.72 lakh for rural health services and Rs. 349.70 lakh for Homoeopathic Medical Education & Training is proposed which includes the hill areas of the State. Thus during the 8th plan period a total outlay of Rs. 1386.42 lakhs is proposed. As for the Annual plan 1990-91 an outlay of Rs. 181.71 lakh has been approved which consists of Rs. 27.25 lakh for urban health services, Rs. 94.06 lakh for rural health services and Rs. 60.40 lakh for Homoeopathic Medical Education & Training, including the hill areas.

12.0.41 As for the Annual plan pertaining to 1991-92 (including hill areas) an outlay of Rs. 67.75 lakh for urban health services, Rs. 86.40 lakh for rural health services and Rs. 42.90 lakh for rural health services and Rs. 42.90 lakh for Homoeopathic Medical Education and Training is proposed, the total of which is Rs. 197.05 lakh.

Medical Education and Research :

12.0.42 With a view to provide effective, curative and immediate medical relief Medical Education, Training and Research Programme has been recognised as of utmost importance. To meet this goal seven state Medical colleges of Lucknow, Kanpur, Agra, Meerut, Allahabad, Jhansi and Gorakhpur are imparting Medical Education Training to about 940 graduate and about 780 post graduate students per year in different specialities. During seventh plan period an expenditure of Rs. 28.35 cr. was incurred. For the Eighth Plan period Rs. 34.83 cr. are proposed, out of which for the year 1990-91 an outlay of Rs. 6.20 cr. has been approved and for the year 1991-92 Rs. 22.28 cr. are proposed.

12.0.43 Besides progress of above mentioned seven Medical colleges, Sanjay Gandhi Post Graduate Institute Lucknow

is also sharing this task. This Institute of Medical Sciences was established by the State Governemtn by State Legislation Act no. 30 of 1983 as a Tertiary health centre and a post Graduate Educational and Research Institute. It was proposed originally that the Institute will have 21 super specialities and will be developed in three phases.

12.0.44 The following six super specialities are created in the first phase in Eighth plan:

1. Neuro Sciences
2. Cardiac Sciences
3. Gastro Sciences
4. Renal Sciences
5. Immunology and Genetics
6. Endocrine Sciences

12.0.45 It was contemplated that during the first phase of the Institute six super specialities with 600 bedded hospital shall start functioning by the end of seventh plan i.e. 31.3.90. Due to paucity of funds, qualified faculty, trained nurses and technicians, the hospital has 250 beds with six super specialities equipped with ultra modern medical equipments worth Rs. 62.57 crores and other hospital support equipments worth Rs. 7.39 cr. The hospital is going to have twelve well equipped operation theatres. Till date about 43000 patients are already been extended medical facilities. About 5000 patients per month in outdoor and 450 patients per month in Indoor are treated in the hospital. Advanced facilities such as open heart surgery and kidney transplantation etc. and special investigations like Radioactive Scanning are available.

12.0.46 The D.M. & M.C.H. courses in 6 super specialities are conducted and I.C.M.R. has provided 11 research schemes. The Institute has itself sponsored 30 research schemes.

12.0.47 The eighth plan needs for the Institute are:

1. Spill over of seventh plan for completion of 1st phase.
2. Requirements for consolidating functioning of phase I.
3. Initiation of IInd phase of the Institute.

Rs. 10000 lakh are proposed for eighth plan out of which Rs. 1200 lakh were approved for 1990-91 and Rs. 2000 lakh are proposed for 1991-92.

-----*

CHAPTER XIII

WATER SUPPLY, SANITATION, HOUSING
AND URBAN DEVELOPMENT

13.1 Water Supply and Sanitation.

The Sewerage and Water Supply Scheme in Urban as well as in Rural areas are being implemented by U.P. Jal Nigam. The urban low cost sanitation programme is being implemented by the Directorate of Local Bodies.

SEVENTH FIVE YEAR PLAN

13.1.2 Seventh Five Year Plan (1985-90) provided an outlay of Rs. 415 Crores. The programmewise details of which are as follows:

Table 13.1.1
Physical achievement and expenditure during Seventh Plan

Programme	Financial Outlay (Rs. Cr.)	Expenditure (Rs. Cr.)	Physical Target/Achievement
1. <u>Urban water supply</u>			
(a) New Towns	27.00	} 108.75	118 Towns/52 Towns
(b) Reorganisation			260 mld in/95 mld.
(c) Corporation Towns	129.00		200 Towns/100 mld. in corp. Towns/146.7mld
	156.00	108.75	
2. <u>Urban Sewerage</u>			
(a) New Towns	5.00	} 11.31	11 Towns/3 Towns
(b) Reorganisation			10 Towns/6 Towns
(c) Corporation Towns	10.00		10 mld./---mld.
	15.00	11.31	
3. <u>Rural Water Supply</u>			
(a) Distt. Sector (Jal Nigam)	205.00	} 289.69	11884 New village/22547 New Villages
(b) Dutch Programme (Jal Nigam)	21.00		150 New Village
(c) Distt. Sector (Rural Development Deptt.)	17.00		Saturation of 571 villages Sanitation/drainage work in 1289 villages/23 new village
4. <u>Rural Sanitation</u>	1.50	3.29	15000 Seats
5. <u>Low Cost Sanitation</u>	14.50	14.43	
6. <u>Rejuvenation of Defunct Schemes</u>	2.00	5.25	
	432.00	455.67	

EIGHTH FIVE YEAR PLAN

13.1.3 For Water Supply and Sanitation total outlay proposed is Rs. 1128.75 crores, including Rs. 255.00 cr., for Hill areas of the State Sectorwise detail of proposed outlays are as under:-

Table 13.1.2
State and District Sector Outlays

PROPOSED OUTLAY	(Rs. in crore)		
	Plains	Hills	Total
District Sector(Jal Nigam)	254.75	200.00	454.45
District Sector (Rural Development)	50.50	2.50	52.50
State Sector (Jal Nigam)	495.55	55.00	550.00
District Sector (Panchayt Raj Department)	70.00	1.25	71.25
Total	870.00	258.75	1128.75

Programmewise breakup of the proposed outlays are given in table no.13.1.3

Table 13.1.3
Breakup of outlays
(Rs. in crore)

Programme	Proposed Outlay		
	Plains	Hills	Total
A. Urban Water Supply (including Rs. 80.00 Cr. for Barrages at Gokul, Agra & Kanpur)	373.80	44.00	417.80
B. Urban Sewerage	15.00	5.00	20.00
C. Minimum Needs Programme			
1. Distt. plan (Jal Nigam)	254.45	200.00	454.45
2. Dutch Credit	66.20	-	66.20
3. Distt. Plan (Rural Development)	50.00	2.50	52.50
4. State Plan	20.55	5.00	25.55
Total (c)	391.20	207.50	598.70
D. Low Cost Sanitation	21.00	1.00	22.00
E. Rural Sanitation	70.00	1.25	71.25
Total :	870.00	258.75	1128.75

*For rejuvenation of defunct schemes.

ANNUAL PLAN 1991-92

13.1.4 Proposed outlay for Annual Plan 1991-92 is Rs.176.28 Cr. It's Programmewise breakup is proposed as under.

Table 13.1.4
Programmewise Breakup of Annual Plan Outlay
(Rs. in crore)

Programme	Proposed Outlay		Total
	Plain	Hills	
(1)	(2)	(3)	(4)
A. Urban Water Supply (Including Rs. 10.00 Cr. for Barrages at Gokul Agra & Kanpur)	49.00	5.50	54.50
B. Urban Sewerage	2.00	1.40	3.40
C. Minimum Need Programme			
1. District Plan (Jal Nigam)	35.365	28.000	63.365
2. Distt. Plan (Rural Development)	8.840	0.500	9.340
3. Dutch Credit	20.000	-	20.000
4. State Sector	9.635	0.500	10.135
Total (c)	73.840	29.000	102.840
D. Low Cost Sanitation	3.500	0.100	3.600
E. Rural Sanitation	11.743	0.200	11.943
Total (ABC)	140.083	36.20	176.286

URBAN WATER SUPPLY

13.1.5 Against as approved outlay of Rs. 156 cr. an expenditure of Rs. 108.75 cr. was incurred in seventh plan. With this amount 52 new towns were provided with pipe water supply and in 205 towns augmentation and extension works, though grossly inadequate, were carried out.

13.1.6 It may be recalled that an outlay of Rs. 156 cr. only could be provided during seventh plan against the requirement of Rs. 545 cr., to provide adequate water supply to 100% urban population by the end of International Drinking Water Supply and Sanitation decade i.e. 1990 to which the state is committed.

13.1.7 As the augmentation & extension of existing water supply systems is not commensurate with the increasing water

demand of the fast expanding urban centres, emergent relief works are becoming necessary in many a towns. The average per capita water supply in most of the 57 big towns (population more than 50,000) is barely 100 lpcd. Advance planning & long term projects are, therefore essential to tide over the fast deteriorating water supply situation in all these and other towns.

13.1.8 Approximately about 800 crore Rupees are now required as on April 1990 for providing adequate water supply facilities to all towns. Therefore if sufficient funds are not provided for urban water supply schemes in the near future, the problem of water may become further acute and may even result in law and order problem.

13.1.9 An outlay of Rs. 54.50 Cr. has been provided for the year 1991-92, out of which Rs. 4.00 Cr. are earmarked for Gokul Barrage.

13.1.10 New Facilities : At the end of Seventh Plan, out of 690 towns in the State, 604 towns have been benefitted by piped water supply facility.

13.1.11 In Eighth Plan, 20 new towns are proposed to be benefitted with this facility.

13.1.12 During 1991-92, a provision of Rs. 5.00 crores has been kept for new facilities and 4 new towns are expected to be benefitted.

13.1.13 Reorganisation/Extension/Augmentation Schemes : Though the coverage of towns with water supply appears to be very high but the level of service in most of the towns is quite poor. Most of the systems have become quite old and need repairs/replacements/augmentation/extension. With the growth in population the level of service has further declined. Urban areas could not have their due share in financial resource allocation because of the high priority given to water supply in rural areas in the sixth Five year Plan and thereafter. If concerted and serious efforts are now not made to augment the Urban Water Supply Systems, the condition may further deteriorate resulting in a lot of health problems and inconvenience to the people.

13.1.14 In Eighth Plan Rs. 417.80 Cr. are being proposed for above purpose. It is targetted to partially reorganise/extend/augment the water supply systems of 200 towns by 200 mld. besides augmenting water supply by 100 mld in the corporation towns. In annual plan of 1991-92, an outlay of Rs. 39.50 cr. have been proposed. It is targetted to partially reorganise/extend/augment the water supply system of 40 towns.

13.1.15 Barrages at Gokul, Agra and Kanpur:- Considering the acute scarcity of drinking water at Mathura, Agra and

Kanpur, the construction of barrages at Gokul, Agra and Kanpur is necessary. The approximate cost of the barrages and associated water supply schemes are:

	(Rs. in Crore)	
	For Barrages	For water supply
1. Gokul Barrage	41.00	16.40
2. Agra Barrage (world bank assistance)	34.00	
3. Kanpur Barrage	173.00	86.17
Total	248.00	102.57

13.1.16 The work of construction of Gokul barrage has already been undertaken during Seventh plan and an amount of Rs. 8.00 cr. has already been provided for it upto March 1990. The requirement of funds for these barrages and associated water supply schemes will be as follows during the plan.

	(Rs. in crore)	
1. Gokul Barrage	33.00	16.00
2. Agra Barrage	15.00	- -
3. Kanpur Barrage	16.00	- -
Total	64.00	16.00

13.1.17 An outlay of Rs. 10.00 crores has been proposed during year 1991-92.

RURAL WATER SUPPLY

13.1.18 On the basis of norms prescribed by Government of India, 35,506 villages, out of total 1,12,566 villages in the State were declared as problem villages in the 1972 survey. By 1980, only 7001 villages could be provided with safe drinking water supply with piped scheme.

13.1.19 With a view to cover all the problem villages as speedily as possible and looking into the financial constraints, installation of India Mark-II hand pumps at the rate of one hand pump for 250-300 persons was decided to be taken up from the year 1982-83 onwards. From then pipe water supply was to be provided only at places where hand pumps are not feasible or where the quality of water is not suitable from chemical point of view.

13.1.20 In order to expedite coverage, by providing atleast one source of drinking water in each problem village, it was decided by the State Govt. to provide, in the first phase, a maximum of two handpumps in each village, out of which one hand

pump waste to be provided for Harijan population of the village. On the above basis 35,252 problem villages have been covered by March 1990. Remaining 254 villages out of which 195 in hills could not be covered due to dispute on water sources or being pumping schemes in hills. Thus only 159 vilages of this list will remain to be covered as on 1.4.90.

13.1.21 With the passage of time due to number of ecological changes such as drought, deforestation etc., a large number of villages have further come under the category of problem villages. As received from District Magistrates, a list of 42544 additional problem villages has been prepared in 1985 out of which 41182 villages have been covered by March 1990. Progress of Rural Water Supply in short is as under:-

Table 13.1.4

Rural Water Supply - Physical Achievements

Item	Problem villages		Other Total Villages	Grand Total	
	1972	1985			
(1)	(2)	(3)	(4)	(5)	(6)
1. Total No of villages	35506	42544	78050	34516	112566
2. Total coverage upto March, 1990	35252	41182	76434	18704	95138
3a. Balance as on April 1,1990	254	1362	1616	15812	17428
b. Out of which disputed	30	574	604	---	604
c. New Balance as on April 1,1990	224	788	1012	15812	16824
4. Anticipated to be covered during 1990-91	---	---	770	4654	5424
5. Anticipated Balance as on April 1,1990	---	---	342	11158	11500
6. Proposed to be covered during 1991-92	---	---	250	5050	5300

Minimum Needs Programme

13.1.22 An outlay of Rs. 226.00 cr. including Rs. 130.00 cr.

for hills was provided for seventh five year plan for safe drinking water supply programme being implemented by U.P. Jal Nigam. Against this an expenditure of Rs. 268.57 crore was incurred.

13.1.23 Now for the Eighth plan an outlay of Rs. 475.00 cr. including Rs. 200.00 crore for Hills with which it is anticipated to cover total 15235 villages including 384 problem villages. Out of these, 800 villages will be covered by pipe schemes rest by handpump. Besides this, reorganisation of some existing piped water supply schemes and saturation of some partially covered villages shall also be done.

13.1.24 An outlay of Rs. 73.00 cr. have been proposed for the year 1991-92 with which it is targetted to cover total 5065 villages including 5015 non problem villages. Out of these, 4950 villages will be covered by Handpumps and rest by pipe. Besides this, reorganisation of some existing piped water supply schemes and saturation of some partially covered villages shall also be done.

The Dutch Assistance for Rural Water Supply Schemes

13.1.25 For providing water supply in problem villages in the state, assistance is being provided by Dutch Government also against an agreement entered into by Govt. of India and Dutch Govt. Against this assistance sub-project I, estimated to Rs. 16.37 cr. has been completed under which 724 villages of district Rae-bareilly, Allahabad and Varanasi have been provided with pipe water supply. sub project -3 estimated to Rs. 11.044 cr. to cover 603 villages of district Allahabad, Agra, Mathura and Etawah by India mark-II Handpumps is nearing completion. Sub project-IV estimated to Rs. 11.26 cr. to provide piped water supply in 199 villages of district Allahabad and Varanasi and sub-project-V estimated Rs. 2.09 cr. for providing drainage/sanitation/health education in villages covered under Dutch assisted schemes have been approved and work started. Sub-Project VII and Sub-project-VIII estimated cost Rs. 25.37 and 30.145 cr. respectively has been submitted for approval to Govt. of India.

13.1.26 For Eight plan an outlay of Rs. 66.20 cr. has been proposed under this programme out of proposed total outlay of Rs. 457.00 cr. under Minimum Needs programme. An outlay of 20.00 cr. have been proposed for the year 1991-92 out of total provision of Rs. 73.00 crores.

Accelerated Rural Water Supply Programme

13.1.27 This programme is centrally sponsored for which cent percent assistance is being provided by Government of India to

accelerate the rural water supply programme in the problem villages. An outlay of Rs. 243.56 cr. was provided for Seventh Plan. Now an outlay of Rs. 200.00 cr. is expected to be provided for Eighth Five Year Plan. With the proposed outlay it is targeted to cover a total of 2193 villages out of which 622 by pipe and rest by Handpumps. Besides this saturation of partially covered villages will mainly be done.

13.1.28 An outlay of Rs. 45.00 cr. has been proposed for the year 1991-92 with which it is proposed to cover 200 problem villages and 35 non-problem villages. All these villages shall be covered by pipe. Besides this saturation of some partially covered villages shall also be done.

Rejuvenation of Defunct Scheme

13.1.29 Many rural water supply schemes in hill districts become defunct due to landslides and damages or other reasons. These need immediate rejuvenation/rehabilitation. Kumaon and Garhwal Jal Sansthan are being given funds for restoration of these schemes. An outlay of Rs. 2.00 cr. was provided for seventh five year plan. Now an outlay of Rs. 5.00 cr. has been proposed for Eight Plan. An outlay of Rs. 0.50 cr. has been proposed for the annual plan 1991-92.

Harijan Drinking Water Supply Scheme

13.1.30 Harijan Rural Water Supply Programme is being implemented by rural development department through development blocks since 1971-72. The objective of the scheme is to provide safe potable drinking water facilities in villages, basties and hamlets which are mainly inhabited by the Scheduled Caste/Tribes, where either there are no sources of water or are deficient in water. In plain areas drinking water wells and in hill areas Diggies are constructed by block staff since inception of the scheme. Govt. of India has accepted that only India Mark-II Hand Pump water is potable and as such where ever possible, only these Hand Pumps are installed by Jal Nigam in plain areas under this scheme.

13.1.31 The average unit cost of Drinking Water Wells, India Mark-II Hand Pumps and Diggies for the year 1991-92 has been taken as Rs. 25,000/-, Rs. 16000/- and Rs. 30,000/- respectively. In ensuing years cost escalation at the rate of 5 percent has been accounted for.

13.1.32 Upto 1984-85 47616 wells, 12950 handpumps and 3805 diggies had been constructed. During the 7th plan period (1985-90) 15626 Hand Pumps, 3022 Wells and 1563 Diggies have been constructed with an expenditure of Rs. 2295.21 lakhs.

For Eighth Five Year Plan (1990-95) an outlay of Rs. 5250.00 lakhs, 2000 Drinking water wells, 22000 India Mark-II hand pumps and 1000 diggies have been proposed which will cover approximately 25000 hamlets. For the year 1991-92 with total outlay of Rs. 934.00 lakhs, which includes Rs. 50.00 lakhs for mills, 330 drinking water wells, 4500 India Mark-II Hand Pumps and 160 Diggies are being proposed.

Urban Sewerage and Sanitation

13.1.33 It is necessary from the point of view of health of the community that all excretion, organic wastes and waste water be quickly removed from inhabited areas of a town. Sewerage & sanitation scheme should, therefore, follow the water supply schemes to avoid insanitation due to increased amount of waste water and to make use of waste water to transport night soil and other human wastes away from habitation. However, due to high cost involved and limited financial resources of the local Bodies and the State, the Sewerage facilities have been provided only in limited urban areas of the State. Expenditure and outlays provided during the Seventh Five year plan were Rs. 10.76 and 15.00 cr. respectively.

Urban Sewerage

13.1.34 New Towns: By end of March, 1990 only 57 towns have been provided with partial sewerage facilities out of which 20 are class-I towns. Now provision has been kept for providing facility in only three new towns during the plan period.

3.1.35 Reorganisation/Extension/Augmentation Schemes : Sewerage facilities in the already covered towns are partial in nature and that too inadequate and their level has further declined due to large growth of population. The present status of sewerage in the most of the towns is not satisfactory which is causing pollution of rivers and serious environmental problems.

13.1.36 A provision of Rs. 20.00 cr. has been made to extend the existing sewerage facilities in towns.

Urban Low Cost Sanitation

13.1.37 The low cost sanitation programmes was introduced in U.P. in 1981-82 in 20 towns through U.P. Jal Nigam after a comprehensive sample survey conducted by U.N.D.P.

13.1.38 Financial Provisions: In this scheme the dry latrines are converted into pour flush water seal latrines and 50% of the cost is given as grant and rest 50% is given as loan to beneficiaries by the Govt. This Programme is

implemented through local bodies in U.P. by under mentioned programme:-

1. Low cost sanitation programme sanctioned in U.P. Budget.
2. "Scavenger free scheme" programme 50% financed by Central Government.

Seventh Five Year Plan (1985-90)

13.1.39 The Programme for conversion of dry latrines into pour flush latrines was implemented in 400 towns upto 1990. During Seventh Five year plan (1985-90) total- 1,00,729 dry latrines were converted against the target for 1,05,000 conversions with an expenditure of Rs. 1443.20 lakh. An outlay of Rs. 2100.00 lakh (including Rs. 100.00 lakh for hills) has been allocated for Eighth Five Year Plan (1990-95). An outlay of Rs. 360.00 lakh (including Rs. 10.00 lakh for hills) has been proposed for the year 1991-92.

Rural Sanitation

13.1.40 The Programme of construction of Sanitation Latrines in rural areas under Rural Sanitation Programme, was started in the year 1984-85. The Scheme was launched with the UNICEF assistance. During Seventh Five Year Plan 1,16,831 household sanitary latrines were constructed under different schemes viz. UNICEF Assisted Sanitation Programme, Rural Landless Employment Guarantee Programme, National Rural Employment Programme, Central Rural Sanitation Programme, Intensive Coverage District Scheme (with UNICEF Assistance) and State Rural Sanitation Programme, 140 Schools with 100% financial help from UNICEF were also provided with school latrines by the department.

13.1.41 The Programme of Construction of Sanitary latrines has been included in the Annual Plan 1990-91 and the Government has approved the construction of 2 lakhs Rural household sanitary latrines and some other sanitary facilities like community latrines, Soakage pits, bathing cubides, small drains etc. Involving an amount of Rs. 2639.03 lakh.

13.1.42 According to the Action Plan 50% of the amount that's Rs. 1319.52 lakh will be provided by the State Government and the remaining 50% of the amount that's Rs. 1319.51 lakhs will be provided by the Central Government under Central Rural Sanitation Programme. The State Government have released its Share amounting Rs. 1300 lakhs to carry out the scheme. In addition to this amount a sum of Rs. 15.00 lakh has been provided in Hill Sector by Hill Development Department for construction of 1109 household sanitary latrines during the year 1990-91.

13.1.43 The programme has received a good response from

Rural masses in State. The Programme is being looked as a vehicle of improved health of the rural folk, socio-economic status and safety. It has received remarkable acceptance among the women folk, as the age old system of open defecation in the changed socio-economic environment is posing a great problem to the women folk in particular. Thus the Programme tends to improve the quality of rural life and environment, curtails the spread of various communicable diseases and maintains the dignity of women folk in rural areas by providing improved sanitary facilities.

13.1.44 Taking above facts in to consideration it is proposed to continue the programme in 8th Five Year Plan. An Outlay of Rs. 1194.30 lakh has been proposed for the year 1991-92 which includes an amount of Rs. 20.00 lakh under the Hill Sector for the construction of 9797 household sanitary latrines.

13.1.45 The cost of per latrine as estimated for the year 1990-91 will continue in the coming year. Thus the construction of a household latrine for the year 1991-92 has been estimated at Rs. 1500/- in which 80% i.e. Rs. 1200/- will be borne by the Government and 20% i.e. Rs. 300/- will be borne by the beneficiary in the non-difficult areas of the Plains. In difficult areas of Bundelkhand division (26 Development Blocks) and Hill division (79 development Blocks) the cost of per latrine has been estimated at Rs. 1725/- out of which 80% i.e. Rs. 1380/- will be borne by the Government and 20% i.e. Rs. 345/- will be borne by the beneficiary. In total 97970 latrines will be constructed during the year 1991-92 out of which 96520 latrines will be constructed in the Plain areas and 1450 latrines will be constructed in in the difficult areas of Bundelkhand and Hill district of the state.

13.1.46 An equal amount of Rs. 1194.30 lakh is proposed to be given be central Government under Central Rural Sanitation Programme to construct 97970 household sanitary latrines. This will enable State Government to construct a total of 195940 household sanitary latrines in the year 1991-92.

13.1.47 A total of 11,69,520 House hold Sanitary Latrines involving an amount of Rs. 14,250.00 Lakhs which includes 50% of the amount that's Rs. 7,125.00 Lakhs as Central Government Assistance under CRSP, are proposed to be constructed during the 8th Five Year Plan.

The detail of year wise break-up of State and Central Share are as given in table 13.1.6 :-

Table 13.1.6
Outlays and Physical Achievements

YEAR	PLAIN	HILLS	TOTAL STATE SECTOR	TOTAL CENTRAL SHARE	GRAND TOTAL
(1)	(2)	(3)	(4)	(5)	(6)
Financial (Rs. in lakh)					
1990-91	1300.00	14.90	1314.90	1314.90	2629.80
1991-92	1174.30	20.00	1194.30	1194.30	2388.60
1992-93	1482.70	30.00	1512.70	1512.70	3025.40
1993-94	1482.70	30.00	1512.70	1512.70	3025.40
1994-95	1560.30	30.10	1590.40	1590.40	3180.80
	7000.00	125.00	7125.00	7125.00	14,250.00
PHYSICAL TARGET (In Nos.)					
1990-91	100000	1109	101109	101109	202218
1991-92	965520	1450	97970	97970	195940
1992-93	123900	2500	126400	126400	252800
1993-94	123900	2500	126400	126400	252800
1994-95	130373	2508	132881	132881	265762
	574693	10067	584760	584760	1169520

13.2 Housing

Government Residential Buildings

The expansion in the activities of different departments is inevitably linked with the increase in responsibilities as well as pace of development of the state. Construction of buildings has to follow this expansion. The essential requirements of residential and non-residential accommodation of departments dealing with non-plan activities could not be provided under the non-plan sector of the State Budget and the planning Commission decided during the fifth plan to provide for it in the plan. For the seventh plan the planning commission has further regrouped the entire housing activities charge to state plan under the following three heads:-

1. Government Residential Buildings.
2. Urban Housing.
3. Rural Housing.

13.2.2 The programme of Construction of non-residential buildings has been kept under "public works" which includes construction of office buildings and other functional buildings.

13.2.3 Under this programme outlay is provided for general pooled accommodation, police, Judicial, Revenue, Estate, Public works Department, Finance (Loan to Government Servants) Karmik and legislative Department.

13.2.4 Although serious efforts have been made to meet this demand but due to increase in the number of offices particularly in Urban areas, still there is acute shortage of accommodation in the state for the Government officers and other categories of Government employees.

13.2.5 During the discussion on state plan 1990-91 with Central Planning Commission it, was decided that from 1990-91 the expenditure on residential and non-residential buildings of the following departments will be borne in non-plan;-

1. Police Department.
2. Judicial Department
3. Finance Department (Loan to Govt. Servants)
4. Legislative.
5. Home (Jails) Department
6. Revenue Department

13.2.6 According to the above discussion, from the year 1990-91 financial provisions for incomplete works only of the above Deptt. would be made in the plan.

13.2.7 Government Pool Accommodation:- The residential buildings of various departments for their employees are being constructed under pooled housing scheme. The seventh plan, provided an outlay of Rs. 1146.00 lakh for above purpose against which an expenditure of Rs.1165.17 lakh is anticipated. An outlay of Rs. 6423.38 lakh the (including Rs. 1000.00 lakh for hills) has been allocated for Eighth Five year Plan (1990-95). For annual plan 1991-92, an outlay of Rs. 815.34 lakh (including 100.00 lakh for hills) has been proposed.

13.2.8 Police Department:- Provision of residential accommodation to different categories of state police personal is necessary to increase their efficiency. At the beginning of the seventh plan the shortfall in living accommodation vis. quarters and barracks was for 85753 non-Gazetted policemen. An outlay of Rs. 890.00 lakh including Rs. 18.00 lakh for hills has been provided in the seventh plan and during this period target for constructing 4081 residential units was fixed against which Rs. 3474.18 lakh has been spent and 2857 residential buildings constructed. For completing the incomplete works of this Deptt. a sum of Rs. 376.00 lakh has been proposed for Eighth plan out of which Rs. 372.00 lakh is for the year 1991-92.

13.2.9 Judicial Department:- An outlay of Rs. 180.00 lakh including Rs. 19.00 lakh for hills was provided in the Seventh plan. An expenditure of Rs. 480.55 lakh including Rs. 18.21 lakh

has been incurred during the period 1985-88 and construction of 120 units completed. During the period 1988-90, Rs. 394.91 has been spent. This scheme has been now transferred to non-plan. Therefore, for completing the incomplete works of this Deptt. a sum of Rs. 44.00 lakh has been proposed for Eighth plan out of which Rs. 12.00 lakh (including Rs. 2.00 lakh for hills) is for the year 1991-92.

13.2.10 Public Works Department:- The public works Department under takes the construction work of residential, non residential and functional buildings of its own as well as of other departments. An outlay of Rs. 304.00 lakh including Rs. 70.00 lakh for hills has been provided in the seventh plan and the target is to construct 250 residential units. The achievement during 1985-88 has been of 61 residential units. During the period 1988-90, Rs. 96.24 lakh has been spent in above purpose. An outlay of Rs. 243.00 lakh (including Rs. 143.00 lakh for hills) has been allocated for Eighth Five Year Plan. An outlay of Rs. 45.00 lakh including Rs. 20.00 lakh for hills is proposed for the year 1991-92.

13.2.11 Revenue Department:- An outlay of Rs. 44.00 lakh including Rs. 15.00 lakh for hills was provided in the seventh plan for construction of residential buildings of Revenue Department officials specially at Tahsil Level. This scheme has been transferred to district sector from 1988-89. During the Seventh plan Rs. 839.85 lakh has been spent. Now this scheme has been transferred to non-plan. An outlay of Rs. 500.00 lakh has been allocated for Eighth Five year plan for completing the incomplete works of this scheme. An outlay of Rs. 255.30 lakh including Rs. 2.00 lakh for hills is proposed for the year 1991-92.

13.2.12 Estate Department:- Estate department provides residential accomodation for Ministers, Legislatures and Govt. Servants at Lucknow and office buildings for Govt. Offices. Govt. residences at Lucknow are in great demand and about 1600 officers and 10,000 non-Gazetted employees are still waiting for Govt. residences. Apart from construction, houses are being purchased from Lucknow Development Authority and U.P. Housing & Development Board. By the end of the 6th five year plan total of 4388 residences of different coterogies were under control of Govt. Estate Department and during Seventh five year plan 2146 residences of different categories were constructed at the cost of Rs. 1851.79 lakh. Out of which a few are under construction. In the Eighth five year plan it is proposed to construct/purchase 6,690 residences of different category on which expenditure of Rs. 7425.00 lakh is estimated.

13.2.13 Estate department has two Guest houses one each at Delhi and Calcutta. One more guest house at Delhi is being constructed at the cost of Rs. 3.00 crores.

13.2.14 At Nainital, Nainital club and its associated

buildings are under control of Govt. Estate Department. Due to large number of guests in season it is not possible to accomodate them at Nainital, therefore it is proposed to construct a complex of 72 suites at oak part at an estimated cost of Rs. 400.00 lakhs.

13.2.15 At Lucknow the number of guests are increasing day by day and there was no transit accomodation for the officers who come on transfer, therefore Transit Hostel of 28 suites and guest house of 56 suites have been constructed at an estimated cost of Rs. 201 lakhs. Besides a V.V.I.P. Guest house at the estimated cost of Rs. 1000.00 lakh has been allocated for Eighth Five Year Plan. An outlay of Rs. 200.00 lakh is proposed for the year 1991-92.

13.2.16 Karnik Department : The Karnik Department provides residential accomodation to a numbers of the State Public Service Commission as well as to the gazetted and non-gazetted employees of the commission. It also provided hostel accomodation and residence to the employees of the Administrative Academy Nainital and Institute of Management Development Institute, U.P.. An Outlay of Rs. 30.00 lakh was approved for the seventh plan (1985-90), against this outlay an expenditure of Rs. 49.54 lakh is anticipated by the end of the seventh plan. No outlay is proposed for the year 1991-92.

Urban Housing

13.2.17 Uttar Pradesh has 659 towns as identified in the Census, 1981. Thirty towns having a population of above 1 lakh were categorised under class-I out of which Kanpur and Lucknow have population of more than 10 lakh each. Besides the above 30 class-I towns, 37 towns had population between 0.50 to one lakh, 85 towns had population between 20,00 to 50,000 and the rest 507 towns had a population below 20,000.

13.2.18 At the begining of the period 1981-91 Uttar Pradesh had a population of 110.86 million with an urban population of 19.90 million. The 1971 urban population in the state was of the order of 12.38 million which shows that the rate at growth of urban population in the state was 4.9% per year or 60.74% over the ten years from 1971 to 81. This rate of growth is substantially higher than the all India average urban growth rate of 3.85% per year (46.02% during 1971-81) during 1981-91. While the main reason of the high rate of urban growth in U.P. is the inclusion of nearly 200 out of the 659 towns as new urban centres as a result of census reclassification, the rate of urban growth in old Census towns has also increased substantially as a result of expending agro-economic and industrial activities in the state.

13.2.19 In 1981 the number of Census households and houses was 33.78 lakh and 31.38 lakh respectively and the

statistical shortage of houses was of the order of 2.4 lakh houses. Considering that 19.66% of the Census houses were being used as shops etc. the number of census residential units has been worked out as 25.21 lakh out of these residential housing units at nearly 77.72% had pucca walls. Similarly 77.72% had pucca roofs as per Census 1981.

13.2.20. It is estimated that the percentage of pucca houses in 1981 was nearly 75.5% and that of semi pucca houses was 15.7%. All these houses could be considered to constitute the accountable housing stock during the Eighth Plan. In addition 5.5% of the houses were kucha serviceable and the rest 3.3% of the houses were unserviceable. As such out of the total existing residential houses nearly 96.7% pucca, semi pucca and kucha serviceable houses have been considered as dependable housing stock. Thus the number of serviceable urban dwelling units is of the order of 24.38 lakh including a shortage of 9.4 lakh in 1981. Estimated shortage of the dwelling units in the urban areas at the beginning of the 8th Five Year Plan is around 12 lakh dwelling units. It is further estimated that during the 8th plan an additional qualitative and quantitative shortage of dwelling units of around 12.58 lakh will be generated, out of which a shortage of 10.7 lakh will be generated during the first 4 years of the Plan. Thus during the 8th Five year Plan period, efforts are to be made to make 22.0 lakh dwelling units available to solve the housing problem.

13.2.21 Against the Seventh-plan allocation of Rs. 75.50 crores for housing in the State-sector against which a sum of Rs. 75.87 crores has been spent. The target of 2,00,000 houses for EWS category from different sources, the achievement during the seventh-plan period are shown below:-

Table 13.2.1
Progress in Seventh Plan

EWS including Sites and Services	Target	Achievement	Percentage achieved
1. State	18,000	23,786	132%
2. HUDCO, Bank etc.	1,82,000	92,638	51%
TOTAL	2,00,000	1,16,406	58%

13.2.22 The seventh plan targets under Low Income Group and Middle Income Group Housing Scheme and the achievements under State Plan upto 31st March, 1990 are as follows:

Scheme	Target	Achievement	Percentage achieved
L.I.G	4,000	3,283	82%
M.I.G.	700	526	75%

13.2.23 The Land Acquisition & Development Scheme (LAD) is being mainly executed through Development Authorities and U.P. Housing & Development Board. Allocation for L.A.D. in Seventh Plan was Rs. 25.20 cr. against which 32.41 crores has been spent.

13.2.28 Objectives and strategies of Eighth Five Year Plan: The current housing situation is influenced by the general low affordability of most of the urban households to pay for conventional housing and their services and by the fact that a growing proportion of the urban population today is living in habitats, which although being over crowded unhygienic and lacking in basic services, provide accommodation that can be afforded by these households. Another factor that needs to be realised is that better space standards and construction occupy a lesser priority to these households than better employment, education, water-supply, health facilities etc. The plan allocations have generally been inadequate and also there has been a weak institutional structure available for housing construction.

13.2.29 Accordingly an entirely new dimension has to be imparted to the Housing Programmes in the Eighth Plan. The basic approach which is called for in the last decade of the century i.e. 1990-2000 should consist of following policy framework:

1. Housing is both a basic need and an essential element in the over-all socio-economic development. An all out effort to meet, in a flexible manner, the diverse housing needs of the urban population has to be made.
2. Public agencies should involve themselves in house building activity only to the extent that it helps to create an environment which enables the full potential and resources of the people to be fully utilised and constraints to housing are removed.
3. Housing is also to be regarded as part of the strategy for augmenting employment and upgradation of skills.
4. To rely increasingly on low cost locally available building materials and simple and appropriate technology. Research and design should be encouraged for the development of various lowcost, low-energy consuming building materials using various agro-forestry, industrial mining waste.
5. To develop, strengthen and extend housing finance system through provision of support services to spread risks and increase liquidity.

6. To develop innovative and non-conventional approaches in operational norms relating to appraisal, sanctions, disbursement and recovery of home loan.
7. Develop institutions and delivery mechanisms to provide housing finance services to non-eligible segment of households and informal settlements.
8. While safeguarding the interest of general public, the activities of legitimate private developers be encouraged.
9. To increase the supply of adequate serviced land at affordable rates to meet the needs of various income groups.
10. Considering and suggesting suitable amendments to existing laws and regulations in order to create an enabling environment for housing activity and for guaranteeing the access of the disadvantaged groups to shelter with security and dignity.
11. Carrying-out housing and urban development activity in such a way that ecology is improved and in nocase, has any adverse effect.

13.2.30 In view of the above policy framework, the housing strategy for the eighth plan is proposed to incorporate the following as the major direction of planned effort:-

- (a) Limited involvement of the existing Government and semi-government agencies be made for the construction of dwelling units but maximise the efforts to make available developed land at the appropriate time for housing programmes of other agencies like co-operative societies and private individuals to construct their houses.
- (b) Emphasis on the development authorities, Nagar Mahapalikas, other local bodies and housing boards to act predominantly as facilitators.
- (c) To encourage the private individuals and cooperatives to come forward in collaboration with the farmer and other land owners to develop the land and to construct dwelling units within the provisions of the development plan of the areas. Here again Housing Board, Development Authority, Nagar-Mahapalikas and other local-bodies are expected to act as facilitators to take the responsibilities of providing external development and higher order facilities and services like water-supply,

drainage, sewage, electric supply, communication, medical, education and recreation.

- (d) Financial requirements specially of the weaker sections are to be solved by giving encouragement to such housing schemes which will facilitate low cost housing equitably between the needy population groups and channelising people's savings through the national Housing Bank.

1.32.31 The Working Group on Urban Housing has recommended a programme for the construction of 14.00 lakh housing units and 3.50 lakh plots during Eighth Five Year plan out of which 50,000 housing units are to be taken-up under state plan schemes. In order that the state govt. plays the role of a facilitator, a larger share of plots have been recommended to be developed in this sector. the proposed break-up of physical targets of houses and plots according to source of finance is given below:-

Table 13.2.2
Proposed breakup of physical targets

		(In lakh)		
Sector/Sub-Sector	Source of Finance	No. of houses	No. of plots	Total units
1	2	3	4	5
1. (A) Public/state	(a) State sector for EWS/LIG/MIG	0.5	-	0.5
	(b) State sector for land acquisition and development.	-	1.0	1.0
	Total state sector	0.5	1.0	1.5
(B) Public/non state	(a) Institutional sources for EWS & LIG including HUDCO & National Housing Bank	3.50	0.2	3.7
	(b) S.F.S. Scheme for MIG, &HIG	0.80	-	0.80
	Total non-state sector	4.30	0.2	4.50
	Total Public sector	4.8	1.2	6.0
2.	Houses constructed and plots developed by Co-operative Societies under the co-operative sector.	2.8	0.7	3.5
3.	Houses constructed and plots developed under private sector (N.H.B. programme)	6.4	1.6	8.0
Total Programme (1+2+3)		14.0	3.5	17.5

State Sector Programme

13.2.32 The proposed physical and financial programme of construction of houses and development of land for state government during the eighth plan is given below:

Table 13.2.2
Proposed Programme of state government

Scheme	Target		
	Dwelling units (nos)	Contribution per D.U.(Rs.)	Total cost (Rs. in lakh)
1	2	3	4
1. Sites and Services	3000	10,000	300
2. EWS	13000	20,000	2500
3. LIG	4200	30,000	1250
4. MIG	450	70,000	300
Total D.U.s.	20650		4400
5. Land Aquisition and Development			3750
6. Seed capital			1500
7. U.P.Cooperative Housing Federation			150
Grand Total	20650		9800

13.2.32 The various housing schemes for which the allocations have been proposed in the state plan are as below:-

13.2.33 Sites and services: In the "sites and services" programme smaller size plots will, be developed so that a need based dwelling unit can be constructed on the plot by the beneficiary himself. the plots under 'sites and services' programme would be allotted on hire-purchase basis to beneficiaries under 'EWS' category. The sites would be provided with the basic facilities like paved paths, drains and street light. Each unit will have one water tap and a flush latrine. The remaining construction will be done by the allottee himself. The financial assistance for one such unit will be about Rs. 10000/- which would be in the shape of loan. It is proposed to construct 3000 'sites & services' during the Eighth Five Year Plan period. The units will be allotted to the persons having income upto Rs. 700 per month. The proposed allocation for sites and services during Eighth Five Year Plan (1990-95) is Rs. 300.00 lakh and for the annual plan : 1991-92 is Rs. 50.00 lakh.

13.2.34 E.W.S. Housing : Under this scheme one room tenement will be constructed and the financial assistance of Rs.

20,000/- per unit would be required in plains and the whole amount will be as loan, whereas in hills, the financial assistance will be Rs. 24,000/- per unit, out of which Rs.4000/- will be as subsidy and remaining Rs. 20,000/- as loan. It is proposed to construct 13000 dwelling units during Eighth Five Year Plan period. The houses so constructed will be allotted to the persons having monthly income upto Ra. 700/-. The proposed allocation for Eighth Five Year Plan (1990-95) is Rs.25.50 crore including Rs. 0.50 crore for hills and for annual plan (1991-92) is Rs. 4.55 crore including Rs.0.05 crore for hills.

13.2.35 Low Income Group Housing Scheme: Under this scheme, it is proposed to construct houses for the persons having monthly income between Rs. 701/- to Rs. 1500/-. The financial assistance required for each unit will be about Rs. 30,000/- in plains and the whole amount will be as loan, whereas in hills the financial assistance will be Rs.36,000/- out of which Rs.6,000/- will be in the shape of subsidy and remaining Rs. 30,000/- as loan. It is proposed to construct 4,200 dwelling units under this scheme during Eighth Five Year Plan period. The proposed allocation for the Eighth Five Year Plan (1990-95) is Rs. 12.50 crore including Rs. 0.50 cr.for hills and for annual plan 1991-92 is Rs. 125 lakhs, including Rs. 5.00 lakh for hills.

13.2.36 Middle Income Group Housing Scheme: Under this category, the persons having monthly income between 1501/- to 2500/- will be covered. The financial assistance required for one unit will be about Rs. 70,000/- and the whole amount will be in the shape of loan only. It is proposed to construct 450 dwelling units during Eighth Five Year Plan period. The proposed allocation under this scheme for Eighth Five Year plan (1990-95) is Rs. 3.00 crore and for annual plan (1991-92) is Rs. 50.00 lakh.

13.2.37 The units proposed under all the above schemes will be constructed through U.P.Housing & Development Board, Development Authorities and local bodies. The govt.will provide financial assistance to these agencies as permissible under specific schemes to construct houses for different income groups and allot them on hire purchase basis.

13.2.38 Land Acquisition & Development Scheme: This scheme envisages acquisition of land for planned area development in accordance with a master plan. The scheme is intended to help in stabilisation of prices, rationalisation of urban development by making suitable provisions for social and services-infrastructure. Under the scheme, it is proposed to make available sufficient number of developed building sites at a reasonable cost to the intending house builders, more particularly to persons belonging to low income group and economically weaker sections of the society. It is proposed to allocate a sum of Rs.37.50crores including Rs. 2.0 crore for hills for this programme, during the Eighth Five Year Plan. The

proposed allocation for 1991-92 is Rs.620.00 lakh including Rs. 40.00 lakh for hills.

13.2.39 Seedcapital: In order to solve the housing problem expeditiously the government has created development authorities and special area development authorities in various cities of the state and the government has been providing them financial assistance in the shape of seed capital. Which is also required for obtaining institutional finance from HUDCO for their housing programmes since land costs cannot be normally financed under the graded scale of assistance. It is, therefore, proposed to allocate a sum of Rs. 15.00 crores including Rs. 5.00 crores for hills for this purpose during Eighth Five Year Plan. The proposed allocation during Annual Plan 1991-92 would be Rs. 350.00 lakh including Rs. 150.00 lakh for hills.

13.2.40 U.P.Cooperative Housing Federation: The U.P.Cooperative Housing Federation, which is the apex body of primary cooperative housing societies is disbursing house building loans to individual house builders. It is proposed to allocate a sum of Rs. 150.00 lakh as marginal share to the federation during Eighth Five Year Plan and the allocation for 1991-92 is Rs. 50.00 lakh.

RURAL HOUSING

13.2.41 Allotment of house sites in Rural area: Under this scheme housesites measuring 100-150 square yards (83.61 to 125.42 sq. meters) are allotted to the members of scheduled castes, scheduled tribes, village artisans, landless workers and members of other weaker sections of the society, residing in rural areas, who have no house of their own or have insufficient space for their residence. Since the inception of the scheme (1972) upto march.1990, 2240979 families have been allotted house sites, out of this number 16,63,347 house sites have been allotted to scheduled castes /tribes and rest 5,75,969 housesites have been allotted to other eligible rural families.

13.2.42 There is a provision of Rs. 125.00 lakh in Eighth Five Year Plan with a target of providing house-sites to 2.50 lakh families. For annual plan 1991-92 an outlay of Rs.22.50 lakh has been proposed with this outlay about 50,000 families will be allotted house-sites.

13.2.43 Construction assistance to Rural Poors : Nirbal Varg Avas Yojna was started in the year 1979-80 in plain and in 1980-81 in the hill districts by the rural development department. This scheme is now in district sector under the decentralised planning and continuing without any substantial change during Eighth Five Year Plan also. An outlay of Rs. 2080.00 lakh (including Rs. 800.00 lakh for hills) was approved for the

Seventh Plan (1985-90) against this outlay an expenditure of Rs. 6597.10 lakh (including Rs. 631.94 lakh in hills) is anticipated by the end of Seventh Plan. with this expenditure 4,34,166 houses are expected to be constructed against the target of 66662 houses.

13.2.44 Now the old scheme 'Nirbal Varg Avas Yojna' of Rural Development department and U.P. Harijan & Nirbal Varg Avas Yojana has been dropped and in its place a new scheme called Nirbal Varg grasin avas yojna' was introduced on 2nd.oct.,1988. Under this scheme a house costing Rs. 6000 in plains and Rs.7800.00 in hills and cottonsoil areas can be constructed. for which a subsidy Rs. 4000.00 will be given in plains, Rs.3000.00 out of this subsidy will come from funds available under employment schemes and Rs.1000.00 from general fund of the state government and Rs. 2000.00 will also be given as a loan to beneficiary. In difficult areas, the subsidy component will be Ra.5800.00 outof which Rs. 4800.00 will come from employment schemes and Rs.1000.00 from state budget. However the loan component in this case will continue to be Rs. 2000.00.

13.2.45 There is a provision of Rs. 13000.00 lakh including Rs. 1000.00 lakh for hills in Eighth Five Year Plan with a target to construct 5.00 lakh houses. For annual plan 1991-92 anoutlay of Rs.2205.64 lakh including Rs.150.00 lakh for hills, has been proposed.with target to construct 1.00 lakh houses With a unit cost of Rs. 8000/= in plain and Ra.9800.00 in hills. Financial requirments and physical targete for the Eighth Plan are given in the following table.

Table 13.2.3
Five Year Plan, Yearly construction target and
financial requirement

Year	Target (No. of units)	Fincial Requirment (Rs. in lakh)							TOTAL
		State grant		Fros Employment Schemes		Loan Bank HUDCO		Beneficiary share	
1	2	3	4	5	6	7	8	9	
1. 1990-91	1,00,000	1497.599	80.126	3339.746	2432.49	672.31	94.585	8116.856	
2. 1991-92	1,00,000	1973.004	104.721	3339.746	2432.49	672.31	94.585	8616.856	
3. 1992-93	1,00,000	2448.409	129.316	3339.746	2432.49	672.31	94.585	9116.856	
4. 1993-94	1,00,000	2923.814	153.911	3339.746	2432.49	672.31	94.585	9616.856	
5. 1994-95	1,00,000	3399.219	178.506	3339.746	2432.49	672.31	94.585	10116.856	
Total		12242.045	646.58	16698.73	12162.45	3361.55	472.925	45584.20	

Gramin Avas Parishad

13.2.46 An outlay of Rs.650.00 lakh has been allocated for Eighth Five Year Plan (1990-95). out of which Rs. 100.00 lakh is proposed for the year 1991-92. With this outlay, the parishad proposes to implement Gramin Abadi Paryavaran Yojna to improve rural environmental conditions.

13.2.47 Indira Avas Yojana : Under rural landless employment guarantee programme Indira Avas Yojana was started in 1985-86. under this scheme dwelling unit is provided to weaker section families belonging to scheduled caste/scheduled tribes and free bonded labourers, alongwith an employment of at least 100 mandays in a year. A house costing Rs .6000 in plain and Rs. 7800 in hills and black cotton soil areas is constructed through District Rural Development agencies. For each dwelling unit, one latrine costing Rs.1200.00 is also constructed and infrastructure work at the rate of Rs.3000 per unit is done to provide necessary facilities like potable water, link road, drainage.

13.2.48 During Seventh Plan 1,24,185 houses were constructed and employment of 417.75 lakh mandays was generated involving a total expenditure of Rs. 11326.68 lakh. It is proposed to construct 4,20,650 units during Eighth Five Year Plan. This is 100% centrally sponsored scheme with in Jawahar Rozgar Yojna. Keeping 1990-91 as base year, unit cost increased by Rs. 500 and accordingly targets have been fixed. During 1990-91 this scheme is being implemented within Jawahar Rozgar Yojna. Unit cost is approved by the Government of India.

13.2.49 Construction of Houses through U.P. Harijan and Nirbal Varg Avas Nigam Ltd : Most of scheduled caste/scheduled tribes and denotified tribe families do not have proper living accomodation. It was proposed to construct about one lakh houses for them in Seventh Plan at a cost Rs. 6000/- per house through Nigam. An outlay of Rs. 1625.00 lakh including Rs. 100.00 lakh for hills was provided in seventh plan against which an expenditure of Rs. 819.10 lakh (including Rs.38.00 lakh in hills) has been incurred during 1985-88. Now, this scheme has been merged with new scheme, namely "Nirbal Varg Gramin Avas Yojana".

13.3 Urban Development

Uttar pradesh had a population of 110.86 million in 1981, By 2001 total population of the State is anticipated to reach 166.00 millions. On the other hand, the urban population of the State has increased from 12.38 millions in 1971 to 19.90 millions in 1981 showing an annual growth rate of 4.9% during 1971-81, which is much higher than the all India urban growth rate of 3.8%. Thus in the State, the urban

population has increased by 60.74% during the decade. By the end of 2001, it is expected that about one third of the total population of the State would be living in urban areas. The number of urban settlements increased from 293 in 1971 to 659 in 1981.

13.3.2 Rapid population growth and urban poverty have had a serious impact on physical conditions in cities. The present conditions of urban infrastructure services and shelter reflect the quality of urban life. A review of urban physical conditions and functions reveal deficiencies in land management policies, services and housing. Therefore, there is a need to strengthen urban planning and service institutions and service delivery institutions, improve the use of available resources and to improve local resource mobilisation.

13.3.3 The Seventh Plan recognised the significance of physical planning as an indispensable component of planning efforts. Urban development has been seen as complementary to rural development. Therefore, urban problems should be viewed in the context of its relationship with rural development.

Review of the Seventh Five Year Plan

13.3.4 In the Seventh Five Year Plan the major emphasis was placed on environmental improvement of slums, integrated development of small and medium towns, development of National Capital Region, Kanpur Development project and preparations of master plans regional plans for the fast growing urban centres selected regions.

13.3.5 Against the allocation of Rs. 24700.00 lakhs for urban development in the Seventh Five Year Plan an amount of Rs. 21664 lakhs was spent by the end of the plan. This expenditure does not include the Central Govt.'s share of Rs. 25.41 crores, for I.D.S.M.T. (Rs. 6.91 crores) and development of NCR-sub-region (Rs. 18.50 crores) during the Seventh Five Year Plan period. World Bank assisted Kanpur Urban Development Project was provided an outlay of Rs. 1100 lakhs during the Seventh Plan, against which an expenditure of Rs. 2553.00 lakhs was incurred and the project was completed during 1987-88.

13.3.6 Allocations for Environmental Improvement of slums scheme was Rs. 3700.00 lakhs for the Seventh Five Year Plan against which a sum of Rs. 2390.00 lakh was spent by March 1990. This component is included in 20-Point Programme. So

far as the physical achievements are concerned, about 10.06 lakh persons were likely to be benefitted by March 1990 against the Seventh Plan target of 15.00 lakh persons.

Objectives of Eighth Plan

13.3.7 The basic objectives for urban development efforts during the Eighth Five Year Plan would be:

- (1) To establish adequate investments and growth potentialities in selected priority towns in regional context for or induced development to infuse growth impulses.
- (2) To evolve a spatial pattern of economic development based on regional planning consideration.
- (3) To secure optimum distribution of population between urban and rural settlements, region-wise, both in long term and short term perspective. There is need to control the rural-urban migration and develop Small & Medium towns as service centres to support their influence zone and provide employment opportunities and economic development for their rural hinterland. Moreover, agricultural sector and cottage industries based on agricultural products should be developed in rural areas for rural prosperity.
- (4) To secure distribution of economic activities in small and medium size towns and new growth centres to induce desired population distribution and achieve maximum economic growth for future.
- (5) To control and arrest future growth of Metropolitan cities by dispersal of economic activities, legislative measures and establishment of counter-magnets in their region.
- (6) To provide minimum level of services and to improve quality of life in rural and urban areas and reducing Urban-Rural disparities, some programme viz. Environmental Improvement Schemes, Urban Basic Services etc. Strategies.

13.3.8 The strategy for planned urban development in the Eighth Five Year Plan would be to make urban development efforts as complementary to rural development. To achieve this objective induced development of different spatial priority regions and towns would be required to evolve a spatial pattern of economic development of these regions in the State. To strengthen the urban-rural linkages urban areas would function as critical hubs of local economic development,

market-outlets for agricultural products, sources of technical expertise and capital and processing centres and provide public services. Measures would also focus on improving the environment of slums, enhance the supply of shelters, sanitation services, potable water supply, safe and efficient transport services etc.

13.3.9 It has been realised that urban and regional programme will achieve more significance with recognition of physical planning efforts. Therefore, effective organisation, coordination and monitoring of urban development programmes within a perspective plan will be essential to enlarge the role and scope of State level Town & Country Planning Department. There is also a need for more wide coverage under the IDSMT programme in order to distribute the benefits of regional planning efforts. It is also realised that resources will have to be created for urban traffic and transportation sector as a part of urban development programmes. Besides, this, a much greater coordination is called for between industrial location policies and urban development in the State. There is a need for upgrading capacities of the State level organisations in respect of technical expertise available for urban planning and developments. Side by side there is also need for co-ordinating the urban programme of other development departments. At the local level, there is a need to strengthen the urban local Bodies for an efficient delivery system.

**Proposed Programme for
Eighth Five Year Plan**

13.3.10 The sector of Urban Development has generally been attached a low priority in earlier Five Year Plans of the State. The outlay earmarked for this Sector in different FIVE YEAR PLANS is given in the following table:

Table 13.3.1
Expenditure in previous Plans
(Rs. in crores)

Plan Period	Expenditure
1. First Plan	No Scheme
2. Second Plan	No Scheme
3. Third Plan	0.26
4. Three Annual Plans (1966-69)	0.32
5. Fourth Plan	1.16
6. Fifth Plan	7.93
7. Sixth Plan	53.39
8. Seventh Plan	216.68

13.3.11 An Outlay of Rs. 521.00 crores has been proposed for Eighth Year Plan for various schemes under this sector.

A brief description of each of the scheme is also given as follows.

13.3.12 National Capital Region : Under this scheme a sum of Rs. 80.00 crores is proposed to be allocated during Eighth Plan as States share. Being A centrally sponsored scheme on 50:50 matching basis the similar amount is expected from Central Govt. For the Annual Plan 1991-92, the proposed allocation is Rs. 7.50 State's share.

13.3.13 Integrated Development of Small & Medium Towns : This is centrally sponsored scheme and is funded on a matching basis. The scheme is implemented in accordance with the guide lines issued by the Ministry of the works and Housing Govt. of India. The component of the scheme eligible for central assistance are land aquisition and land development, Traffic and transportation. The projects prepared under this scheme also provide for construction of roads and improvement/upgradation of existing roads, development of mandies, markets and processing facilities and low cost sanitation, all of which are required to be finided by State Plan.

13.3.14 In the State, There are 659 urban-centres as per 1981 census and 122 towns are under the population category between 20,000 & 50,000. Presently this scheme is operative in 36 towns only, and it is proposed to take-up 35 new towns during the Eighth Five Year Plan. The proposed outlay for eighth Plan and Annual Plan 1991-92 is Rs. 1500.00 lakh & 200.00 lakh respectively.

13.3.15 Environmental Improvement of Urban Slums : The working group has suggested that this scheme should be extended to cover all the towns having population more than 20,000. By the year 1991 the number of towns having population more than 20,000 is likely to reach 219. Thus, this scheme will have to be implemented at least in 152 towns during Eighth Five Year, Plan.

13.3.16 An outlay of Rs. 53.50 crores is proposed (including Rs. 3.50 crores for hill projects) for this scheme, during Eighth Five Year Plan. The proposed target would be to benefit 12.00 lakh slum population. The proposed outlay for 1991-92 is Rs. 850.00 lakh including Rs. 50.00 lakh for Hills.

13.3.17 Urban Development Scheme (Grant to Development Authorities & Local Bodies for Non-remunerative Schemes) : Presently this schemes is operative only in large towns. But as per the policy of the Government, it is desired to develop small and medium towns for balanced development of the region. Hence it is proposed that all district headquarters & some other small and medium towns should be included under the perview of this programme.

13.3.18 It is proposed that during Eighth Five Year Plan, financial assistance will be provided for the following items also to increase scope of the scheme.

I. Existing Items:

- A. Park
- B. Offices
- C. Community Centres
- D. Beautification Schemes
- E. Electric Crematorium

II. New Items (proposed)

- A. Auditoriums
- B. Bsl Bhawans
- C. Barat Ghar
- D. Libraries &
- E. Town Open Centres.

13.3.19 An outlay of Rs. 100.00 lakhs was allotted for the Seventh Plan period. Against this, the Seventh Plan expenditure was Rs. 681.83 lakhs (in plains only). No outlay was allocated for Hills during Seventh Plan, but a sum of Rs. 879.41 lakh has been spent in Hills for this programme. The proposed outlay for the Eighth Five Year Plan will be Rs.33.00 crore include Rs. 11.00 crores for hills.

13.3.20 The proposed allocation for 1991-92 is Rs. 310.00 lakh including Rs. 60.00 lakh for Hills.

13.3.21 U.P. Urban Development & Water Supply Project : The State Government formulated an urban development and water-supply Project covering Twelve cities in the State for assistance of the World Bank.

13.3.22 The basic objective of the project is to improve urban management finance and resource mobilisation through the strengthening of key urban institutions in the project towns particularly management and financing of services through a programme of physical works designed to reduce the existing serious deficits in urban services like shelter, water-supply, sanitation, drainage solid-waste-management, traffic management etc.

13.3.23 The total estimated cost of the U.P. Urban Development Project for 11 towns upto 1994 was Ra. 246.11 crores. However, a provision of Rs. 151.50 crores was made for the project in the Rs. Seventh Five Year Plan and the actual expenditure was Rs. 123.77 crores. As per negotiations with the World Bank, 4 new towns have been included in the project & the Project is expected to be completed in the years ending 1993-94; with the revised estimated cost of Rs. 346.11 crores. Therefore, a provision of Rs. 222.34 crores is being

proposed for the U.P. Urban Development Project during Eighth Five Year Plan. The proposed outlay for 1991-92 is Rs. 40.00 crores.

13.3.24 Urban Basic Services : During the financial year 1988-89, an outlay of Rs. 1.00 lakh was available. A sum of Rs. 5.00 lakh was proposed in the annual Plan of 1989-90. An expenditure of Rs. 5.00 lakh was incurred during Seventh Five Year Plan. For Eighth Plan outlay of Rs. 0.66 crores is proposed with an annual Plan proposal of Rs. 10.00 lakh during 1991-92. "Urban Basic Services For Poor" is 100% centrally sponsored scheme for which during 1990-91, Rs. 338.00 lakh have been allotted.

13.3.25 Urban Transportation : The most common traffic problems encounter in the cities are traffic congestion, narrow-Roads, mixed-traffic of slow & fast moving vehicles reducing the speed, inadequate public transport facilities leading to delays, lack of parking facilities; poorly developed pedestria facilities high-accident rates, encroachments, lack of coordination between transport-traffic-engineering & planning agencies, all these contribute significantly to an under utilization of available road capacities. Another lacunee in the realisation of appropriate urban-growth has been paucity of funds for undertaking capital road projects as per the Master Plan.

13.3.26 Under the project professionally managed Traffic-Engineering & Management Cell (TEMC) will be set-up at each of the towns of Agra, Varanasi, Allahabad & Lucknow to evolve suitable strategies for tackling Urban Traffic & Transport Problems. In Eighth Plan 6.00 cores is proposed for Urban Transportation Sector with an annual outlay proposed of Rs. 50.00 lakh for 1991-92.

13.3.27 Urban & Regional Planning: The allocation under this head is utilised for the establishment of State Town & country Planing Deptt. for preparaton of Master Plans and Coordination and Monitoring of the Urban Development Scheme to provide technical guidance to various Development Authorities and Local Bodies in the field of Housing & Urban Development and also preparing layout & Building Plans for their schemes.

13.3.28 Thus it would be essential to create local level units of Town & Country Planning Department in all district headquarters of the State. All the 18 units of IDSMT functioning at different district headquarters will also have to be strengthened. All these units will be responsible for the revision of existing Master Plans preparatiuous of Master Plans for new towns as well as zonal development and regional plans.

13.3.29 In Physical terms there are 659 cities/towns in the State, out of these 68 urban centres being development oriented are likely to creat such problems in near futre. Out

of these 68 towns; Master Plans for only 22 towns could be prepared during the last two decades. All these Master Plans needs to be revised.

13.3.30 This Department has already completed revision work of 3 master plans and revision work of 2 master plans is under progress but the revision of remaining 17 master plans is still to be taken up. Hence the physical targets during Eighth Five Year Plan would be as follow :

Revision of 17 Master Plans
Preparation of Master Plan for 25 new towns and
Preparation of 150 Zonal Plans.

13.3.31 A sum of Rs. 145.00 lakh was allocated during Seventh Five Year; against which actual expenditure was Rs. 209.01 lakhs, with a view to taking up the above projects/scheme, the plan outlay for urban & regional planning scheme is proposed for Eighth Five Year Plan as Rs. 12.00 crores including Rs. 1.00 crore for Hill areas with an annual outlay of Rs. 1.38 crores.

13.3.32 Establishment subsidy to 'Hills' development authorities : Under the present system rupees three lacs is provided; rupees one lac each year; for first 3 years as establishment subsidy to development authorities in hill area.

13.3.33 During the Seventh Five Year Plan no allocation was provided for this scheme but an expenditure of Rs. 15.00 lakh was incurred during the Seventh Five Year Plan period. During Eighth Five Year Plan an outlay of Rs. 50.00 lakh is proposed with an annual plan proposal of Rs. 2.00 lakh for 1991-92.

13.3.34 Smt. Indira Gandhi Memorial Complex : Indira Gandhi Memorial Complex is being constructed at Lucknow in memory of the Late Prime Minister, Smt. Indira (Priyadarshini) Gandhi. The Memorial is designed to include auditorium, meeting-hall, library, exhibition-room, Cafeteria, art Gallery etcetra. Land has been acquired for this project. The works of Flood Protection accessibility improvement & Land development are under progress.

13.3.35 An outlay of Rs. 15.00 crore was provided in Seventh Five Year Plan; against this a sum of Rs. 2.76 crores was spent. It is proposed to allocate a sum of Rs. 30.00 crores in the Eighth Five Year Plan with an allocation of Rs. 2.50 crore for Annual 1991-92.

13.3.36 Regional Centre (Lucknow University) : The Regional centre for urban & environmental studies, Lucknow-University had been set-up by the State Government to provide training facilities.

13.3.37 A sum of Rs. 15.00 lakh was provided during Seventh Five Year Plan; against this a sum of Rs. 27.00 lakh was spent. An outlay of Rs. 100.00 lakh is therefore proposed to be provided during Eighth-Five Year Plan with annual Plan proposal of Rs. 10.00 lakh during 1991-92.

13.3.38 Night shelter for pavement dwellers : This scheme is executed in Lucknow and Kanpur in first phase. The cost of per unit night shelter works out to be Rs. 5750 at present prices, out of which Rs. 4000 will be loan from HUDCO, Rs. 1000 as grant from Govt. of India and in the remaining Rs. 750 of the scheme Rs. 375 by the concerned local body. This scheme will be executed in other towns also during the Eighth Five Year Plan period for which grant from Govt. of India will not be provided. Therefore, besides Rs. 4000 as loan from HUDCO; Rs. 1750 will be required as grant from the State Govt. Therefore, to implement this scheme in metropolitan and other towns, on the basis of Rs. 2.00 crores each year, a sum of Rs. 10.00 crore is required during Eighth Five Year Plan.

13.3.39 Development of Spatial Priority Urbanisation Regions: National Commission on Urbanisation in its Report has suggested SIX Spatial Priority Urbanisation Regions in the State for their priority development. During Eighth Plan Ten Spatial Priority Urbanisation Regions (excluding 'NCR' for priority development with Central Government intervention. The working-Group recommended that on the pattern of NCR a sum of Rs. 8.0 lakh per year for each region will be a reasonable amount. Thus the total requirement for the Plan period will be Rs. 4.00 crores for which 50% i.e. Rs. 2.00 crores should be provided by the Central Government on matching basis and balances of Rs. 2.00 crores by the State Government. For annual Plan of 1991-92 an outlay of Rs. 10 lakh is proposed.

13.3.40 Development of National Priority Cities: (NPC) The National Commission on Urbanisation has identified 7 priority-cities in the State for their induced development. The working-Group recommended dropping Aligarh from National Priority Cities and inclusion of three more cities. Thus working group suggested 9 cities in the State for induced development with Central Government intervention. On the pattern of priority towns in NCR. The working group has proposed an outlay of Rs. 2.00 crore for Eighth Five Year Plan out of which 50% should be provided by Central Government on matching basis like NCR i.e. Rs. 1.00 Crore by Government of India and Rs. 1.00 by State Government. Rs. 10.00 lakhs are proposed as State Share' for 1991-92.

13.3.41 Development of State Priority Cities (SPC) : National Commission on Urbanisation has identified 36 cities under state Priority Cities, But the working Group has proposed 6 more cities for inclusion in the priority category i.e. 2 State Priority Cities.

13.3.42 These towns/cities will provide necessary impulses to evolve a spatial pattern of economic development based on Regional Planning Considerations. For Eighth Five Year Plan a sum of Rs. 2.00 crore is proposed for this scheme with annual outlay proposed of Rs. 10.00 lakh for 1991-92.

13.3.43 Nehru Rozgar Yojna : The Nehru Rozgar Yojana has been designed to provide employment to the Urban unemployed and under employed poor. While the target group of the yojana is urban poor, women beneficiaries belonging to Scheduled Caste and Scheduled Tribes will constitute special target group. This scheme consists of the following three components.

- (a) Scheme of Urban Micro Enterprise : Under this segment it is proposed to encourage under employed/unemployed urban youth to set up small/micro enterprises relating to servicing, petty business and manufacturing for which there is lot of potential in urban areas. The financial assistance will be 75% loan and 25% subsidy. The loan component will be provided by Banks where-as subsidy will be shared equally by State and Central Government on 50:50 Matching basis.
- (b) Scheme of Wage Employment for Public Assets Creation : It is proposed to provide wage employment for urban poor beneficiaries by utilizing their labour for construction of socially and economically useful public asset in the jurisdiction of urban local bodies. The nature of municipal works contemplated relate to low cost water supply pour flush community latrines, drainage related earth works, community facilities etc. in urban settlements below 20,000 persons, the material labour ratio will be 50:50. In urban settlements between 20,00 and lakh the material labour ratio will be enhanced to 60:40. Prevailing minimum wage applicable to the area will be paid. The financial assistance will be in the ratio of 80:20 by Government of India and State Government.
- (c) Scheme of Employment Through Housing and Shelter Upgradation : It is proposed to enable households belonging to economically weaker sections (as per the prevalent HUDCO definition of EWS Housing with emphasis on households with an annual income of less than Rs. 7,200 to construct simple dwellings or to upgrade their dwellings with improvement of wall, flooring, additional rooms etc at a cost of Rs. 4,000. 25% subsidy with a ceiling of Rs. 1,000 would be available for this purpose and loan of Rs. 3,000 from HUDCO at 6.25% rate of interest. The subsidy of Rs. 1,000 per unit will be shared

between the central and state governments with central government providing Rs. 800 and state Government Rs. 200.

13.3.44 Apart from the components mentioned above the Government of India will provide 100% subsidy for training and infrastructure support under (a) and (c) component of the Scheme.

13.3.45 It is proposed to allocate a sum of Rs. 52.00 crore including Rs. 2.00 crores for Hills during Eighth Five Year Plan and Rs. 13.00 crore including Rs. 0.50 crore for Hills for Annual Plan 1991-92.

-----*

CHAPTER XIV

INFORMATION AND PUBLICITY

A two way communication between Government and the people of the State is essential in a democratic set up. With this objective, the Department of Information and Public Relations is utilising different media for conveying to the people policies and programmes of the government through press releases, articles, folders, posters, documentary films, radio, television, exhibitions etc. On the other hand, public reactions, suggestions, and comments are also brought to the notice of the Government through daily scrutiny of articles appearing in the newspapers, magazines etc. This not only helps in securing public participation and co-operation in various developmental activities of the Government but also provides basic feedback to the Government for framing future policies.

14.0.2 In the Seventh Five Year Plan (1985-90) a total expenditure of Rs. 1600.43 lakh has been incurred during the aforesaid period. The main physical progress achieved during the Seventh plan (1985-90) comprises production of 34 documentary films, 16 newsreels, publication of 322 booklets and 7 posters, organization of 1647 exhibitions, 10,573 cultural programmes, 260 sponsored radio programmes and installation of 3933 T.V. sets and 13 V.C.R. units. Besides this 882 T.V. sets were installed in hill areas and 1235 T.V. sets against I.P.P. Scheme. Two T.V. towers were installed at Mainpuri and Manakapur (Gonda).

14.0.3 The main thrust in the information sector in Eighth Five Year Plan is to re-organise the structure of the department and to strengthen the Information Bureau. Press Bureau, and other important sections of the department with staff and latest publicity equipments.

14.0.4 An outlay of Rs. 2250.00 lakh has been proposed for the Eighth Five Year Plan 1990-95. The physical targets proposed for Eighth Plan include production of 44 newsreels, and 40 documentary films, organisation of 2000 exhibitions, 15,000 cultural programmes, 260 sponsored radio programmes. Publication of 670 booklets and 10 posters, installation of 3,600 T.V. sets in plains and 410 T.V. sets in hill areas.

14.0.5 A total outlay of Rs. 330.00 lakh was sanctioned for the first year of the Eighth Plan, (1990-91) including Rs. 25.00 lakh for hills. This outlay has been utilized to achieve the targets of production of 6 newsreels and 5 documentary films, organisation of 200 exhibitions, 2000 cultural programmes and 52 radio programmes, publication of 100 booklets or development and 2 posters, installation of 632 T.V. sets

including 32 T.V.sets in hill areas.

14.0.6 An outlay of Rs. 329.00 lakh has been proposed for the year 1991-92, including Rs. 40.00 lakh for hills. The physical targets proposed for 1991-92 include production of 7 documentary films(3 for hills) and 8 newsreels, organisation of 300 exhibitions, 2,500 cultural programmes and 52 sponsored radio programmes. Publication of 120 booklets on development and 2 posters, installation of 675 T.V. sets including 75 T.V. sets for Hills.

-----*

CHAPTER XV

WELFARE OF SCHEDULED CASTES, DENOTIFIED TRIBES AND OTHER BACKWARD CLASSES.

Emphasis is being laid on the educational development of weaker section of the society, particularly Scheduled Castes, Denotified Tribes and other Backward classes. According to the Census of 1981 the total population of the State is 11.09 crores of which Scheduled Castes population is 2.34 crores which is 21 percent of the total population. There are 66 Scheduled Castes, 70 Denotified Castes and 56 Backward Castes in the State. The literacy percentage among the Scheduled Castes is only 14.9 percent which is far below the general literacy percentage of 27.16. The literacy percentage among the Scheduled Caste women is only 3.9 percent. The retention rate among the scheduled caste boys and girls is 27.7 percent and 82.7 percent at the Primary and Junior High School level respectively.

ACHIEVEMENTS OF SEVENTH PLAN

15.0.2 The Seventh Plan provided for an outlay of Rs. 96.48 crores against which an expenditure of Rs. 137.88 crores has been incurred. In addition, the State Government has placed special emphasis to ensure regular flow of benefits of sectoral programmes in different sectors to Scheduled Castes under the Special Component Plan. It can broadly be divided into the categories of educational and financial support. Educational programmes include grant of scholarship, non-recurring assistance for purchase of books, reimbursement of fees, establishment of Ashram Type Schools, Hostels and Book Banks. Assistance to voluntary organisations for running Primary Schools, Hostels and Libraries. Programme of financial support include assistance for marriage and treatment in severe illness, and also financial assistance in case of atrocities. The targets and achievements of Seventh Plan under selected programmes is given below:-

	<u>Students (No.)</u>	
	Target	Level Achieved
1. Education		
A. Scholarship Scheduled Castes:		
(1) Primary level classes (I to V)	7,50,000	7,50,000
(2) Junior High School level classes (VI to VIII)	All students	2,50,000
(3) Prematric classes (IX & X)	All students	2,20,000
(4) Postmatric level classes	All students	2,25,000

	Students (No.)	
	Target	Level Achieved
B. Scholarship-Denotified Tribes:		
(1) Primary level classes (I to V)	All Students	30,000
(2) Junior High School level classes (VI to VIII)	All Students	11,000
(3) Prematric Classes (IX to X)	All Students	10,000
C. Scholarship Other Backward Classes:		
(1) Primary Level Classes (I to V)	2,25,000	2,32,000
(2) Junior High School level Classes (VI to VIII)	1,02,000	1,18,000
(3) Prematric Classes (IX to X)	--	56,000
2. Establishment of Hostel	(Boys) 100 (Girls) 11	20 7
3. Establishment of Ashram Type School	35	14
4. Establishment of Book Bank	--	26
5. Establishment of Coaching Centres	5	5

15.0.3 During the Seventh Plan sufficient fund were made available to this sector yet there had been certain gaps in the implementation i.e. Hostels could not be constructed and ATS could not be established against the targeted number. Similarly it was proposed to cover all the school going Scheduled Caste children from class VI to X under scholarship schemes and to increase the rate of Scholarship from Rs. 12/= to Rs. 30/= per month at Junior High School level and from Rs. 22/= to Rs. 40/= per month at Pre-matric level. But during seventh Plan only 2.5 lakhs could be covered out of 7.87 lakhs this rate could be increased to Rs. 20/= and Rs. 30/= per month at the Junior High School and Pre-matric level respectively. Similarly as against the target of 111 only 27 Hostel could be established.

15.0.4 Another shortfall has been in the utilization of capacity created. For example the hostels for girls could not be run for want of staff. Capacity of P.C.S. coaching centres could also not be utilized for want of staff. Construction of buildings have also suffered on account of non-availability of free land.

Strategy and Programmes for Eighth Plan

15.0.5 A comprehensive review has been made of the existing infra-structure and schemes of the department under 'zero base' budgeting system. It is aimed at optimum utilization of existing infra-structure, increasing effectiveness of the

schemes and improving delivery system. Keeping in view these objectives in mind following programmes and schemes are proposed to be taken up during Eighth Plan period.

15.0.6 Educational Programmes : The percentage of literacy among the Scheduled Caste is far below the general classes. The rate of dropouts among the Scheduled Caste students at primary level is also very alarming. Besides the gap between the number of enrolled students and number of students covered under the departmental schemes is also increasing gradually. Hence it is proposed to continue assigning priority to the educational schemes including grant of Scholarship, non-recurring assistance for purchase of books, reimbursement of fees, establishment of hostels, A.T.S., Book Banks, Coaching Centres etc. Besides, maintenance cost will also be provided to the girls residing in hostels. It is also proposed to award Incentives-grants to those educational institutions which put extra efforts for improving the educational standards of the Scheduled Caste students. Main schemes proposed are as under:-

15.0.7 Scholarship during Seventh Plan were given at the rate of Rs. 12/=, 20/= and 30/= per month at Primary, Junior High School and Pre-matric level respectively. It is felt that these rates are very low. It is proposed to increase these rates to Rs. 20/=, 30/= and 60/= per month at Primary, Junior High School and Pre-matric level respectively. It is also proposed to increase the coverage by 20 percent each year and 100 percent by the end of Eighth Plan. Thus an outlay of Rs. 94.26 crores is proposed for the scheme of Scholarship for Eighth Plan and Rs. 19.91 crores for 91-92. A new orientation is also proposed to be given to the scheme by adding the element of merit. A higher rate of scholarship in IX and X classes is proposed to the students securing 60 percent marks in the previous class.

15.0.8 Incentive to Educational Institutions : In the Seventh Plan, schemes for running coaching class for the students of X and XII classes were launched. A critical review of the scheme clearly brings out the ineffectiveness of the programme. Now it is proposed to give Incentive grants to educational institutions, putting extra efforts for the improvement of educational standards of the Scheduled Caste students. An outlay of Rs. 119.00 lakh has been proposed for the Eighth Plan period and Rs. 5.00 lakhs for 1991-92.

15.0.9 Construction of Hostels: During Seventh Plan periods buildings of only 20 hostels for boys and 7 hostels for girls were constructed as against the target of 100 and 11 respectively. Keeping in view the fact that 85 percent Scheduled Caste population resides in villages, where educational facilities are inadequate, and that the total capacity of Hostels for Scheduled Caste students in the State is only for about 11000 boys, it is proposed to construct more hostels for boys as well as girls. An outlay of Rs.1080 lakh is proposed for construction of 45 hostels for boys and

Rs.365.00 lakh for construction of 16 hostels for girls. It is also proposed to give maintenance cost to the Scheduled Caste girls residing in hostels. An amount of Rs. 25.00 lakh is expected to be utilized under this scheme in Eighth Five Year Plan while Rs.4.50 lakh is proposed for 1991-92.

15.0.10 Establishment of Ashram Type School (ATS) : At present 33 Ashram Type Schools are functioning out of which one is of Intermediate level and two are of High School level. This scheme has been found useful and it is proposed to increase the number of such schools and to upgrade the existing schools. An outlay of Rs. 1460.00 lakh has been proposed in Eighth Plan for opening and construction of buildings of 15 such schools in the year 1991-92 at the cost of per school Rs. 100.00 lakh. Maintenance grants will also be increased from Rs. 125/= per month per boy to Rs. 200/=. Efforts will also be made to provide co-curricular activities.

15.0.11 Coaching : At present there are 8 P.C.S. Coaching Centres in the State. It is proposed to establish another 5 such centres so as to cover all the divisional headquarters of the State. An outlay of Rs. 20.00 lakh is proposed for this purpose. Besides 13 centres are proposed to be established for imparting coaching to Scheduled Caste boys and girls for Pre-medical and Pre-engineering examinations. For this Rs. 38.00 lakh will be required during the Eighth Plan period.

15.0.12 Economic Development of Nomadic and Vimuktajati artisans of occupational castes and other Backward classes : Upto the end of Fourth Five Year Plan programmes for economic development of these castes were taken up in the central sector. There after, State sector was asked to take care of these communities. Now again these programmes will be taken up under central sector. It is proposed to provide financial assistance of Rs. 5000/= to the members of these communities who are below poverty line for house building and they will also be given a package of programmes for economic development which will include a subsidy of upto Rs. 3000/= per beneficiary.

15.0.13 Publicity and Training: The need for publicising the departmental programmes has been felt long ago. For this purpose a unit was established in First Five Year Plan. This unit has lost its utility, hence it is proposed to close this unit and to run publicity programmes through Information and Public Relations Department of the State. An expenditure of Rs. 25.00 lakhs is anticipated on this account.

15.0.14 Training is another important programme to be taken up in the Eighth Plan. It is proposed that all the officers and staff will be given refresher courses in different disciplines during the plan. Two percent of the total outlay is expected to be utilized for this purpose.

15.0.15 Inter-Caste Marriage Incentive: Marriage between Scheduled Castes and non-scheduled castes is a powerful instrument of social change. It helps in bringing social equality and removal of untouchability. It is proposed that an amount of Rs. 20000/= be given to a couple for inter-caste marriage, provided either the bride or the bride groom belongs to one of Scheduled Castes.

15.0.16 Financial Assistance in Case of Atrocities: At present financial assistance is being provided to the member of Scheduled Caste who fall victims of atrocities. Keeping in view the socio-economic conditions of the member of Scheduled Caste financial assistance will continue to be given.

Welfare of Scheduled Tribes

15.0.17 The effective implementation of tribal development programmes have been accorded top priority during the Eighth Plan Period. It has been proposed to continue the relevant and useful schemes implemented during the seventh plan, besides such new schemes which are beneficial for the socio-economic development of tribals residing in remote areas of hill and plain regions with special emphasis on the generation of employment and self employment avenues. Speedy per capita growth in economy and improvement in the social status of tribals through expansion of adequate and effective educational facilities will also be emphasised. The collaboration and participation of tribal people would be accorded weightage in the preparation, formulation and implementation of Tribal Sub Plan. It has also been proposed to complete the spill-over works of the Seventh Plan period. During Seventh Plan Period an outlay of Rs 1257.00 lakh was allotted for tribal development schemes against which Rs. 1162.18 lakh were spent.

15.0.18 An outlay of Rs. 3100.00 lakh has been proposed for 1990-95 which includes Rs. 1600.00 lakh for Hill region. Similarly an outlay of Rs. 474.00 lakh has been proposed for the year 1991-92 which includes Rs. 200.00 lakh for Hill region.

15.0.19 The schemes of economic development, extension and expansion of educational facilities will mainly be implemented during the Eighth Plan period besides strengthening of Directorate for the effective implementation of various schemes. There were an estimated 28,600 families living below the poverty line at the commencement of the Seventh Plan period. Out of a total 28600 families, 20708 families were assisted to cross the poverty line by the end of the Seventh plan period, the remaining families will be covered under poverty eradication programmes and other employment generation schemes by the end of the Eighth Plan. It has been proposed to conduct fresh economic surveys and evaluation studies of all the tribal families during the Eighth plan period. The families identified on the basis of surveys and evaluation studies would be covered

for economic assistance and employment generation schemes during Eighth Plan period. Besides, family oriented schemes in the sector of agriculture, horticulture, animal husbandry, development of village and cottage industries alongwith human resource development programme for the upgradation of tribal skill would be implemented for improvement in the economic status of the tribals.

15.0.20 Education : Education has been accorded top priority during the Eighth Plan period. It has been proposed to provide cent per cent scholarships to pre-matric students during 90-95. An estimated number of 14,166 tribal students would be benefitted similarly 3000 students would be covered under post matric scholarship scheme by the end of the eighth plan period. It has also been proposed to raise the present rate of scholarship from Rs. 12,20 and 30 to Rs. 20,30 and 60 for classes 1 to 5, 6 to 8 and 9 to 10 respectively during the year 1991-92 for this purpose Rs. 166.92 lakh has been proposed for 1990-95 and while Rs. 28.34 lakh for 1991-92.

15.0.21 Ashram Type School: Since ashram type schools have become very popular among tribal students, it has been proposed to open 16 new Ashram type schools out of which 10 will be located in plain region and remaining six in Hill region. Five existing Ashram type schools, also be upgraded during Eighth Plan period. For this scheme an outlay of Rs. 1234.73 lakh has been proposed for 1990-95 while Rs. 203.82 for 1991-92.

15.0.22 Besides, it has also been proposed to open 10 hostels which include 6 for boys and 4 for girls to support this scheme Rs. 218.95 lakh is proposed for boys hostels while Rs. 96.00 lakh for girls hostel for Eighth plan period.

15.0.23 Grant to Voluntary Agencies : It has been proposed to provide grants to voluntary agencies engaged in the tribal development work for expansion of educational facilities.

15.0.24 Share-Capital to Tarai Anusuchit Janjati Vikas Nigam: It has been proposed to allocate Rs. 5.00 lakh per year to Tarai Anusuchit Janjati Vikas Nigam for implementation of commercial schemes in plain region so as to enable the tribals to become self-reliant and promote the spirit of entrepreneurship among them.

15.0.25 Besides, the following new schemes would be implemented during Eighth Plan period in order to protect the tribals from exploitation and ensure their proper welfare.

1. Protection of tribals from indebtedness.
2. Assistance to tribal parents for the marriage of their daughters.
3. Scheme of book bank.
4. Assistance to tribal students studying in medical and engineering classes for the purchase of books.

Research and Training Institute

15.0.26 For the development of scheduled castes, scheduled tribes, denotified tribes and other backward classes. The State Institute of Research and Training has been established in 1986--87. The main functions of the Institute are :-

- (i) to conduct action oriented reserach for development of communities.
- (ii) to evolve suitable methodologies for planning and implementation to in specific area and cultural specific programmes.
- (iii) to design suitable . programmes of training for functionaries involved in the task of development of these communities, and
- (iv) to conduct evaluation studies for improvement of the programmes.
- (v) to collect relevant statistics and bench-mark data on the current status of development of different communities in order to assess the impact of development programmes.

15.0.27 Since creation the institute, is engaged mainly in survey and evaluation . Now it is felt that the strenghteing of Institute is necessary. In the Eighth Plan period evaluation and training of officials involved in development process is proposed work of collection of relevent data etc. will be taken up. The Research and Training Institute is a centrally sponsored scheme and is funded on 50:50 basis. An amount of Rs. 75.00 lakh and Rs. 15.00 lakh has been proposed for Eighth Plan Period and For Year, 1991-92 respectively as state share.

-----*

CHAPTER -XVI

LABOUR AND EMPLOYMENT

In a planned economic growth, labour is the most important input for both industrial and agricultural production. Economic development, to a great extent, is dependent on labour, productivity, industrial peace and cordial relation between labour and employers. In a welfare state aimed at providing social justice to its citizens, it becomes foremost duty of the state to ensure that workers get reasonable wages, they are not exploited and their living and working conditions are improved.

16.0.2 Labour and labour welfare sector is classified under following three subheads:

- (i) Labour welfare
- (ii) Employment
- (iii) Craftmen training

Labour Welfare:

16.0.3 The activities under this sub-head are mainly of two types-Regulatory and Welfare. The regulatory activities include the enforcement of various labour laws and settlement of labour disputes. The welfare activities include provision for medical facilities, housing facilities, games, recreational and cultural activities etc. The organisation of Labour commissioner has been set up to achieve these objectives. The enforcement machinery of this organisation supervises coverage and implementation of various labour laws relating to working condition, working hours, wages etc. of workmen. On account of multiplicity of laws for the welfare of working class, the volume of work has substantially increased during the last few years. The number of registered factories, which was 2482 in 1960, has gone up to 11475 in 1989. Similarly the number of workers in these establishments has also gone up from 28,500 in 1960 to 9,02,080 in 1989.

16.0.4 During the Seventh Plan period an outlay of Rs. 546.71 lakhs, including Rs. 243 lakhs for the hills, was approved. This included Rs. 287.03 lakhs for the rehabilitation of bonded labour. Against this an expenditure of Rs. 713.18 lakhs including Rs. 284.48 lakhs for the hills was incurred. During Seventh plan (1985-90)- 14,116 bonded labourers were rehabilitated against the target of rehabilitation of 8350 bonded labourers.

16.0.5 Four new welfare centres, one each at Rishikesh (Dehradoon), Jagdishpur (Sultanpur), BHEL (Jhansi), Teliarganj (Allahabad) were opened. In addition, purchase of Television sets for the existing welfare centres in plain and Hill areas, construction of buildings/Purchase of land for Regional offices at Ghaziabad, Haldwani (Nainital), Labour welfare centres at Chaziabad and building for labour Courts and Industrial Tribunals

at Kanpur, creation of separate authority for early disposal of wages and workmen compensation/claims at Ghaziabad, Allahabad and Moradabad, providing additional staff for regional offices of Dehradun and Haldwani (Nainital) for enforcing the Trade Union Act opening of one office of Assistant Labour Commissioner at Rishikesh and strengthening the existing libraries, were also taken up. For ensuring proper implementation of Motor Transport Workers Act, 1961 four labour courts one each at Dehradun, Haldwani, Gaziabad and Meerut were opened. Similarly 108 Labour Inspectors offices at Tehsil level (104 plain area and 4 for hill area) were sanctioned mainly with a view to ensure minimum wages for agricultural workers. An Industrial Hygiene Laboratory was established in the office of the Director of Factories at Kanpur mainly for monitoring the work of industrial environment.

Strategy of Eighth Five Year Plan:

16.0.6 Keeping in view the objectives of the Eighth Five Year Plan, special emphasis is proposed to be given to the following programmes.

1. Wide coverage and effective enforcement of the Minimum Wages Act, Contract Labour (Regulation and Abolition) Act, and other enactments specially designed for the protection of unorganised and weaker sections of the working class.
2. Continuous identification and rehabilitation of bonded labour.
3. Opening of welfare centres in areas of new industrial development.
4. Greater emphasis on safer working conditions of workers.
5. Creating greater awareness amongst the workers and involving them in fruitful participation in management.
6. Setting up of a legal cell at Head Quarter, opening of one office of Assistant Labour Commissioner at Rishikesh and Regional Offices at Allahabad and Lucknow.
7. Setting up of a separate cell for labourers in unorganised and agriculture sector.

Eighth Five Year Plan (1990-95)

16.0.7 During Eighth five year plan, an outlay of Rs. 370.00 Crores, including Rs. 20.00 Crores for hills, has been proposed. Out of this outlay, Rs. 360.00 Crores has been proposed for old Age Pension Scheme, which includes Rs. 18 Crores for Hills. The Eighth Five Year Plan proposals have been formulated with a view

to effect strict enforcement of labour laws, creation of better industrial climate between employees and employers for achieving maximum production and to ensure better living and working condition of working class. One of the important features of the Eighth Plan is to setup a separate cell to look into the welfare of labour, both in agriculture and unorganised sector, which in the past could not receive due and proper attention. Another salient feature of the plan is the setting up of Departmental legal cells to expedite and settle various long standing industrial disputes pending in High Court and various courts. In order to make labour laws enforcement machinery more effective at district and tehsil levels, administrative organisation is being strengthened both at district and Tehsil levels. Some new welfare centres are proposed to be established and rehabilitation of remaining bonded labour in hill areas will also be taken up and completed during the plan period.

16.0.8 An outlay of Rs. 3359 lakh has been approved for annual plan 1990-91, out of which 320.00 lakh are proposed for hills. A sum of Rs. 3324 lakh will be spent on Old Age Pension Scheme benefiting 3.05 lakh pensioners. A target for rehabilitating 441 bonded labour in hill areas has also been fixed.

16.0.9 For 1991-92 an outlay of Rs. 5432.00 lakhs including Rs. 375.00 lakhs for hills has been proposed. Out of this Rs. 5360.00 lakhs (Rs. 5030.00 lakhs for plains and Rs. 330.00 lakhs for hills) has been proposed for old Age Pension scheme. Some of the important schemes in hill areas to be taken up include rehabilitation of the bonded labour, Construction of buildings for regional offices at Nainital and Dehradun, upgradation of regional office at Haldwani and setting up of a few new welfare Centres. Under Old Age Pension Scheme, it is proposed to benefit 4,41,000 pensioners, (415000 in plains and 26000 in hills)

Employment

16.0.10 At the time of the beginning of Eighth Five Year Plan '96 Employment Exchanges were functioning in the State for providing employment assistance to the unemployed applicants. Besides Employment Exchanges, 52 Coaching-cum-Guidance Centres were also setup in order to enhance the Self Employability of the applicants belonging to Scheduled Castes/Scheduled Tribes, Backward Classes and Physically Handicapped categories.

Seventh Plan Progress

16.0.11 An outlay of Rs. 253 lakhs was sanctioned during Seventh Five Year Plan against which Rs. 212.06 lakh was utilized including Rs. 27 lakhs in Hill areas. During this Plan Period the following schemes were implemented.

1. Computerization of 4 Employment Exchanges.
2. Construction of building for 9 Employment Exchanges.
3. Establishment of Employment Market Information

- units at Pithoragarh, Chamoli, and Uttarkashi Districts.
4. Establishment of University Employment Information and Guidance Bureau at Ruhelkhand University.
 5. Establishment of 9 Coaching-cum-Guidance Centres for Scheduled Castes/Scheduled Tribes and Backward Classes Categories of applicants.

Strategy for Eighth Five Year Plan

16.0.12 Keeping in view the objectives of Employment service and the progress made during the Seventh Five Year Plan, the strategy for the Eighth Five Year Plan has been worked out on the following lines:-

1. Modernization of the Employment Exchanges.
2. Expansion of Employment Service with special emphasis on the establishment of Village Employment Centres at Block level for providing employment assistance to the unemployed rural youth.
3. Enhancement of Craftsmanship and employability of the applicants of weaker section.
4. Reorganisation of Employment Service in conformity with the structure of other departments. For the Eight Five year Plan an outlay of Re. 668.41 lakhs has been proposed for this sector out of which Re. 270 lakhs will be spent in hill areas.

Annual Plan 1990-91

16.0.13 An outlay of Re 94.01 lakhs has been approved for the financial year 1990-91 out of which an amount of Re. 25 lakhs has been earmarked for hill districts of the state. It is proposed to execute the following scheme:

1. Completion of construction work already taken up during the Seventh Five Year Plan, financial allocation was made for the construction of nine buildings and the construction work of 7 buildings could not be completed during the plan period. Consequently, it is proposed to complete these remaining works during 1990-91.
2. Computerisation of Employment Exchanges : It is proposed to computerise 3 Employment Exchanges in the plain and one in hills during the year 1990-91.
3. Setting up vocational guidance units in the colleges of hill districts : It is proposed to make available the facility of Vocational Guidance to the schools and colleges located in hill districts of the state.
4. It is proposed to set up a Planning and Hill Development Cell at the Directorate.
5. It is proposed to make available the staff in the year 1990-91 for 3 Coaching cum Guidance Centres established in the year 1989-90. Beside this, typists of 11

Coaching-cum-Guidance Centres are proposed to be replaced.

Annual Plan (1991-92)

16.0.14 An outlay of Rs.14.06 lakh has been proposed for the year 1991-92 out of which Rs. 35 lakhs is for the hill districts. With this outlay, it is proposed to complete continued schemes and to take up a few new schemes details of which are given as under.

1. Computerisation of University Employment Information and Guidance Bureau Varanasi.
2. Setting up of Coaching-cum-Guidance Centres for Scheduled castes/Scheduled Tribes and Backward Classes in Gonda, Son Bhadra, Etah, Hardoi and Uttarkashi and modernization of centres established so far.
3. Construction of new buildings in district. Lucknow and Almor.
4. Vocational Guidance and Self-Employment cells in few district of the state.

Craftsmen Training

- 16.0.15 The primary aim of Craftsmen training is:
- (a) To make available skilled workers in different trades and industries.
 - (b) To make qualitative improvement in industrial products by way of training the craftsmen in a planned way.
 - (c) To provide an opportunity to unemployed youth to seek jobs in technical trades and also to equip them with skills for choosing self-employment as a career.

16.0.16 In 1956, when administrative control of Industrial Training Institutes was given to the State Government, there were only 8 Industrial Training Institutes in the State with a capacity of 1832 seats. In the year 1966, 14 Government Industrial & Technical Institutes (G.I.T.Is), under the control of the Technical Education Directorate were also transferred to the Directorate of Training & Employment. After the year 1966, in G.I.T.Is where training was provided in the conventional occupations, under the Craftsmen Training Scheme, local occupations were also included in the training syllabus. The progress under the Craftsmen Training Scheme is indicated in table no 16.0.1 :

Table. 14.0.1

Year-wise progress of Industrial Training Institutes.

Year	ITIs	GITIs	Branch ITIs	Seats Available ^(No.) (cumulative)
(1)	(2)	(3)	(4)	(5)
1954	8	-	-	1832
1961	15	-	-	5904
1966	48	14	-	17568
1974	52	14	-	24784
1979	67	14	-	26912
1985	74	14	36	37714
1985-90	133	14	64	51452
1990-95	159	14	64	60000*
1990-91	139	14	64	54244
1991-92	139	14	14	56000

* Target

14.0.17 The new education policy has stressed that the training imparted by I.T.Is will have to be modernised to fulfilling the objectives of the New Education Policy. Therefore, the following aims have been fixed for the Craftsmen Training Scheme:-

- (1) To fulfill the national goal of development and the removal of unemployment.
- (2) To enhance the individual employability.
- (3) To impart a training relevant to productivity & economic development.
- (4) To meet the need for skilled manpower in the growing sectors of the economy.
- (5) To attract a sizeable segment of population to varied vocational courses so as to provide an alternative to those who are pursuing higher education without any interest or purpose.

14.0.18 The Eighth Plan envisages eradication of unemployment by extensive expansion of irrigation, power, rural electrification, drinking water, transport and road construction programme in Uttar Pradesh. This will create an increased demand for skilled craftsmen. Thus for the successful implementation of Eighth Plan objective, the increased requirement for skilled craftsmen can be met by expanding the Craftsmen Training Scheme.

14.0.19 In the field of Craftsmen training the state of

Uttar Pradesh provides much scope as we are far behind the national average.

16.0.20 There is, therefore, wide scope and necessity for the enhancement of seating capacity in IITs which will have to be increased in due course of time. In some districts of Uttar Pradesh there is comparatively less facility for training as compared to other districts. It is, therefore, necessary to diversify the craftsmen training scheme in such a way that availability of seats becomes uniform for all districts and training facilities are available uniformly to all sections of the population. In our State I.T.Is. have generally been established at district headquarters. It is, therefore, necessary that under the extension scheme priority should be given to establish I.T.Is. at Tebelle level as well.

16.0.21 Craftsmen Training Scheme is a national level scheme and has fixed national standards. Therefore, it is necessary to remove the shortfall in the equipment, staff and building. The old outdated equipment of the workshop should be replaced by modern machines and equipments. Trades on national pattern as well as short-term courses on the basis of the new demand should be opened in the existing I.T.Is. of the state. To ensure that one seat is available for every 1000 population of the state, it is necessary that with the financial assistance provided by the Govt. more I.T.Is. could be established in the private sector. To ensure proper implementation of the programme necessary administrative infrastructure is to be provided at state/divisional level.

16.0.22 Apprenticeship Training Scheme : Apprenticeship Training Scheme is also a national level scheme which is implemented under the Apprentices Act, 1961. In this scheme it is obligatory on the part of the employer both in private & public sectors to train such number of Apprentices in the designated trades as laid down in the Act.

16.0.23 The State Govt. has to determine the number of training facilities, create facilities for Basic Training & Related Instruction, inspect standard of training, conduct examinations and certification as per laid down standards.

16.0.24 It is, therefore, necessary to strengthen the implementation, inspection, monitoring and follow up machinery so that about 32 thousands Apprentices are trained at the end of the Eighth Plan.

Programmes of Eighth Plan
and Annual Plans 1990-1991
and 1991-92.

16.0.25 An outlay of Rs. 8300 lakh has been proposed for the craftsmen training programme during the Eighth Plan period, out of which 3100 lakh has been earmarked for E.I.I.E. During

1990-91 this sub-sector has been allotted Rs. 1112 lakh including Rs. 385 lakh for Mills. For the Annual Plan of 1991-92 a sum of Rs. 1400 lakh including Rs. 450 lakh for Mills is proposed to be allotted. During the Eighth Plan period, greater emphasis is proposed to be given to the following programmes/schemes.

1. Strengthening and modernisation of existing ITIs./GITIs.
2. Opening of new trades in existing ITIs/GITIs.
3. Modernisation of Equipment and upgradation of ITIs. for improving quality of training.
4. Taking up of apprenticeship training scheme.
5. Taking up research programme with a view to improve the quality of training.
6. Grant-in-aid to private ITIs.

-----*

CHAPTER XVII

SOCIAL SECURITY, WELFARE AND NUTRITION

17.1 Social Security and Welfare

Programmes of Social Welfare aim at providing minimum essential support financial or moral to the physically and socially handicapped persons and to those who are in need of special care and protection. Several institutional and Non-institutional services have been provided for the socio-economic development of the neglected and handicapped sections of the society. These programmes include expansion of institutional services to cater to the needs of destitute and handicapped children, setting up of women welfare centres, protective homes and homes for the aged persons, effective implementation of Probation and Juvenile Justice Act, training and rehabilitation of destitute and handicapped persons, grant to destitute widows etc. As such, although a number of institutional and Non-institutional services have been provided by the State but due to financial constraints only the fringe of the problem could be touched.

Review of Seventh Plan

17.1.2 A critical analysis of the past five year plans reveals that in absence of the basic data regarding the various categories of socially, morally and physically handicapped persons such headway could not be made. Inadequacy of properly trained and committed personnel and financial resources has also been responsible for the wide gap between the achievements and the objectives. The welfare schemes undertaken so far can be categorised into 5 groups, viz

1. Child Welfare
2. Women Welfare,
3. Welfare of handicapped
4. Welfare of the destitute and poor
5. Correctional services

17.1.3 During the Seventh Plan a sum of Rs. 18.88 cr. was allocated for social welfare schemes against which an expenditure of Rs. 70.96 cr. was incurred. During the period institutional services were not expanded barring a few additions, but in order to widen the scope of assistance certain important decisions were taken by the Government. They are stated briefly below:-

17.1.4 Grant to Destitute Widows: This assistance was being provided at the rate of Rs. 60/- per month to the destitute widows and 1.23 lakh widows were covered. In the year 1989-90 the coverage was increased and another 1.12 lakh widows were covered. The rate of grant was increased from Rs. 60/- to Re. 100/- per month v.e.f. January 1, 1990.

17.1.5 Grant to Physically disabled persons: During the last year of the plan the rate of grant to physically disabled persons has also been increased from Rs. 60/- to Rs. 100/- per month and the coverage has been increased from 24,000 to about 50,000.

17.1.6 Implementation of Juvenile Justice Act : Another important achievement of the Seventh plan was the implementation of Juvenile Justice Act. During this period 59 Observation Homes, 10 Juvenile Homes and one Special Home were set up for ensuring care and protection to the juveniles. In order to ensure speedy justice to them, 59 Juvenile Boards and 13 Special Courts were set up. The administrative machinery looking after the welfare of juveniles was also strengthened.

Programmes, Objectives and Strategies of Eighth Plan

17.1.7 Several factors have been responsible for the gaps between achievements and objectives during Seventh Five Year Plan. Besides physical gaps, quality of the programmes has also been an important point which needs special consideration. An analysis of the various schemes under 'Zero Base Budgeting' system reveals that created capacity, whether administrative or institutional, is not being utilized at the optimum scale. Therefore the programmes which are proposed to be taken up during the Eighth Plan aim at utilizing the existing capacity at optimum scale, improving the qualitative aspect of the programmes developing the human resource and ensuring efficiency with economy. Keeping in view these objectives, the broad strategy for the Eighth Five Year Plan is proposed as below. :-

17.1.8 Training : Trained and committed staff is an essential part of any programme of social welfare. Therefore, it is proposed to train all the staff dealing with social welfare schemes during the plan period. It is estimated that around 7 percent of the total Plan outlay will be utilized for that purpose. Courses will be conducted by Research and Training Institute of the Department involving National Institutes in different fields.

17.1.9 Buildings: The residential institutions of the department are located in rented buildings in the cities which are very old and do not suit the requirements. It is proposed to shift them to the more congenial atmosphere of the countryside. The department is running at present 165 residential institutions out of which 135 are located in rented buildings. It is proposed to construct 60 buildings during the Eighth Plan period.

17.1.10 Rehabilitation: During the Eighth Plan period emphasis will be placed on speedy and effective rehabilitation of discharged inmates. At present inmates discharged from various correctional institutions often find it difficult to assimilate

in the main stream of the society which generates a feeling of frustration. It is therefore necessary that they should be given gainful employment. It is proposed to rehabilitate them through bankable schemes under various other programmes. Besides, voluntary organisations will also be involved in rehabilitation programmes.

17.1.11 Surveys: In the absence of reliable data, it has not been possible to formulate effective welfare schemes. Today even the basic data of the weaker and handicapped sections are not available. It is therefore proposed to conduct surveys through reliable agencies so as to have relevant and basic data of the various target groups.

17.1.12 Expansion of the existing schemes: Although, main emphasis will be on the qualitative improvement of the programme, yet the existing schemes will be expanded further.

17.1.13 Grant to destitute Widows and disabled persons: Twenty percent increase in the coverage is proposed. An outlay of Rs 220.00 cr. has been earmarked for this purpose. It is also proposed to issue Identity cards to the beneficiaries and to make payments through post offices by opening their saving bank accounts. The income ceiling is also proposed to be raised from Rs. 200/- per month to Rs. 225/- per month in case of widows and from Rs. 100/- to Rs. 225/- in case of disabled persons. An outlay of Rs. 16500 lakhs has been proposed for eighth plan period for widows while Rs. 3132.00 lakhs for 1991-92. Further an outlay of Rs. 5500 lakhs has been proposed for 1990-95 and Rs. 939.00 lakh for 1991-92 for disabled person.

17.1.14 Hostels for working handicapped persons: The Working handicapped persons face great difficulty in finding the residential accommodation. It is therefore proposed to establish 10 hostels for them at each Divisional Head Quarter in plains on the pattern of working women hostel. An outlay of Rs 70.00 lakh is proposed for eighth plan period.

17.1.15 Training-cum-Workshop Centres for Deaf and Dumb: It is proposed to establish 4 training-cum-workshop centres for the deaf and dumb boys. They will be provided free residential and boarding facilities during training period. An outlay of Rs. 23.00 lakh is proposed for this scheme during eighth plan period.

17.1.16 Shishu shala and Balwaries: At present 50 such Balwaries are functioning in the State. Although there have been problems in running these Balwaries, but this scheme has been found useful because it is a great help to the poor working women. Therefore it is proposed to further expand this scheme by adding 30 more such balwaries. It is also proposed to enhance the quality of mid-day meal given to the children, from 25 paise per day to Re. 1/- per day per child. An outlay of Rs. 40 lakhs is proposed for 1990-95 while Rs. 6.00 lakh is proposed for 1991-92.

17.1.17 Ashram Type School for the children of destitute women: In order to prevent the children of destitute women from going astray, and to give them a sense of belonging, it is proposed to give them free education facilities by establishing 2 Ashram Type Schools. Facilities of free boarding and lodging will be provided to them. An outlay of Rs. 200 lakhs has been proposed for eighth plan period while Rs. 10.50 lakh for 1991-92.

17.1.18 Rehabilitation Centre of Destitute Women: The need for schemes of Women Welfare has been further felt. A review of various institutional programmes for Women Welfare has been made. It is found that they need a reorientation of the objective. It is therefore proposed to re-organise all the existing institutions connected with the Women Welfare to make them rehabilitation oriented. Additional 12 such centres are also proposed to be set up during Eighth plan and an outlay of Rs. 117 lakh has been proposed for eighth plan period.

17.1.19 Assistance to Voluntary Organisation: In order to encourage social welfare activities through voluntary agencies, grant in aid is provided to organisations engaged in welfare of destitute children, rehabilitation and training of destitute women, welfare of the mentally and physically handicapped. An outlay of Rs.33.00 lakhs has been proposed for Eighth Five Year Plan period while Rs. 5.00 lakhs is proposed for year 1991-92.

SAINIK KALYAN

17.1.20 Ex-servicemen who normally retire after 18-20 years of service in the defence forces often need relief and rehabilitation. At the time after retirement, ex-servicemen have to face problems in maintaining their families. To maintain their families, they are required to take up some type of employment. The job seeking ex-servicemen are provided guidance by Zila Sainik Kalyan and Punarvas offices at district level. Various schemes such as construction of office building, rest houses, revitalization of old houses, construction of sainik sarai and war widows hostels have already been taken up.

17.1.21 During seventh plan period an outlay of Rs. 200.00 lakh was approved against which Rs. 300.71 lakhs were spent in various schemes run by the department.

17.1.22 To provide training to ex-servicemen in self employment in various vocational occupations through existing industrial training institutes, a scheme known as "preparing Ex-servicemen for self employment (PEXSEM) was started in 1983-84. About 764 exservicemen were benefited by the end of seventh plan. During Eighth Five Year plan an outlay of Rs. 27.00 lakhs has been proposed and Rs. 3.75 lakhs for year 1991-92. It is expected to benefit 3165 persons during the Eighth Five Year Plan and 625 persons in the year 1991-92 To encourage Ex-servicemen in establishing industrial units, technical guidance in preparing viable projects as well as economic assistance is provided

through U.P. Ex servicemen welfare corporation. An outlay of Rs.51.00 lakh is proposed for eighth plan period while Rs. 1.00 lakh for the year 1991-92.

WOMEN WELFARE DEPARTMENT

17.1.23 The Government of Uttar Pradesh has established a separate department for Women Welfare with a view to assisting the women in improving their socio economic status by associating them with different developmental activities. To associate the women, especially the rural women with different developmental activities so that they could realise some economic benefits, it is necessary that some special facilities and infrastructure be created to impart them latest skills in traditional handicrafts in addition to those new areas where women can participate efficiently. This would lead to increase in productivity of the women generating additional income and improving quality of life of the whole family. In this context various programmes have been envisaged in the Eighth Five Year Plan. The total proposed outlay for the Eighth Plan period is Rs. 1300 lakhs, out of which Rs. 700 lakhs is for hill areas.

17.1.24 Construction of Working Women Hostels: To provide accommodation to single working women, who are unmarried, widows, divorced, separated or those are out of town, 25 hostels are proposed to be constructed. Out of them 12 hostels would be located in the plains and 13 in the hills. For the construction of working women hostels Government of India gives assistance to the extent of 50 percent of the cost of land and 75 percent of the cost of construction of the building. An outlay of Rs. 223.45 lakh is proposed for eighth plan period while Rs. 53.00 lakh for the year 1991-92 as State Share.

17.1.25 Support to Training -cum-Employment Programme for Women (STEP): To improve and strengthen the employment of women in the fields like agriculture, animal husbandary, dairying, fisheries, handlooms, handicrafts, khadi and village industries and sericulture, department of Women and Child Development, Government of India has started 'Support to Training-cum-Employment Programme for Women (STEP)'. In this programme poor and assetless women will be given special training in basic social services like health, literacy, legal awareness etc. and will also be taught new technical skills, so that their income may increase. Working capital for maintenance of productive assets will be provided for supplementary activities leading to increased production. The scheme would be implemented by U.P. Women's Welfare Corporation, DRDA's, NGO's etc. The Government of India would provide 90 percent assistance on grant basis. Rs. 200.00 lakhs and Rs. 30.00 lakh has been proposed as state share for eighth plan period and for the year 1991-92 respectively:

17.1.26 Purchase of Women's Welfare Corporation Shares: U.P. Women's Welfare Corporation is engaged mainly in organising skill upgradation training programmes, establishing training-cum-production centres for women, making marketing arrangements for produce and making available margin money loans to women entrepreneurs. To carry out these activities the Government would subscribe the share capital of the Corporation. The Government of India provides 49 percent of the subscribed and paid up capital of the Corporation. In the Eighth Five Year Plan period a total of Rs. 160 lakhs has been proposed as State Government share for the purchase of the Corporation's share whereas in the year 1991-92, Rs. 20 lakhs has been proposed.

17.1.27 Skill Upgradation Training: There are several government agencies providing training facilities to women in different arts and crafts. However, the women folk from remote villages, particularly those belonging to weaker sections hardly prefer to go out of the village to acquire skills even if they are convinced of the need of supplementing their incomes after such training. Thus there is a need to provide skill improvement training facilities at their door steps. During Eighth plan period it is envisaged to train about 20,500 women in different skills and a total outlay of Rs. 307.50 lakh has been proposed for Eighth plan period. In the year 1991-92 an outlay of Rs.45.00 lakh has been proposed to train 3000 women.

17.1.28 Marketing Assistance: The major problem being faced by the women engaged in the traditional handicrafts and other economic generating activities is that of marketing of their products. In view of this marketing arrangements would have to be ensured so that women may get reasonable prices for their products. An outlay of Rs. 98.65 lakh has been proposed for the eighth plan period and Rs. 12 lakh for the year 1991-92 for giving marketing assistance to women's welfare corporation, women co-operative societies and women entrepreneurs.

17.1.29 Assistance to Mahila Mangal Dals: In every district there are many Mahila Mangal Dals but because of lack of financial resources and initiative they have become almost defunct. To revitalise this organisation it is proposed to give them financial assistance to the extent of Rs. 2000/- per Mahila Mangal Dal for infrastructural facilities so that they could maintain their offices; and to the extent of Rs. 24,000/- per Dal with which Dals may take up any programme/project suitable for their area like, organising awareness generation programmes about rights of women, tree plantation programmes etc. They may also take up production programme on cooperative basis etc. It has been proposed to give assistance to 1200 Mahila Mangal Dals in three years starting from 1992-93. A total outlay of Rs. 268 lakh has been proposed for the Eighth Five Year Plan.

17.2 Nutrition

The integrated child development services (I.C.D.S.) programme which was started in the year 1975 on an experimental basis has grown to cover 313 blocks at the end of seventh plan. The objectives of the projects include reduction of infant and child mortality, morbidity and mal-nutrition, the reduction in the number of drop outs from school, immunization of children, protection of children as well as pregnant women from mal-nutrition, increase in the educational level including nutritional and Health Education and employment opportunities among women. On the basis of the recommendations of the working group constituted by the Planning Commission, the objective of the programme is to saturate the entire state by the end of Eighth Five Year Plan, by raising the total number of projects to 920. These projects are proposed both for rural as well as urban areas.

17.2.2 Even after having some problems such as low rate of expenditure on nutrition, non-attractive Angan Wadi Centres etc., 55.27 percent of physical target in the last year of seventh five year plan and 89.4 percent of utilization of total funds allotted during Seventh Five Year Plan could be achieved.

17.2.3 Following were the targets and achievements of the Seventh Five Year Plan.

Table 17.2.1
Targets and Achievements

Year	<u>Financial (Rs. in lakh)</u>		<u>Physical (No. in lakh)</u>	
	<u>Outlay</u>	<u>Expenditure</u>	<u>Target</u>	<u>Achievement</u>
1985-86	840.00	875.27	12.18	9.10
1986-87	921.00	844.33	13.79	12.44
1987-88	977.00	1233.17	16.03	14.62
1988-89	1750.00	1738.70	17.05	16.91
1989-90	2015.00	1204.97	21.42	11.84

17.2.3 For the Eighth Five Year Plan an outlay of Rs. 5150.00 lakh including Rs. 150.00 lakh for hills has been proposed. While for the year 1991-92 an outlay of Rs. 835.00 lakh (Rs. 50.00 lakhs for hills) has been proposed.

-----*

CHAPTER XVIII

GENERAL SERVICES

18.1 JAILS

Most of the jail buildings are very old and renovation or re-construction of these buildings is essential. Due to increase in the number of convicts the capacity of jails is also to be increased. An outlay of Rs. 80.00 lakh (including Rs. 30.00 lakh for hills) was approved for the seventh plan for buildings of jail department against this outlay an expenditure of Rs. 527.65 lakh is anticipated by the end of the seventh plan. This scheme has been now transferred to non-plan from the year 1990-91. There fore, for completing the incomplete works of this department, a sum of Rs. 220.00 lakh has been allocated for Eighth Five Year Plan out of which Rs. 2.00 lakh is for the year 1991-92.

18.2 Stationery and Printing

Printing and stationery is a service department which supplies stationery, printed-forms to the Government departments along with the printing of gazette etc.

18.2.2 During the past few years, the activities in the Government departments have increased manifold where as the printing capacities of the Government printing press at Allahabad, Aishbagh (Lucknow), Hazratganj (Lucknow) and Roorkee reduced owing to old machines who have already outlived their lives.

18.2.3 In order to modernise these printing press, an ambitious programme of modernisation costing Rs. 51.28 crore has been launched for which an outlay of Rs. 22.00 crore is proposed in the Eighth Plan and Rs. 1.50 crore for the annual plan 1991-92 as against an outlay of Rs. 10.53 crore for the Seventh Plan.

18.3 Public works

The increase in responsibilities and work loads of different government departments leads inevitably to their expansion. New offices and other functional buildings have to be constructed to improve efficiency of the departments at different levels. Since Fifth Five Year Plan, funds have been made available for construction of non-residential buildings of various departments from State's plan resources. Under the scheme buildings of Police, Judicial, Revenue, Estate, Public Works Department, Finance (sales tax), Finance (Stamp and Registration), Excise and Karmic Departments are constructed.

18.3.2 An outlay of Rs.10239.00 lakh including Rs.574.00 lakh for hills was provided in Seventh Plan for construction of offices and other functional buildings, such as P.A.C. barracks etc. An expenditure of Rs.8821.53 lakh including Rs.324.84 lakh in hills has been incurred during Seventh Plan.

18.3.3 Police Department: In view of the difficult nature of duties and responsibilities of the police force, construction of office and other functional buildings such as Police Stations, Fire Station, P.A.C. barracks, Police Officers Radio Complexes etc. has become necessary. The growing responsibilities of Police Department in maintaining law and order require construction of office and other buildings. By the end of Sixth Plan, 307 non-residential buildings had been constructed. An outlay of Rs.4210.00 lakh (including Rs.82.00 lakh for hills) was provided in Seventh Plan. The programmes undertaken were construction of buildings for 50 police stations, 20 out-posts, 8 Fire Stations, 3 P.A.C. Barracks, 5 Police Radio complexes, 3 Police Hospitals, 3 Maternity wards, one Teleprinter hall offices-cum-residences, for one D.I.G. and 5 I. G. Zones offices-cum-residences, one godown for central stores, Kanpur, one Gymnasium and extension of police officers mess. An expenditure of Rs.3474.18 lakh has been incurred during Seventh Plan and constructed 174 non-residential buildings. This scheme has now been transferred to non-plan from the year 1990-91. Therefore, for completion of the ongoing works, a sum of Rs.440.00 lakh has been proposed for Eighth Plan out of which Rs.142.00 lakh (including 2.00 lakh for hills) is for the year 1991-92.

18.3.4 Judicial Department: There has been abnormal increase in criminal as well as civil cases during the last decade. From 1970 to 1981 the institution of magisterial cases has gone up by about three times and that of session cases even more than three times. Creation of large number of courts to keep pace with the growing volume of litigation is necessary. It is also necessary to augment the strength of various courts. This has resulted into requirement for the construction of new court rooms and allied offices. Some of the existing courts are very old and need renovation.

18.3.5 The total number of courts at present are 1995. Standard court rooms existing (after demolition of old buildings at Allahabad, Kanpur, and Bareilly) before 1975 were about 350, sanction for construction of 700 court rooms with allied buildings and also for advocates chambers at Allahabad and Lucknow have been issued in the period from 1976-77. Judicial training and research institute and other service buildings of the department were subsequently sanctioned. An outlay of Rs.380.00 lakh has been provided in Seventh Plan against which Rs.956.28 lakh has been spent. This scheme has been now transferred to non-plan. Therefore, for completing the incomplete works, a sum of Rs.1004.00 lakh has been allocated for Eighth Plan out of which Rs.352.00 lakh (including Rs 2.00 lakh for hills) is for the year 1991-92.

18.3.6 Revenue Department :Most of the collectorate and tehsil buildings are very old and require renovation.With induction of more staff,additional space for various types of offices is also required.Buildings are also required for maintaining land revenue records properly.An outlay of Rs.256.00 lakh (including Rs.85.00 lakh for hills) has been provided in the Seventh Plan against which Rs.839.85 lakh has been spent.This scheme has been now transferred to non-plan.There fore,for completing the incomplete works, a sum of Rs.1599.00 lakh has been allocated for Eighth Plan (1990-95) out of which Rs.570.10 lakh is for the year 1991-92.

18.3.7 Estate Department: The Estate Department provides office accomodation at Lucknow and guest houses at Lucknow,Delhi,Calcutta.Keeping in view the additional requirement' of civil secretariat, Vidhan Parishad and Vidhan Sabha at Lucknow, a multistory, Mahatma Gandhi Bhawan' is being constructed in the premises of Royal Hotel (estimated cost of Rs.21.00 crore).Apart from this two storied officers block of 36 rooms have been constructed at an estimated cost of Rs.64.00 lakh in place of old premier residence in secretariat.

18.3.8 Office space for heads of departments is also not sufficient,therefore multistoriss Indira Bhawan is being constructed in the premises of Jawahar Bhawan Lucknow at an estimated cost of Rs.17.00 crore. An outlay of Rs.3723.00 lakh (including Rs.286.00 lakh for hills) has been provided in Seventh Plan against which Rs.1800.00 lakh has been spent during this period.An outlay of Rs.1407.00 lakh has been allocated for Eighth Five Year Plan.An outlay of Rs.310.00 lakh has been proposed for the year 1991-92.

18.3.9 Karmik Department: The karmik Dpartment caters to the need of the State Public Service Commission, Nainital Acadmy of Administration and the Institute of Management Development, U.P. An outlay of Rs.220.00 lakh has been provided in seventh plan against which Rs.274.51 lakh has been spent. An outlay of Rs.60.00 lakh has been allocated for Eighth Five Year Plan.No outlay has been proposed for the year 1991-92.

18.3.10. Public Works Department: The Public Works Department undertakes construction of office buildings,functional buildings and guest houses of different departments.With the expenditure of Rs.397.33 lakh including Rs.172.85 lakh for hills,construction of 76 buildings has been done during the period 1985-88. During the year 1988-90, Rs.220.97 lakh has been spent.An outlay of Rs.75.00 lakh for hills has been allocated for Eighth Plan. Only, an outlay of hills of Rs.15.00 lakh has been proposed for the year 1991-92.

18.3.11 Excise Department : Most of the offices of this department are in rented buildings. An outlay of Rs.100.00 lakh has been provided in Seventh Plan for construction of some of

these buildings. An expenditure of Rs.262.33 lakh has been incurred by the end of Seventh Plan. This scheme has been now transferred to non-plan. Therefore, no outlay has been proposed for the year 1991-92.

18.3.12 Finance (Stamp and Registration) Department : An outlay of Rs.50.00 lakh has been provided in seventh plan for building of the department. An expenditure of Rs.83.57 has been incurred by the end of Seventh Plan. No outlay has been proposed for Eighth Five Year Plan.

-----*

CHAPTER-V

ENERGY

The role of energy in the developmental process is of paramount importance. Development of energy in the past has established that it was an essential pre-requisite for industrial as well as agricultural development. It also functioned as one of the most important instrument of socio-economic change. Therefore, in order to ensure sustained all round development, the State has been embarking on an ambitious programme of energy development.

5.1 POWER

This state in 1950-51 had the third highest capacity amongst the various states in the country. over the last four decades of planned development, the states with lower base grew much faster than Uttar Pradesh. Power development in the state has registered a growth rate in installed capacity of about ten per cent during the period 1951-85, which was lower than most of the advanced states. During the seventh plan, it declined sharply in this state while many of the other states maintained their growth. Energy elasticity factor in seventies and first half of eighties works out to around 1.6 in the state, against about 1.5 for the country as a whole. Still the main constraints in development of the state has been low level of power availability to industries, agriculture and other usages. This would be evident from the fact that the state's per capita consumption of power in 1988-89 was 143 Kwh. against the all-India average of 217 Kwh. The state ranked fourteenth amongst seventeen major states of the country. The position of states in descending order in respect of per capita consumption of power is given below:

<u>State</u>	<u>Per capita Consumption of Electricity (MW)</u>
1. Punjab	660
2. Gujarat	397
3. Maharashtra	372
4. Haryana	328
5. TamilNadu	277
6. Karnataka	233
7. Andhra Pradesh	218
8. Orissa	201
9. Madhya Pradesh	188
10. Rajasthan	182
11. Jammu&Kashmir	172
12. Himachal Pradesh	167
13. Kerala	148
14. Uttar Pradesh	143
15. West Bengal	137
16. Bihar	110
17. Assam	63
TOTAL INDIA :	217

5.1.2. To ensure that the needs of the ordinary people and the quality of their life specially in the rural areas become the central focus of planning even as the state plan seeks to promote rapid overall development and diversification of economy and also to strengthen the infrastructural base, objectives of the proposed power plan are as under:

- (1) As per commitment of the State Govt. to attain cent per cent village electrification, 32,208 villages be electrified during the plan period, so as to make power available to all.
- (2) To meet the energy demand by 1994-95 in full, 32,260 MU energy will be made available to the consumers, which will also enable the economy to attain the targeted growth of six per cent. This would mean that the level of per capita energy consumption in the state would be raised from 143 Kwh in 1988-89 to 218 Kwh by the end of eighth plan.

5.1.3 Strategy to achieve these objectives and priority as signed to the programmes is given as under:

- (a) For maximisation of benefits from capacities that were created by the end of seventh plan, following programmes have been grouped under three heads of generation, transmission & distribution and rural electrification.
 - (i) To optimise generation by increasing the Plant Load Factor (PLF) of the units in operation, a centrally sponsored programme shall be completed. In addition to it a new programme of renovation of power stations has also been proposed which includes left over works of the ongoing programme alongwith some works in the field of checking pollution and ensuring better safety of plant and equipment:
 - (ii) To reduce system losses, a new programme for removal of deficiencies in transmission network has been proposed in addition to the on-going programme of urban and rural system improvement under secondary system & distribution.
 - (iii) To stabilize voltage levels in supply of energy to consumers, the programme of installation of capacitors in transmission and distribution systems will be continued in eighth plan as well.
 - (iv) A new programme of intensification of rural electrification in villages already electrified by CEA definition has been included in the plan so as to provide more connections under different usages and thus optimise the use of T&D network already available for the target villages.
- (b) Projects involving external assistance, minimum needs programme and those schemes/projects which are to

fructify in eighth plan itself, have been included under critical on-going category of schemes and these have been fully funded.

(c) Adequate provisions have also been made for the other on-going sanctioned and committed programmes.

(d) Under new schemes only some transmission works, a lumpsum provision for new starts and a minimal outlay for Vishnu Prayag have been proposed in view of constraints of resource. New transmission works include evacuation system of Lakhwar Vyasi which is expected to be commissioned in ninth plan and some normal developmental works of transmission which would be required in later stages of eighth plan.

5.1.4 An outlay of Rs.7140.68 cr. has been proposed for Eighth Plan, which includes Rs. 1720.68 cr. for Anpara 'B' thermal generation Project. A broad break up of the plan is as under:

Table 5.1.1
Financial Requirement During Eighth Plan.

(Crore Rs.)

Category	Generation	Renovation	Transmission & Distribution	Rural Electrification	Other	Total
1	2	3	4	5	6	7
I.. PLAN	3502.90	200.00	2382.78	1050.00	5.00	7140.68
A.. Maximisation of benefits from existing capacity		200.00	719.28	160.00	-	1079.28
B11. Completed schemes	88.78	-	-	-	-	88.78
B22. Critical ongoing Schemes	2764.95	-	545.00	890.00	-	4199.95
B33. Sanctioned schemes/ committed in 90-91	599.17	-	873.39	-	5.00	1477.56
C.. New Schemes	50.00	-	245.11	-	-	295.11
III. OUTSIDE PLAN	25.00	175.00	475.00	850.00	-	1525.00
1. P F C	25.00	175.00	350.00	-	-	550.00
2. R E C	-	-	125.00	625.00	-	750.00
3. S P A	-	-	-	225.50	-	225.50
TOTAL (I + II)	3527.90	375.00	2857.78	1900.00	5.00	8665.68

5.1.5 It is seen from the above table that besides plan allocation a sum of Rs.1525.00 cr. is also required from resources out side the plan to achieve the benefits envisaged in the plan. In view of the disparities in power development in comparison to many advance states and state's over all, limited resources, it is essential that the state may be helped in a large way in mobilising resources out side the plan from financial institutions in the field, which will help in removal of regional imbalances.

Generation

5.1.6 To increase availability of power, efforts are being made to increase additional generation capacity and to improve generation capability of existing stations through programme of renoyation and modernisation.

Installed Capacity

5.1.7 The total installed capacity available to the state in public sector at the end of seventh plan was 7106 MW, of which 5488 MW was State's own capacity and 1618 MW from state's share in central sector projects. During eighth plan, additional availability of 3343 MW is envisaged. Out of this, the target proposed for state sector is 1587 MW. The yearwise projections of the targeted additions are given in table below :

Table 5.1.2

Capacity Availability During Eight Plan Period						
Project	Target Proposal	Yearly Phasing				
		1990-91	1991-92	1992-93	1993-94	1994-85
1	2	3	4	5	6	7
A- State Sector	1587	114	85	501	503	384
(1) HYDRO	477	4	85	1	3	384
Kharra	72	-	72	-	-	-
Shrinagar (Unit-I)	55	-	-	-	-	55
Maneri Bhal-I-II	304	-	-	-	-	304
Rajghat (U.P.'s Share)	22	-	-	-	-	22
Mini/Micro	24	4	13	1	3	3
(2) THERMAL	1110	110	-	500	500	-
Tanda	110	110	-	-	-	-
Anpara 'B'	1000	-	-	500	500	-
B- Central Sector U.P.S. Share	1336	120	254	420	170	372
Total Availability (A+B)	3343	234	339	920	673	1177

(2) State's Share in Central Projects

5.1.8 Capacity created by the end of seventh plan in the central sector projects in northern region and share available to the state are as under :

Table 5.1.3

States Share in Central Projects by the end of Seventh Plan

(MU)				
Project (Unit No. Capacity in MW)	Capacity in Northern Region	State's Share		Commissioning Schedule
		MW	Percentage	
1	2	3	4	5
(a) Hydro	525	-	-	
1. Bairasul (3X60)	180	-	-	3,3/80,9/81
2. Salal Stage I(3X115)	345	-	-	
(b) Thermal	3770	1233	32.7	
1. Badarpur (3X100+2X210)	720	-	-	11/73,8/74,3/75
2. Singrauli (5X210)	1050	368	35.0	2,11/82,3,11/83,2/84
3. Singrauli Extn. (2X500)	1000	500	50.0	12/86,11/87
4. Rihand (2X500)	1000	365	36.5	3/88, 7/89
(c) Nuclear	675	82	12.1	
1. Rajasthan Atomic (RAPP)	440	-	-	1973-74 & 1980-81
2. Narora (1X235)	235	82	35.1	1988-89
Gas	963	303	31.5	
1. Auraiya (4X112+1X102)	550	197	35.8	1988-90
2. Anta Stage I(3X88+1X149)	413	106	25.7	1988-90
Total	5933	1618	27.3	

5.1.9 In eighth plan 4984 MW capacity is likely to be added in northern region. Of this, state's share as indicated by Central Government is 1336 MW. Project-wise details and year-wise projections are given in table 5.1.4 :

Table 5.1.4
States's share in Central sector projects in Eighth Plan

Project (% share)	Capacity (unit no x capac- ity)	Yearly Phasing					Eighth Plan Estim- ate	Commissioning Schedule
		1990-91	1991-92	1992-93	1993-94	1994-95		
1	2	3	4	5	6	7	8	9
(A) Hydro	286 (1050)	-	45 (120)	140 (540)	-	101 (390)	286 (1050)	
1. Tanakpur (38.0)	45 (3x40)	-	45 (120)	-	-	-	45 (120)	1991-92
2. Chamara-I (26.0)	140 (3x180)	-	-	140 (540)	-	-	140 (540)	1992-93
3. Dulhasti (26.0+)	101 (3x130)	-	-	-	-	101 (390)	101 (390)	1994-95
(B) Thermal	674 (2680)	-	21 (210)	42 (420)	21 (210)	238 (710)	322 (1550)	
1. Dadri (10.0)	84 (4x210)	-	21 (210)	42 (420)	21 (210)	-	84 (840)	11/91, 5,11/92 5/93 3/95
2. Rihand Extn. (36.5)	365 (2x500)	-	-	-	-	182 (500)	182 (500)	
3. Yamuna Nagar (26.8)	225 (4x210)	-	-	-	-	56 (210)	56 (210)	3/95
(C) Nuclear	165 (235)	83 (235)	-	-	-	-	83 (235)	
1. Narora (35.1)	83 (1x235)	83 (235)	-	-	-	-	83 (235)	12/90 (Unit II)
(D) Gas	842 (2699)	37 (102)	188 (524)	238 (813)	149 (580)	33 (130)	645 (2149)	
1. Auralya (35.8)	234 (1x102)	37 (102)	-	-	-	-	37 (102)	1/91 (Unit VI)
2. Anta II (25.6)	110 (3x100+ 1x130)	-	-	-	77 (300)	33 (130)	110 (430)	11/93, 1,3,11/94 P
3. Dadri (35.8)	293 (4x131+ 2x146.5)	-	188 (524)	105 (293)	-	-	293 (817)	9,11/91, 1,3,9/92, 1/93
4. Farida bad (25.6)	205 (4x130+ 2x140)	-	-	133 (520)	72 (280)	-	205 (800)	1992-94
Total (AtoD)	1967 (6664)	120 (337)	254 (854)	420 (1773)	170 (790)	372 (1230)	1336 (4984)	

() : Figure in bracket is capacity in Northern Region

5.1.10 It is evident from the above facts that so far state has not received any share in hydel generation, besides in some of the old thermal projects. It is, therefore, necessary that state should get a larger share in projects that are to be commissioned in eighth plan and ninth plan. In absence of share in hydro project the pooled cost of energy import has risen very fast. It is thus far more important that the state may be allocated higher share in hydel generation so as to compensate the shares denied so far.

Power Scenario during Eighth Plan

5.1.11 On the basis of the demand as assessed by Central Electricity Authority (CEA) through Thirteenth Electric Power Survey (XIII EPS), yearly shortages/surpluses in energy availability and peaking capability of the state power system works out as under :

Table 5.1.5

Demand & Supply of Energy during Eighth Plan.

Year	ENERGY AVAILABILITY (MU)				PEAKING CAPABILITY (MW)			
	Demand	Own Generation	Import	Total	Surplus(+) /Deficit(-)	Demand	Avail- ability	Deficit (-)
1	2	3	4	5	6	7	8	9
1989-90	28100	17112	7330	24450	(-)3650 (13.8)	4747	3858	889 (18.7)
1990-91	28693	18636	7360	25996	(-)2697 (9.4)	6027	4021	2006
1991-92	31239	22203	9036	31239	-	6571	4300	2263 (34.4)
1992-93	34042	23001	11041	34042	-	7174	4782	2392 (33.3)
1993-94	37137	25223	11914	37137	-	7837	5216	2621 (33.4)
1994-95	40551	28133	12702	40835	(+)284 (0.7)	8570	5764	2806 (32.7)

Note: Figure in bracket is percentage surplus/deficit in respect of Demand

5.1.12 It is clear from the above that position of energy availability in the eighth plan would be comfortable, but shortages in peaking capability would rise substantially. Percentage shortage during the eighth plan would be almost doubled.

Load Development

5.1.13 To absorb 32,260 MU of additional energy available during the eighth plan the load development proposed is as given in table 5.1.6 :

Table-5.1.6

Load Development During Eighth Plan					
Period	Domestic & Commercial	Agriculture	Industries	Others	Total
1	2	3	4	5	6
<u>Consumer (Lakh)</u>					
1. Seventh Plan level	31.71	5.04	1.86	0.28	38.69
2. Additional in Eighth Plan	19.34	1.58	0.77	0.19	21.90
3. Eighth Plan level	51.05	6.62	2.63	0.47	60.59
<u>Connected Load (MU)</u>					
1. Seventh Plan	2811	2790	3358	378	9337
2. Additions in Eighth Plan	1783	892	1594	257	4526
3. Eighth Plan level	4594	3682	4954	635	13865
<u>Energy Consumption (MU)</u>					
1. Seventh Plan	3779	7230	5740	1361	18110
2. Additions in Eighth Plan	2907	5980	4819	464	14150
3. Eighth Plan level	6686	13210	10559	1805	32260

5.1.14 It has been agreed that activities relating to secondary distribution system and load development as well shall be decentralized in the eighth plan to the district level and shall be included in the district plans. A committee is being formed to look into the modalities to work out smooth coordination of planning and implementation.

Generation

5.1.15 In order to increase the hydro share in state's hydro thermal mix, on-going Maneri Bhall Part-II project (4x76MU) is proposed to be completed in eighth plan itself. Another on-going project of Lakhwar Vyasi has been assigned a lower priority in view of the resource constraint and a sum of Rs. 100 cr. has been proposed in eighth plan so as to complete it during ninth plan.

5.1.16 The State Government has taken a decision to transfer Unchaar Extension (2x210 MU) thermal project and Jagdiehpur gas project (4x35 MU) to private sector. Thus no provisions have been proposed for these projects. In addition two more Thermal Projects of Jawaharpur (3x210 MW) and Roza (3x210 MU) and three gas projects of 600 MU each at Anula, Babrala and Shabajhanpur have also been offered to private sector.

5.1.17 Anpara 'B' (2x500 MW) Thermal Project: This on-going project is envisaged to be completed by December, 1993. The latest estimated cost of the project is Rs. 2432.56 cr. This included Rs. 350.00 cr. of supplier's credit from Exim Bank, Japan. In proposed outlays for eighth plan and annual plan 1991-92 the amount equivalent to supplier's credit has not been included in the plan since the amount equivalent to supply received is being treated as a resource out side plan. Moreover the repayment including interest of supplier's credit shall commence from last year of the eighth plan and will be repaid in 20 half yearly instalments upto the year 2005.

5.1.18 The 'break up' of outlays proposed in eighth plan for Anpara 'B' thermal power project is as under :

Table 5.1.7
Break-up of Outlays proposed for Anpara 'B' Project
(Crore Rs.)

Items	1990-95	1990-91	1991-92
	Proposed Outlay	Outlay	Proposed Outlay
	2	3	4
I. OECF PACKAGE			
(A) Items Covered Under OECF Loan			
(i) Equipment/Material F.O.B. part of shipment	584.55	185.60	238.05
(ii) Special tools & tackles F.O.B. part of shipment	1.42	-	1.42
(iii) Construction & Erection of Machinery F.O.B. part of shipment	5.47	5.47	-
(iv) Spare parts F.O.B. part of shipment	31.41	-	23.26
(v) Ocean Freight & Marine Insurance	41.12	14.98	16.48
(vi) Technical Services in Japan	54.50	19.46	19.46
(vii) General Misc. Services in Japan	6.13	6.13	-
(viii) MHI supplies Ex-Works	104.71	48.17	48.00
(ix) Erection Works	22.71	2.37	15.74
(x) Civil Works (a) Engg. Design	7.80	6.10	-
(b) Works	29.25	11.13	12.85
(xi) Operation & Maintenance	5.02	-	-
(xii) Retainer Consultancy (TEPSCO)	5.89	2.39	1.14
(xiii) Contingencies	99.35	-	-
Sub Total : (A)	1003.53	301.80	376.64
(B) Item Covered Under Indian Currency			
(i) Inland transportation and Insurance	29.48	14.70	14.70
(ii) Indian oversail Engg. & coordination	1.31	0.48	0.48
(iii) Erection work	22.37	0.15	13.10
(iv) Civil works	122.98	39.50	37.44
Sub Total : (B)	176.14	54.83	65.72
Sub Total : (I)	1179.67	356.63	442.36

Table 5.1.7(Concl'd.)

(Crore Rs.)

Items 1	1990-95	1990-91	1991-92
	Proposed Outlay 2	Outlay 3	Proposed Outlay 4
2. NON OECF PACKAGE			
(C) Item Covered Under Indian Currency			
(i) BHEL supply ex-works	50.14	-	44.03
(ii) Indian transportation & Insurance	10.35	-	7.10
(iii) Indian overall Engg. & coordination	0.47	0.14	0.14
(iv) Erection works	9.40	-	2.60
(v) Civil works	10.01	4.80	1.79
Sub Total : (2)	80.37	4.94	55.66
3. OTHERS			
(i) Departmental works	46.00	15.43	18.00
(ii) Custom duty & taxes	375.56	113.00	159.19
(iii) Establishment	37.32	10.00	7.71
(iv) Contingency	1.76	-	-
Sub Total : (3)	460.64	138.43	184.90
Total : (1+2+3)	1720.68	500.00	683.00

RENOVATION

5.1.19 Under centrally sponsored schemes of Obra, Harduaganj and Panki, the activities under state plan could not be completed during seventh plan due to paucity of funds. During eighth plan, it is proposed to execute the balance works except works relating to 50 MW Russian unit and Electro-Static Precipitators (ESPs) of Obra and Harduaganj power stations. Encouraged by the appreciable improvement in the operational performance of the power station of Obra, as a result of renovation and modernisation programme four more projects, three of phase II of Obra, Panki, Harduaganj and one of Parichha have been formulated. These projects have been techno economically cleared by CEA.

5.1.20 Out of these schemes, a major share of Rs. 138 cr. is for Obra power station mainly comprising the renovation of 50 MW unit of Russian origin which could not be taken up earlier due to non availability of design with BHEL.

5.1.21 In respect of Harduaganj, the project estimates cover the activities in respect of Harduaganj 'A'. The old boilers of this power station are already being replaced by fluidised bed combustion boilers under World Bank assisted Srinagar Composite Project. Besides, those activities of renovation and modernisation in respect of Harduaganj 'B' and 'C' thermal power stations have also been included which could not be included earlier.

5.1.22 In respect of Panki power station the project estimates cover the activities in respect of Cal, condensers, HP heaters of 110 MW units. These activities has been identified after a visit of the joint team of engineers from CRA, BREL and PFC. Based on the team report a project report of Rs. 30 cr. has been formulated.

5.1.23 The project report of renovation and modernisation activities of Parichha power station amounting to Rs. 20 cr. approximately have also been framed and the same is being submitted to CRA for techno-economic appraisal.

TRANSMISSION AND DISTRIBUTION

5.1.24 Transmission: At the end of seventh plan, works completed under the transmission system (132KV and above) were as under:

	400KV	220KV	132KV
No. of S/Se	7	26	167
Capacity(MVA)	3360	5905	8630
Lines(Ckt Km)	1877	5539	9613

5.1.25 Due to financial constraints the development of transmission system proposed for sixth and seventh plane could not be implemented and several works have spilled over to eighth plan. Thus, the systems on which works could not be completed to meet the demand of increased load are now been identified as deficient systems. For removal of these deficiencies, an outlay of Rs. 235.00 cr. has been proposed in eighth plan. The works included under this category comprises of the following :

	400KV	220KV	132KV
New S/Se (Nos.)	1	7	7
(MVA)	630	850	220
Augumentation of S/Se (Nos.)			
(MVA)	315	900	370
Trans lines (Ckt.km)	20	652	214

5.1.26 New Development works : In addition to above, development works to the tune of Rs. 287.00 cr. are required to be excuted during eighth five year plan to meet requirement of load development, improved voltage conditions, improved system stability and reliability including the transfer of bulk power to major load centre. An abstract of the works under this category is given below :

	400KV	220KV	132KV
New S/Se	-	6	42
Capacity (MVA)	-	650	1245
Augumentation of S/Se (No.)	-	4	28
(MVA)	-	320	770
Lines (Ckt.km)	520	324	774

5.1.27 Besides this following items are considered to be indispensable from consideration of system stability, maintenance of proper voltage profile, reliability and operation of the grid as whole. A provision of Rs.82.50 cr. have been made under plan resources for the above work :

- i) Installation of additional 33KV capacitors at primary substations during Seventh Plan (800MVAR)
- ii) Installation of two static var compensators of 70MVAR capacity each at Lucknow, Moradabad and Muradnagar 400KV sub-stations.
- iii) Communication Plan, including strengthening of existing communication system as per the CEAs consultant's report.
- iv) Augmentation schemes and unified schemes of supervisory control as desired by NREB (SCADA) (Rs.45.00 crores being shared by Central Government for this project)
- v) Renovation works

POWER EVACUATION

5.1.28 Full provision is being made in the eighth plan transmission proposal for power evacuation system in respect of projects scheduled to be completed during plan period viz. Anpara B, Khara, Maneri Bhali-II and Srinagar hydro electric project. Besides, this small provisions have also been made for evacuation of Lakhwar Vyasi. The amount required for this evacuation system and physical targets identified are as under :

Table 5.1.8
Work Programme of Evacuation Systems
covered under Eighth Plan

Project	Outlay proposed (cr.Rs.)	Physical target				
		800KV Lines (Cktkm)	400KV Lines (Km)	S/S MVA	220KV Lines Ckt.km.	S/S
1	2	3	4	5	6	7
1. Anpara 'B'	525	450	1035	1575	-	200
2. Srinagar	117	-	350	630	120	500
3. Maneri Bhali-II	13	-	-	-	80	-
4. Khara	7	-	-	-	100	-
5. Lakhwar Vyasi	20	-	-	-	-	-

5.1.29 In addition to above an amount of Rs. 140 cr. is proposed to be paid to Tehri Hydro Electric Corporation as UP's share for evacuation of power from Tehri Complex.

Distribution

5.1.30 The achievement during seventh plan in respect of secondary transmission lines and construction of new sub-stations were much less than the target due to paucity of funds. As a result over a period of several years the secondary system in the state have failed to keep pace with the load development. This has resulted into over loading of 33/11 KV and 33 and 11 KV lines, causing poor voltage regulation and frequent interruption of supply.

5.1.31 In order to restore the system, it is necessary to provide separate funds for the system improvement schemes in addition to those needed for meeting the load growth in the eighth five year plan period.

System Improvement

5.1.32 (a) Urban : In Uttar Pradesh there are 152 towns with a total population of 199 lakhs as per 1981 census. Of these, there are 66 towns with population of 50,000 and above and 86 towns are having population 2,000 and above but less than 50,000. All the above towns are electrified. The load growth in all these towns has been very rapid and the existing distribution system has become inadequate to cope with the growing power demand, on account of which the quality of power supply is poor and the distribution losses are high. In particular, in towns having population above 50,000 due to rapid urbanization, system has become over-loaded resulting into frequent interruptions, excessive voltage drops and line losses. In order to improve the reliability and quality of power supply in towns and to reduce energy losses, 45 towns have been identified in the first step, where system improvement works are required to be carried out during eighth plan. The system improvement schemes for as many as 41 towns have already been formulated. The estimated total cost of these 41 schemes is approximately Rs.370.00 cr. The total cost of all the 45 system improvement schemes is estimated to be about Rs.450.00 cr. which is required to be funded during the eighth plan.*

5.1.33 Rural : The total cost of 37 on-going system improvement schemes is Rs.45.00 cr., against which only Rs.5.00 cr. could be spent upto the end of seventh plan. These schemes are to be completed in eighth plan, which would require Rs.40.00 cr. Another 60 new schemes are being formulated which are proposed to be taken up in eighth plan and will also be completed within the plan period. In all Rs.125.00 cr. will be required in eighth plan. These schemes are proposed to be fully financed by REC outside the plan resources. Thus, no provision has been made for these schemes in plan outlays.

Installation of Capacitor

5.1.34 Total requirement of capacitors for eighth plan is 2545 MVAR, out of which 1345 MVAR will be on transmission grid and balance 1200 MVAR on 11 KV network. The requirement of funds for

11 KV capacitors is Rs.26 cr. Out of this Rs.13 cr. are proposed as an assistance from REC and PFC and balance Rs.13 cr. have been provided in the plan.

5.1.35 An extract of works proposed to be executed under normal development. Urban and Rural system improvement during eighth five year plan are as under :

Table 5.1.9
Programme of Secondary Transmission & Distribution Works During Eighth Plan

Works	Unit	Normal develop- ment	Target		Total (3+6)	Total (3+6)
			System Improvement			
			Rural	Urban		
1	2	3	4	5	6	7
(i) <u>33 KV Works</u>						
Lines	Ckt. Km.	5849	1204	1120	2324	8173
33/11 KV Sub Station	Nos. MVA	883 1836	220 493	120 1120	340 1813	883 3649
Augmentation	Nos. MVA	2620 634	53 140	80 400	133 540	2753 1174
(ii) <u>11 KV Works</u>						
Lines	Ckt. Km.	9412	1408	1730	3138	22550
11/0.4 KV (New sub station)	Nos. MVA	2359 194	- -	3750 1075	3750 1075	6109 1269
Augmentation	Nos. MVA	6235 841	- -	- -	- -	6235 841
(iii) <u>L.T. Works</u>						
Lines	Ckt. Km.	4562	-	5550	5550	10112
Strengthening L.T. Lines	Ckt. Km.	380	-	-	-	380
Service Connections	Nos.	380	-	-	-	380
Industrial	Thous.	77.76	-	-	-	77.76
Domestic	Thous.	1934	-	-	-	1934
(iv) <u>Other Works</u>						
Installation of capacitors	MVAR	67	-	-	-	67

Rural Electrification

5.1.36 By the end of seventh plan 80,358 villages i.e. 71.4 percent of the total 112566 inhabited villages have been electrified by CEA definition. During eighth plan, state has taken up a massive programme of village electrification under which all the remaining 32800 villages are proposed to be electrified by CEA definition to attain 100 percent village electrification.

5.1.37 A total of 8,06,362 private tubewells were energised by 1989-90. Another 1.5 lakh private tubewells are envisaged to be energised in eighth plan. Of this 60,000 tubewells are proposed under state plan and remaining 90,000 from resources out side plan like SPA, LDB/NABARD, etc. In arranging resources from out side plan some difficulty is being experienced. While the cost of energisation per private tubewell/Pump set works out Re.25,000 at current prices, the norms for assistance per tubewell is only Re.15,000 approximately. This leads to retardation in pace of progress. Therefore, it is necessary that the norms of unit cost may be made more realistic.

5.1.38 By the end of seventh plan 48,213 harijan bastias were electrified and target for electrification of harijan basties in eighth plan has been proposed as 41,272 which would raise the level to 89,485 harijan basties.

5.1.39 The proposed financing of the rural electrification programme from all sources including that under accelerated development of decolty prone areas under special area programmes sector is as follow :

Table 5.1.10
Financing of Rural Electrification Programme
(Crores Re.)

Source	Seventh Outlay	Plan Expendi- ture	Eighth Plan Proposed outlay	1990-91 Outlay	1990-91 Antici- pated expendi- ture	1991-92 Proposed outlay
1	2	3	4	5	6	7
A- Plan Resources	434.53	405.40	1075.00	84.40	84.40	103.00
I Power Sector	284.53	401.40	1050.00	82.40	82.40	100.00
Normal	63.52	57.93	39.20	25.00	25.00	4.00
R.E.C.	130.90	184.44	730.00	27.40	27.40	59.00
M.N.P.	117.11	159.03	280.00	30.00	30.00	37.00
II Special Area Programme Section						
Decolty Prone Areas Accelerated development	150.00	4.00	25.00	2.00	2.00	3.00
B- Non Plan Special Programme Agriculture(SPA)	200.08	57.27	225.00	18.00	18.00	50.00
Total Resources : (A+B)	634.53	461.67	1300.00	102.20	1290.00	153.00

5.2 Non-Conventional Sources of Energy

The Department of Additional Sources of energy was created in 1983, whereafter a formal programme for development of renewable energy in the State was started. NEDA came into existence in April, 1983 as a nucleus organisation sponsored by the State Govt. as the nodal agency, for carrying out the NCED programmes in the State.

AIRNS AND OBJECTIVES

5.2.2 The status of development of technologies in the field of renewable energy is fast changing. The major objective of the programme is to demonstrate technology which are appropriate for localised energy needs and to extend such other technologies which have reached an evolutionary stage where they can be accepted with reasonable government financial support. Besides, conservation of energy is a very important and essential ingredient of this programme because energy conserved is as good as energy generated. These technologies are also being used to supplement energy needs of different sectors. With these objectives, various technologies are applied to development needs in rural and urban areas.

PRESENT ACTIVITIES

5.2.3 As stated earlier, the renewable energy programme was started in 1983-84. In the initial years, the Programme did not take-off well but in the Seventh Plan period, the Programme has done very well and there has been a multi-dimensional growth. The allocations in the Seventh Plan are summarised below:

Table-5.2.1
Financial allocations during Seventh Plan

Item	Seventh Plan (1985-90)	
	Approved outlay	
	Total	of which hill
1. Bio-Energy	203.00	65.00
2. Solar	712.75	273.15
(i) Thermal	355.75	132.15
(ii) Photovoltaic	357.00	141.00
3. Wind	208.25	130.10
4. Others	880.00	370.00
<u>Total</u>	<u>2004.00</u>	<u>838.25</u>

5.2.4 Initially the emphasis was on demonstration of technologies. With gradual acceptance Govt. Financial Support for popularising these technologies was given. It is planned that with the increase in acceptance, subsidies will be reduced.

INFRASTRUCTURE

5.2.5 Since December, 1988, NEDA has been operating through 41 District Offices. It has a technical manpower of 49 Officers, which includes 26 Engineers. It also has a sizeable contingent of Jr. Engineers and Mechanics. The organisation is constituted on functional lines based on specific disciplines to bring in organizational dynamism. Technologies which are deployable at extension level, are now being transferred to the newly created project set up, while technologies in development stages or which require skilled implementation will be retained by functional divisions.

5.2.6 On the basis of experience gained during preceding Five Year Plans, it is evident that the non-conventional energy sources/renewable energy sources hold a very good promise for decentralised energy planning management. Once the systems become popular, the users/beneficiaries/village organisations can handle them with care, thereby drawing maximum benefits for private/common/public use. Mass use of smokeless energy efficient chulhas, biogas plants-both community/institutional and individual, energy plantations, use of micro hydel in hill areas, wide application of solar thermal energy, not only in the domestic field but also in commercial/industrial/agricultural fields and use of solar photovoltaic in remote areas will go a long way in promoting the use of non-conventional/renewable energy and above all in conserving the conventional energy sources which are fast depleting. It is not worthy that application of these sources is not only pollution free but helpful in protecting the environment, thereby maintaining the balance of eco-system. The implementation strategy for Eighth plan will therefore revolve round this theme of decentralised energy planning and management. The programme, therefore, can be implemented on a much wider basis. Implementation of some basic programmes in the Seventh plan is summarised in the Table given below :

Table-5.2.2
Physical targets and Achievements

Item	Unit	Seventh Plan (1985-90)	
		Target	Achievement
1. Establishment of Urjagram/Complexes	No.	14	20
2. Solar Energy			
(a) Photovoltaic			
(i) power generator	No./Kw	-	17/56.54
(ii) Drinking/Irrigation pump	No.	194	127
(b) Thermal			
(i) Solar Cooker	No.	5292	10956
(ii) Solar Water Heater	Ltr./Day	25000	418250
3. Bio-Energy			
(i) Community/Institutional Bio-gas Plant	No.	18	42
(ii) Night Soil based Bio-gas Plant.	No.	-	15
4. Energy Conservation			
(i) Smokeless Chulha	No.	117500	296155
5. Wind Energy			
(i) Wind Pump	No.	-	218

EIGHTH PLAN PROGRAMMES

5.2.7 SOLAR THERMAL ENERGY : In the field of solar energy, solar thermal technology has proved quite acceptable and almost economically viable, especially for commercial and industrial users. Annual reduction in subsidy rates and enough acceptance of the technology are the indications. Solar thermal technology has been primarily applied to production of hot water. Its application for various other users in agriculture, horticulture, forestry and other industrial activities, are still at a little more than demonstration stage and all our efforts will be made to extend the programme in these sectors by the end of the Eighth Plan.

5.2.8 SOLAR PHOTOVOLTAIC : Solar photovoltaic could safely be described as most potential way of exploiting solar energy. For a state like U.P., where intensive electrification is far distant, photovoltaic could be an effective answer. Unfortunately, costs have been the major consideration, none the less in carefully selected remote villages where network extension may be expensive, photovoltaic can be used. High unit cost would be compensated by the cost of drawing lines and the socio-economic factors. However, development of suitable battery is still an on-going process. Therefore, photovoltaic will be a useful area of application in remote areas for electrification, pumping, drinking and irrigation water.

5.2.9 BIO-ENERGY : Bio-energy can be divided into two - Biogas and Biomass energies :

5.2.10 BIO-GAS : The estimated cattle population of U.P. is 6,05,86,000. Besides, we have a human population of more than 14 crores. This is a potent source for harnessing bio-energy in the form of biogas. Therefore, biogas seems to have extremely bright prospects in U.P. So far as NEDA is concerned, large size community plants were constructed, but they have been only partially successful. Major factors against their success have been lack of motivation and community involvement. With proper motivation and community involvement, institutional plants have been largely successful. If proper motivation of the community and development of cooperative efforts is possible, community biogas plant can also prove useful for cooking energy needs. Biogas based on human excreta and sewage has a tremendous potential as a source of energy and also as the means of reducing environmental pollution. Both these areas seem to have a bright prospective for the Eighth Plan.

5.2.11 BIO-MASS Estimation of yearly production of agro-residues which can be harnessed for energy generation through various conversion technologies, is yet to be made. It must be said that these technologies in India are still at demonstration stage and that, towards the middle of the Eighth Plan they will be available for mass scale extension. A very potential source

for energy generation is the energy plantation programme to provide ever growing requirement of fuel wood. The Advisory Board of Energy has estimated that even in year 2000 AD, the fuel wood production in U.P. will be shorter than its requirement. Therefore, energy power plantations programme assumes great significance. Specially, reclamation of degraded lands such as user and ravines could be achieved by growing energy plantation. This programme holds bright prospects for the next plan.

5.2.12 ENERGY CONSERVATION : Development of renewable energy could be one of the important objectives of NEDA. But energy Conservation seems to be the most effective answer to the energy problem. Energy Conservation in various sectors of economy has to be achieved through generating interest and awareness and through introduction of new technologies and improving upon the existing systems. This area is already fairly well developed, what is required is a well emphasised concrete policy supported by various incentives and disincentives to bring energy conservation in mainstream of economy. Energy audit, energy conservation studies and subsequently financial and legislative sanctions are required. This programme will certainly form the backbone of the renewable energy programme, because the full evolution of renewable energy technologies will still take time.

5.2.13. In the rural domestic sector improved energy efficient Chulhas will continue as major source of energy conservation and a concerted policy for construction of Chulhas will have to be thought out. However, the technology seems to have reached a stage, where a scientifically oriented organisation like NEDA should not involve. It should deal only with further improvement in the technology and its evolution rather than actual extension, which should be left to the main stream of rural development set-up.

5.2.14. WIND ENERGY : The wind energy technologies were deployed as early as 1978 in the form of wind pumps. Even today, wind pumps contribute mainly to the exploitation of this technology. However, it has been experienced that this application still requires study and improvement. Therefore, a large scale extension may not be attempted in the eighth plan. Another application of wind energy the wind electric generator holds much greater potential for U.P. Ironically the technology has not been developed indigenously and continue to be imported. It is imperative that manufacturing of wind electric generator should be taken within the country and one of the public sector undertakings in U.P. may like to do so, because this area has good prospects. The present level of development, however, indicates that even in the eighth plan, this application will continue to be on Govt. supported community applications.

5.2.15. MICRO HYDEL : The hills of Uttar Pradesh hold extraordinary potential for micro hydel power generation. Investigation and surveys have been carried out by the end of seventh plan, investigation for a capacity of approx. 2000

KV have been completed. However, implementation with similar speed is doubtful for following reasons:

- (a) Small indigenous manufacturing capacities and absence of simple indigenous technology like manufacturing of cross-flow turbines etc.
- (b) Legal constraints regarding acquisition of land in hills and green belt delays in obtaining licences.
- (c) Low-economic development causing low load and making the scheme economically unviable.

There is need to draw a distinct policy on Micro Hydel Power generation. Smaller capacity units are not economically viable. There is need for development of local loads and installation of such generation units in remote areas so that higher social benefits can compensate for higher capital costs.

5.2.16 GEOTHERMAL ENERGY : No exploitation of this source could be done so far. At least 10 sources have been reported in the hill regions of Uttar Pradesh. A few of these are ready for economic exploitation. The level of technology, however, will facilitate their use only for certain basic purposes, like space heating, bathing, waobing and use in agriculture on an experimental basis in the eighth plan.

DISTINCTION

5.2.17 The above evaluation of various technologies, therefore, segregates them into two categories i.e. demonstration and subsidy programmes :

- (a) Demonstration and cent-per-cent Govt. supported applications for communities :-
 1. Some applications for solar thermal technology.
 2. Most of the applications of solar photovoltaic technology.
 3. Wind electric generators.
 4. Micro Hydel Power plants.
 5. Exploitation of Geothermal Energy.
 6. Exploitation of Biomass for energy conservation.
 7. Energy power plantation.
- (b) Extension oriented or subsidiable technologies :-
 1. Solar Water Heating systems and solar cooking systems.
 2. Some solar photovoltaic applications.
 3. Wind pumps on a limited basis.
 4. Watermills and water turbines.
 5. Most of the programmes on energy conservation.
 6. All programmes of biogas production and use.

PRIORITISATION OF NEEDS

5.2.18 On assessment of these technologies, it has been felt that for a state like U.P., the use of non-conventional/renewable sources of energy would be made in the following order based on needs/applications:

1. Energy conservation in Domestic, Agriculture, Transport and Industrial sector as a matter of fact the entire programme in the non-conventional energy sector aims at meeting the energy gap and saving the energy from the conventional sources.
2. Rural Electrification.
3. Fuel wood needs for rural areas.
4. Domestic Cooking.
5. Drinking and irrigation water for rural areas.
6. Low temperature heat requirement in industries and processing units and for mass use.

CONSTRAINTS

5.2.19. A policy on financial incentives will have to evolve out of above evaluation and prioritization. In the implementation of the programmes during the seventh plan period, the following constraints have been observed:

1. Most of the technologies are in evolutionary stage.
2. Inherent resistance of people to change.
3. Initial high capital investment.
4. Lack of community effort in the society leading to low capacity utilization.
5. Slow and imperfect vendor development.
6. Diverse subsidy systems of the same product it will be necessary to have uniform pattern of subsidy for the same range of product especially in view of higher subsidy in neighbouring states.

RESOURCES

5.2.20 In the seventh plan due to initial drawback in implementation scarcity of resources was not felt. This should not be taken as a representative situation with technological evolution and development of institutional system in working. There is every possibility that the expenditure more than the current plan allocation will be required. Besides, certain technologies will be available for larger exploitation requiring higher financial input. Therefore, State Government plan outlay should be sufficiently higher than the current plan

outlay. Besides, resources from Govt. of India and other financial institutions should be mopped-up on project specific basis. The Govt. of India in the Deptt. of non-conventional energy sources have come out with a policy statement that by the end of the century, i.e. 2000 AD or so, 20 % energy needs of the country will have to be met by the non-conventional sources of energy (including the savings from energy conservation efforts) and allocation will be made accordingly. The state nodal agency for this programme has to work in consonance with this policy. Therefore, there is all the more necessity to develop the programme multi-dimensionally and seek more funds for eighth plan.

PROMISES FOR THE EIGHTH PLAN

5.2.21 The following are the promises for eighth plan :

1. The increasing scarcity of fossil fuels and dire need for energy conservation holds promise for the sector
2. Abundance of natural resources in India and U.P.
3. Despite best efforts for electrification through conventional sources environmental constraints and need for maintaining balance in the eco-system, the non-conventional programme will necessitate expansion.
4. On going research, indigenous and abroad, will reduce cost and improve efficiency.
5. Decentralized nature of the non-conventional energy systems site specific and stand alone systems will popularise the non-conventional energy systems.

PROPOSAL FOR EIGHTH PLAN

5.2.22 In the light of the above description, a sum of Rs. 29.00 crores has been proposed for NEDA's programmes. Emphasis has been given on Power generation including research and development, demonstration and pilot projects etc. through Wind, Water, Solar, Thermal, Solar photovoltaic, Bio-energy, Biomass and Aerogenerators. It has been proposed that each block should be covered under one Urja Gram programme to fulfil to a certain extent the energy needs of the rural people through decentralised energy planning management by non-conventional energy sources. Apart from this meeting, the energy needs of specific villages such as Urja gram will also serve as focal point to create awareness about alternative sources of energy which could be used as stand alone devices for individual houses. The focal point will be rural development through conventional / non-commercial energy. On the

5.2.22 The Ministry has set up a sub-working group on non-conventional energy. It is proposed to set up a documentation centre in plain areas and a training centre in one of the hill districts for non-conventional energy planning/management for which budgetary allocation has been proposed under organisational, overhead and establishment heads during the eighth plan. A training centre has already been established in Chinhat, Lucknow in the seventh plan period.

5.2.23 As it is well-established fact that the conservation of energy is more economical than the generation of additional energy, more emphasis has been given to these areas, specially for creating awareness for energy conservation and implementing energy conservation programmes in the domestic /agriculture / transport / industry sectors.

5.2.24 While proposing the various projects during the eighth plan, it has been taken into consideration that Department of Non-conventional Energy sources, Govt. of India will also supplement financial assistance for all the projects on the share basis varying upto 80% for Demonstration, research and Development projects.

-----X-----