

FOURTH FIVE YEAR PLAN & ANNUAL
PLAN 1969-70

C O N T E N T S

CHAPTER	<i>Pages</i>
Physico-Geographical Factors	1
Physiography	1
Soils	2
Climate and Rainfall	4
Economic Divisions	4
Population and Area	5
Working Force	5
Land Utilization	7
Water Resources	8
Forest	9
Minerals	12
Animal Husbandry	14
Fisheries	16
Eighteen Years of Planning	19
Per capita Income	19
Average Holdings and Yields	22
Urban Sector	22
Industrialisation	23
Level of Development	23
Outlays	24
Investment	25
Central Assistance	25
Central Industrial Projects	25
Investments by Central Financial Institutions	26
Commercial Banks	26
Private Enterprise	26
Special Problem Areas	27
Review of Important Programmes	28
Pattern of Utilization of Funds	34
Low Level Equilibrium Trap	34

CHAPTER	<i>Pages</i>
3. Objectives and Strategy	53
Objectives of State's Fourth Plan	54
Long Term Perspective	54
Fourth Plan Outlay	55
Strategy for Development	58
Some programmes included in the Supplementary Plan	62
Employment	62
4. District Plans	65
5. Resources	69
6. Agriculture	71
Agricultural Production	71
Soil Conservation	88
7. Animal Husbandry	105
8. Dairying and Milk Supply	117
9. Forests	121
10. Fisheries	127
11. Cooperation	133
12. Community Development and Panchayati Raj	145
Community Development	145
Panchayati Raj	147
Rural Man Power	149
Applied Nutrition Programme	150
13. Irrigation	155
Irrigation	155
Flood Control	159
14. Power	161
15. Industries and Mineral Development	201
Large and Medium Industries	201
Mineral Development	207
Village and Small Industries	208
16. Transport and Communications	223
Roads and Bridges	223

CHAPTER	<i>Pages</i>
Road Transport	229
Tourism	231
17. Education	239
General Education	239
Technical Education	246
18. Health and Family Planning	267
19. Water Supply	285
20. Housing and Urban Development	291
21. Welfare of Backward Classes.. .. .	295
22. Social Welfare	305
23. Craftsmen Training and Labour Welfare	313
24. Other Programmes	319
Statistics	319
Information and Publicity	320
Evaluation	321
Planning Research and Action Institute	322
Youth Programmes	323
25. Special Problem Areas	329
Eastern Districts	330
Hill Region	333
Bundelkhand	337
26. Administrative and Organisational Problems	339
Accountability	340
Personnel Policy and Training	340
Delegation of Power and Decentralization of functions	341
Evaluation	341
Economies in Construction	342
Revision of Rules and Procedures	342
Public Cooperation and Participation	342
Schools, Cooperatives and Panchayts	343

CHAPTER	<i>Pages</i>
27. Welfare and Development of Vulnerable Sections	345
STATEMENTS	
I—Outlays and Expenditure, 1966—69	351
II—Summary Statement Showing head-wise break-up of State's Fourth Five-Year Plan Outlay	354
IIA—Distribution of Outlays under the State's Supplementary Fourth Five-Year Plan	358
III—Proposed Plan Outlays	360
IV—Summary Statement—Centrally Sponsored Schemes	372
V—Physical Programmes	373
VI—Check list in respect of Principal Projects costing Rs. 5 crores and above	388
APPENDICES	
I—Growth of Irrigation Potential and Utilisation during Fourth Plan through Major—Medium Irrigation Schemes	416
II—Growth of installed capacity and firm capacity during Fourth Five Year Plan	420
III—Growth of Transmission and Distribution lines	422
IV—Proposed sectorwise Outlay for Uttarakhand	423

Sub. National Systems Unit,

National Institute of Educational

Planning and Administration

17-P, Shaheed Marg, New Delhi-110016

DC. No.

Date

PHYSICO-GEOGRAPHICAL FACTORS

1.1. Uttar Pradesh is one of the border States and lies along the foot-hills of Himalayas. Its position is between latitudes $23^{\circ}52'N$ and $31^{\circ}28'N$ and longitude $77^{\circ}3'E$ and $84^{\circ}39'E$ covering an area of about 294 thousand sq. kilometres. It has a common border with Tibet and Nepal in the North; Himachal Pradesh, Haryana, Delhi and Rajasthan in the West and South-West; Madhya Pradesh in the South, and Bihar in the East.

Physiography

1.2. Physiographically, Uttar Pradesh can be divided into three distinct regions, (1) Himalayan Region, (2) Gangetic Plain in the centre, and (3) the Hills and Plateau in the south.

1.3. The Himalayan region is mountainous having extensive and thick forests. It comprises Uttar Kashi, Chamoli, Pithoragarh, Tehri Garhwal, Garhwal and Almora Districts, Naini Tal tehsil of Naini Tal District and Chakrata and a part of Dehra Dun tehsil of Dehra Dun District. This region is thinly populated and there are no large towns, though there are a number of beautiful hill stations like Chakrata, Mussoorie, Naini Tal, Ranikhet and Almora. Dehra Dun is the only city with a population of more than one lakh. On account of the stony nature of the land cultivation is possible only in river valleys and terraced hill slopes. The chief crops of the area are rice and wheat. Naini Tal and Almora Districts have some orchards while the sub-montane area of Dehra Dun produces tea as well.

1.4. The alluvial Gangetic Plain covers a major portion of the State. The northern strip of this plain, which runs from Saharanpur to Deoria is called the Bhabhar and the Tarai and has distinctive features of its own. The Bhabhar skirts the Sivaliks mainly lying in Saharanpur, Bijnor, Garhwal, Naini Tal and Pilibhit Districts. This portion is generally covered with forests. Parallel to Bhabhar and to its south lies the narrow strip of the Tarai running through Saharanpur, Bijnor, Naini Tal, Rampur, Bareilly, Pilibhit, Kheri, Bahraich, Gonda, Basti, Gorakhpur and Deoria Districts. It is damp and marshy and is covered by tall grass and thick forests. The main crops of the Bhabhar and the Tarai are wheat, rice and sugarcane. The slope of the Gangetic Plain is from north to south in western portion and from north-west to south-east in eastern portion. The plain is watered by the Yamuna, the Ganga and its northern tributaries, the Ramganga, the Gomti and the Ghaghra. This region is vital for the economy of the State and is densely populated. According to the 1961 Census, it contained 14 out of 17 cities and

town-groups having more than 1,00,000 population in the State. The whole of the Gangetic plain outside the Bhabhar and the Tarai is alluvial and very fertile. About 70 per cent of the area is cultivated. The chief crops are rice, wheat, millets, gram, barley and sugarcane. Sugarcane is the chief cash crop of the region.

1.5. The southern region consists of the Vindhya Hills and the Plateau and is a part of the Central Indian Plateau. It comprises of the four districts of Bundelkhand Division, namely Jhansi, Jalaun, Hamirpur and Banda Districts, the Meja and Karchhana tehsils of Allahabad District, the whole of Mirzapur District south of the Ganga and the Chakia tehsil of Varanasi District. General slope of Bundelkhand is to the north-east. Low hills exist here and there. The region is drained by the Betwa and the Ken rivers which join the Yamuna. This region, again, is not densely populated. Only two cities, viz. Jhansi and Mirzapur have a population of over one lakh each according to the 1961 Census. The Southern Hills and the Plateau are not very suitable for agriculture due to configuration of the land. Only about 50 per cent of the area is under cultivation. The main crops of the region are Jowar, Gram and Wheat.

Soils

1.6. To a great extent soils derive their chief characteristics from the geological formation beneath them. Uttar Pradesh has three broad geological divisions which corresponds to the three broad physical features viz., (a) Northern mountains, (b) Gangetic plain and (c) Southern Hills and Plateau, which have soil characteristics of their own. The different soil types may, therefore, be broadly classified as under :

(A) *Forest and Hill soils*—These can be classified into two broad groups, viz., (i) those found in the northern mountainous region and (ii) those found in the sub-montane tract at the foot of the Himalayas extending from Dehra Dun to Deoria Districts. In the northern mountainous region, they are generally shallow and immature and they vary in texture and depth. These can be differentiated into the following four distinct types :

(i) *Red loam*—This type of soil is mostly found along slopes of lower hills or along ridges.

(ii) *Brown forest soil*—This is widespread and most of the soils of the higher sub-tropical and lower temperate regions belong to this type.

(iii) *Podsol*—This is met with under mild slope gradients and in pockets of hills and ridges and in shady places in both sub-tropical and temperate zones.

(iv) *Meadow soils*—They are local and less important and are usually found near water streams.

In the sub-montane tract the soils are pebbly and porous. They vary from clay loam to sandy loam. They can be categorised as (i) Clay loam, which is very mildly calcareous, rich in organic matter with dark grey colour

at the surface and inherently rich in nitrogen, (ii) Highly calcareous loam, (iii) Slightly calcareous loam, (iv) non-calcareous loam and (v) sandy loam which varies from dark brown to reddish brown in colour and is liable to suffer from droughty conditions due to excessive percolation and low water holding capacity.

(B) *Alluvial soils*—These soils in the Indo-Gangetic plain are of two types, viz., (i) Older Alluvium (Bangar) and (ii) New Alluvium (Khadar). They may be divided into the following three ranges :

(1) *Western range*—(Districts of Dehra Dun, Saharanpur, Muzaffarnagar, Meerut, Bijnor, Moradabad, Naini Tal, Bareilly, Pilibhit and Shahjahanpur.) The Tarai area in the north-western part of the range comprising the districts of Naini Tal and Dehra Dun consists mostly of dark grey soils, varying from loam to sandy loam. These soils are shallow, containing stones and gravels in large proportions and are generally acidic. In the plains of the western part of the range (e.g. districts of Saharanpur, Muzaffarnagar and Meerut), the soils are deep and generally very fertile. Towards further east, the tract (Bareilly, Bijnor, Pilibhit and Moradabad) contains soils which are generally heavy loam in texture. The soils are slightly alkaline, excepting east of Pilibhit, where they are acidic.

(2) *Central range*—(Districts of Kheri, Sitapur, Hardoi, Lucknow, Bara Banki, Jaunpur, Azamgarh and Kanpur.) In the north-eastern part (Kheri and Sitapur), the soils are loam or sandy loam. In general they are slightly acidic. In the other parts the soils are sandy loam in character.

(3) *Eastern range*—(Districts of Gorakhpur, Basti and Gonda.) There are two distinct types of soils, locally known as "bhat" and "banjar"; a third type of soil, known as "dhuh" occurs near river banks which are liable to inundation. "Bhat" soils are generally lowlying and sandy loam in texture. They have an abnormally high lime content, possess a clayey appearance and have markedly high water holding capacity. "Banjar" soils, varying from loam to sandy loam, are marked by lower lime content and are generally slightly alkaline to slightly acidic in reaction. A phosphate deficient belt exists in the north-western part comprising Pilibhit, Bareilly, Moradabad, Meerut, Muzaffarnagar, Saharanpur, Bijnor, Lucknow, Sitapur, Kanpur, Jaunpur, Gorakhpur and Gonda. Potash is deficient in Dehra Dun, Jaunpur and Azamgarh Districts. In drier parts saline and alkaline efflorescences occur in the soils which are popularly known as "Usar" and "Reh". Such stretches are quite vast and the districts mainly affected are Aligarh, Mainpuri, Kanpur, Sitapur, Unnao, Etah, Etawah, Rae Bareilly and Lucknow.

(C) *Mixed red and black soils*—These soils are found in Jhansi division, Mirzapur District, the Karchhana and Meja tehsils of Allahabad District and the Chakia tehsil of Varanasi District. The black soils commonly called "Mar" and "Kabir" are adhesive and calcareous and possess a high degree of fertility. They are very adhesive when wet and expand and contract to a

remarkable degree, getting fissured in the hot season. They are predominantly clayey. Although "Kabar" is as valuable as "Mar", it is relatively less retentive of moisture. The red soils are found mostly on plateau tops and upper slopes and are of two types known as "Parwa" and "Rakar". "Parwa" is a light sandy soil, sometimes a sandy loam, while "Rakar" is eroded soil usually found on higher elevations.

Climate and Rainfall

1.7. The entire State has tropical monsoon climate, but there are great variations on account of altitude. On the one hand there is the cold montane climate, as in the Himalayas, specially above the snow line where the temperature remains below the freezing point and, on the other hand, there are excessively hot and arid regions in the southern plains, specially adjoining the Thar desert. In the plains, the average temperature varies from a minimum of about 3-4°C in January to a maximum of 43-45°C in May and June. Generally Agra and Jhansi have the highest temperature and Bareilly and Roorkee the lowest. The year may be broadly divided into three distinct seasons—the cold season from October to February, summer from March to mid-June and monsoon from mid-June to September.

1.8. The annual rainfall in the State varies from region to region, the eastern and sub-montane tracts receiving a slightly higher rainfall and the south-western part, the least rainfall. It is roughly between 100-200 Cms. in the Himalayan region, about 100 Cms. in the sub-Himalayan belt of the Bhabhar and the Tarai about 60-100 Cms. in the West and Central Gangetic plain and between 100-120 Cms. in the eastern plain. The southern Hill and Plateau get rainfall of over 100 Cms. but portions of Jhansi and Banda Districts and the whole of Jalaun and Hamirpur Districts have less rainfall. Nearly 87 per cent of the annual rainfall is received during June to September and about 7 per cent during the winter months.

Economic Divisions

1.9. By grouping contiguous districts having almost similar crop patterns and population densities, the following five broad economic divisions emerge in the State :

Regions	Districts
1. Hill Region	(1) Naini Tal, (2) Almora, (3) Tehri-Garhwal, (4) Garhwal, (5) Chamoli, (6) Uttar Kashi, (7) Pithoragarh, (8) Dehra Dun.
2. Western Region	(9) Saharanpur, (10) Muzaffarnagar, (11) Meerut, (12) Bijnor, (13) Moradabad, (14) Rampur, (15) Bulandshahr, (16) Aligarh, (17) Mathura, (18) Agra, (19) Etah, (20) Mainpuri, (21) Farrukhabad, (22) Etawah, (23) Budaun, (24) Shahjahanpur, (25) Bareilly, (26) Pilibhit.
3. Central Region	(27) Lucknow, (28) Sitapur, (29) Kheri, (30) Hardoi, (31) Kanpur, (32) Unnao, (33) Fatehpur, (34) Rae Bareli, (35) Bara Banki.
4. Eastern Region	(36) Allahabad, (37) Mirzapur, (38) Varanasi, (39) Jaunpur, (40) Pratapgarh, (41) Sultanpur, (42) Faizabad, (43) Ghazipur, (44) Ballia, (45) Azamgarh, (46) Deoria, (47) Gorakhpur, (48) Gonda, (49) Basti, (50) Bahraich.
5. Bundelkhand Region	(51) Jalaun, (52) Jhansi, (53) Hamirpur, (54) Banda.

Population and Area

1.10. The State ranks first among all States in population and fourth in area. About 17 per cent of the country's population lives in this State, which has about 9 per cent of the area of the country. The State which had 73.7 million persons in 1961 is estimated to have a population of 88.2 million in 1969, with a density of 300 persons per sq. km. In March 1974, the population is likely to touch the figure of 98.7 million. The region-wise percentage distribution of area and population and population density are given below :

Region		Percentage distribution of area	Percentage distribution of population	Population (1969)* ('000)	Density per sq. km. (1969)*
1		2	3	4	5
1.	Hill	17.4	4.2	37,16	73
2.	Western	27.9	34.8	3,07,10	373
3.	Central	15.6	17.9	1,57,79	344
4.	Eastern	29.1	38.4	3,38,42	395
5.	Bundelkhand	10.0	4.7	41,87	142
Uttar Pradesh		100.0	100.0	8,82,34	300

1.11. Lucknow District has the highest density namely 533* persons per sq. km. but this is chiefly due to the existence of a large city in a small district. If urban population is ignored, the five most populous districts of the State are :

- (1) Deoria,
- (2) Jaunpur
- (3) Ballia,
- (4) Azamgarh, and
- (5) Gorakhpur.

Working Force

1.12. The population in the working age-group, 15-59 years, was 40 million in 1961, which is now estimated to be 47 million in 1969, representing

*According to projections by Directorate of Economics and Statistics. U. P.

a rise of 17.3 per cent during the period of 8 years. The Region-wise projections of population in the working age-group in 1969 are given in the following table :

Region	Working age-group population in 1969* ('000)	Proportion in the State	Percentage of total population
1	2	3	4
1. Hill	20,39	4.3	54.9
2. Western	1,62,98	34.7	53.1
3. Central	86,60	18.4	54.9
4. Eastern	1,77,38	37.7	52.4
5. Bundelkhand	22,91	4.9	54.7
Uttar Pradesh	4,70,26	100.0	53.3

About 50 per cent of the population in the working age-group consists of women, the bulk of whom are not engaged in gainful work. The actual number of workers in the State in all age-groups was, however, 29 million in 1961. Most of these workers (75 per cent) were engaged in agricultural occupations. The region-wise distribution of workers, their proportion to the total population and the proportion of workers engaged in agricultural occupations are given in the following table :

Region	Number of workers in 1961 ('000)	Proportion in the State	Percentage of workers to the total population	Percentage of workers in agriculture to total workers
1	2	3	4	5
1. Hill	1,741	6.0	56.1	79.9
2. Western	8,503	29.5	33.1	63.8
3. Central	5,040	17.5	38.2	75.6
4. Eastern	12,058	41.8	42.6	82.2
5. Bundelkhand	1,508	5.2	43.1	75.9
Uttar Pradesh	28,850	100.0	39.1	75.2

*According to projections by Directorate of Economics and Statistics, U. P.

Land Utilization

1.13. Land is the most important natural resource of the State. The solution for meeting the requirements of the growing population with a fixed land surface, lies in the optimum utilisation of land in all possible ways. The following table gives the land utilization in the State for the two latest years for which data were available along with the position at the beginning of the first three Plans :

Land Utilisation	('000 Hectares)				
	1950-51	1955-56	1960-61	1965-66	1966-67
1. Reporting area as per village records	29,258	30,103	29,495	29,430	29,542
2. Forest	3,194	4,271	3,794	3,776	3,895
3. Barren and unculturable land	4,740	1,211	1,140	1,065	1,048
4. Land put to non-agricultural uses		3,234	3,363	3,439	3,465
5. Culturable Waste	4,016	1,998	1,813	1,662	1,625
6. Permanent pastures and other grazing land		34	44	66	74
7. Land under miscellaneous tree crops and groves not included in net area sown		1,018	719	637	631
8. Current fallows	1,077	192	174	894	521
9. Other fallow land	16,231	1,282	1,260	548	964
10. Net area sown		16,863	17,188	17,343	17,319
11. Area sown more than once	3,729	4,150	4,542	4,731	4,736
12. Total cropped area	19,960	21,013	21,730	22,074	22,082
13. Net area irrigated	4,840	4,952	5,074	5,875	6,255
14. Cropped area irrigated	5,209	5,357	5,559	6,607	7,152

Source—Board of Revenue and Bulletin of Agricultural Statistics-U. P.

1.14. The total cropped area has shown a rising trend both on account of increase in the net area sown and the area sown more than once. The per capita cropped area has, however, declined from 0.32 hectares to 0.27 hectares during the last 15 years. The percentage of double cropped area to the net area sown has increased from 23 per cent to 27 per cent in 15 years. The following table shows the situation in different regions of the State :

Regions	1950-51	1955-56	1960-61	1965-66	1966-67
Hill	16.9	18.2	20.0	21.7	22.9
Western	22.0	24.7	27.1	28.8	31.1
Central	22.5	24.6	27.0	28.3	25.4
Eastern	29.6	30.7	31.7	32.4	30.9
Bundelkhand	6.3	6.7	9.1	8.2	9.6
Uttar Pradesh	23.0	24.6	26.4	27.3	27.5

The lower proportions of double cropped area in the Bundelkhand region is mainly due to lack of irrigation facilities in that region.

The following table shows region-wise position in regard to culturable waste land in the State :

Region	Culturable waste land as percentage of net area sown during			
	1955-56	1960-61	1965-66	1966-67
Hill	25.6	24.2	23.2	22.7
Western	7.3	6.5	5.7	5.5
Central	11.3	10.0	8.4	8.4
Eastern	9.2	8.6	7.7	7.6
Bundelkhand	31.8	25.3	24.3	23.9
Uttar Pradesh	11.8	10.5	9.6	9.4

Bundelkhand and Hill regions appear to have large tracts of culturable waste land, which need special attention, in the context of the imperative need to increase agricultural production.

1.15. Taking more than one crop on the same area during a year is only one of the ways of the intensive utilisation of land resources. Another way can be to put that area under crops, which remains fallow during the year for one reason or the other. The following table shows the fallow land as percentage of the net area sown in different regions of the State :

Region	1950-51	1955-56	1960-61	1965-66	1966-67
Hill	6.4	7.2	6.1	4.9	4.8
Western	5.1	7.2	7.1	7.1	6.6
Central	6.5	10.2	9.4	9.5	10.2
Eastern	6.1	7.7	7.7	7.5	7.8
Bundelkhand	14.6	16.3	14.2	14.9	17.1
Uttar Pradesh	6.6	8.7	8.3	8.3	8.6

Bundelkhand region is again prominent because of high percentage of fallow land.

Water Resources

1.16. Water resources may be broadly divided into surface water and underground water. In the country about one-third of the water available

through rainfall is lost immediately due to evaporation and about 22 per cent seeps into the soil. The remaining 45 per cent flows into the river system ; of this only about one-third can be harnessed for purposes of irrigation on account of limitations imposed by topography, flow characteristics, climate and soil. Of the 22 per cent that seeps into the soil, about 50 per cent gets absorbed into the top layers, contributing to soil moisture which is essential for the growth of vegetation. The remaining percolates down into porous strata and represents the annual enrichment of the underground water. The exploitation of water resources has to be so organised as to increase the productivity of land through irrigation, flood control and drainage.

1.17. Excepting the Hill region and Bundelkhand, Uttar Pradesh is fortunate in the matter of water resources. Though a proper survey has not yet been undertaken, it is estimated that the total water resources of the Ganga basin are about 430 lakh hectare metres, out of which about 310 lakh hectare metres pass through this State. About six lakh hectare metres are at present drawn from the sub-soil through tube-wells and masonry wells.

Forest*

1.18. The total forest area in the State adds up to 47,938 sq. km. out of which 39,318 sq. km. is under the control of Forest Department under the following categories :

(a) Reserved	..	..	..	..	..	30,432	sq. km.
(b) Protected	..	..	..	..	..	774	„ „
(c) Unclassed	..	..	..	..	..	8,111	„ „

The remaining 8,620 sq. km. of forest area is under the control of civil and other authorities. The State stands sixth in respect of forest area amongst the States of the country — the first five being Madhya Pradesh, Assam, Orissa, Maharashtra and Andhra Pradesh in that order. The area in this State under Forest is 16.3 per cent of the total geographical area of the State against 23.4 per cent in India, 53.7 per cent in Assam, 42.3 per cent in Orissa, 39.0 per cent in Madhya Pradesh, 31.2 per cent in Kerala, 23.8 per cent in Andhra Pradesh, 20.6 per cent in Maharashtra, 18.3 per cent in Mysore, 18.1 per cent in Bihar and 16.1 per cent in Nagaland. The National Forest Policy lays down that to promote balanced economy, 33 per cent of the land — 60 per cent in the hilly regions and 20 per cent in the plains—should be developed as properly cited and well managed forests. Against this the percentage in the hill areas of Uttar Pradesh is 54.8 (27,918 sq. km.) and in the plains it is 8.4 (20,020 sq. km.)

1.19. Per capita forest area in U. P. is only 0.06 hectares against 0.16 hectares in the country. Only the State of West Bengal has a lower per capita forest area (0.03 hectares). The per capita growing stock of forests

*Based on information received from Forest Department, U. P.

in use in U. P. is only 0.04 cubic metre against 5.2 cubic metres for the country. Thus the State is quite deficient in forests.

1.20. The major portion of forest lies in the Himalayan and sub-montane tracts, followed by a much smaller proportion in the hill and plateau in the south. The Gangetic basin is practically devoid of forests. Out of 54 districts, natural forests occur only in 22 districts, three districts of Ballia, Ghazipur and Jaunpur have no forest land at all; and twenty-nine districts have a forest area of less than five per cent of their respective areas. Districts in the hill region however, have heavy forests, the largest proportion of area under forests is in Uttar Kashi District (89.0 per cent), followed by Pauri Garhwal (82.2 per cent), Almora (67.8 per cent), Chamoli (61.2 per cent), Tehri Garhwal (59.6 per cent) Naini Tal (58.3 per cent) and Dehra Dun (53.7 per cent). In the plains the district of Pilibhit (30.7 per cent) has the largest proportion of forest area followed by Mirzapur (29.0 per cent) and Lakhimpur Kheri (22.6 per cent).

1.21. A large variety of forests has developed under the wide range of climatic conditions prevailing in the State. The latest classification recognises the following broad groups:

(1) *North Indian Tropical Moist Deciduous Forest*—This type which consists of two categories viz., Sal forest and the rest is most important in U. P. Sal forests have different varieties: (i) Moist Sivalik Sal forests found in Sivalik hills from Dehra Dun to Haldwani, (ii) Moist Bhabhar Sal forests found in Dehra Dun, Kumaun, Bhabhar and Kheri, (iii) Moist Tarai Sal forests found in Haldwani, (iv) Moist plains Sal forests found in the Gorakhpur forest division, (v) Moist peninsular Sal forests found in southern parts of the State and (vi) Sal savannah forests occurring throughout the Gangetic plains. Other forests of this type are found in Sivalik hills, Haldwani, Gorakhpur and North Kheri forest Divisions.

(2) *Sub-Montane Hill Valley Swamp Forest*—These are found along the Himalayan Sub-montane tract and in tropical hill valleys. The typical site of this type is in the East Dehra Dun forest division.

(3) *Northern Tropical Dry Deciduous Forest*—This group occurs extensively in U. P. It extends with but little change up to the lower slopes of the Himalayas.

(4) *Northern Tropical Thorn Forest*—It is spread over the Semi-arid regions of the mostly found in the ravinous area of Chambal drainage.

(5) *Sub-Tropical Pine Forest*—This type is typically an associate of pine occurring between 1,000 metres to 1,800 metres extending on ridges down to 600 metres and up to 2,300 metres on southern exposure.

(6) *Himalayan Moist Temperate Forest*—It is found in Himalayas between the sub-tropical pine forests and the sub-alpine formation.

(7) *Himalayan Dry Temperate Forest*—This type occurs on an attitude of over 1,700 metres in the minor ranges of Himalayas.

(8) *Sub-Alpine Forest*—The topmost tree forest in the Himalayas in the altitudinal limits of 2,900 metres and 3,500 metres falls in this type.

(9) *Moist Alpine Scrub*—This type forms a low evergreen forest almost entirely of species of *Rhododendron* but with some birch and other deciduous trees.

(10) *Dry Alpine Scrub*—This group adjoins the dry temperate forests and may take their place under heavy pressure of grazing.

1.22. Out of 39,318 sq. km. under the control of Forest Department, only 24,258 sq. km. of forest area are exploitable. Out of the rest, 2,568 sq. km. are unworkable, 3,169 sq. km. are waste lands and the remaining 9,323 sq. km. are blanks constituting grass land, degraded and snow covered areas, etc.

1.23. The woody plants in the State add up to about a thousand species. Even if species which are herbacious are excluded, there are more than 300 trees and almost 400 shrubs and over 100 woody climber species. More than 220 species of grasses have been collected from the Gangetic plain alone and there are many more in the hills. The following table depicts the net area of important species of the forests under the control of Forest Department :

Serial no.	Name of Species	Net area (Hectares)
1	Chir	4,06,787
2	Deodar	17,627
3	Fir and Spruce	82,659
4	Kail	16,866
5	Cypress	1,288
6	Sal	4,96,228
7	Teak	18,947
8	Khair (Mixed with Shisham)	74,955
9	Shisham	5,963
10	Miscellaneous and other species unproductive, blanks etc.	28,10,497

1.24. Amongst the major forest products, timber and firewood are the most important. The principal timber trees found are Sal, Chir, Deodar, Semal, Sheesham, Asna, Babul, Saim, Haldu, Tun, Kanju, Spruce, Blue Pine, Jamun, Teak and Gutel. In addition to timber, Chir yields resin also, which is the chief source of resin and turpentine. There are a number of

minor forest products like bamboo, ringal, katha, tendu-leaves and cane. The value of the annual forest production is about Rs.55 crores and the annual revenue from forests to the State is a little over Rs.15 crores. The estimated growing stocks of some of the important species in the forest area is to the tune of 850 lakh cubic metres. The following table shows the estimated growing stock of forest in the State :

Serial no.	Name of species	Growing stock ('000 cu. metres)
1	Abies Pindrow	11,174
2	Acacia catechu	503
3	Acer species	568
4	Adina Cordifolia	1,115
5	Anogeissus latifolia	579
6	Boswellia Serrata	1,001
7	Cedrus deodara	1,474
8	Holoptelza integrifolia	542
9	Mallotus philippensis	756
10	Pinus Wallichiana	855
11	Pinus rexburghii	24,283
12	Salmaalma malabarica	590
13	Sherea robusta	30,546
14	Syzygium Cumini	1,082
15	Terminalia to montosa	3,774
16	Others	6,158
	Total	85,000

1.25. Forests can play a very important role in the industrial development of the State, but they are yet to be fully exploited. Exploitation of forest will boost the industrial programme of the State while afforestation will conserve soil and organise physical defence against nature.

Minerals*

1.26. Uttar Pradesh is not very fortunate in regard to mineral deposits. Whatever deposits are found are concentrated in the eight northern Himalayan

*Based on information obtained from Directorate of Geology and Mining, U. P. and 'Minerals of Uttar Pradesh' compiled by Directorate of Geology and Mining, U. P.

districts, viz., Uttar Kashi, Chamoli, Pithoragarh, Tehri-Garhwal, Garhwal, Almora, Naini Tal and Dehra Dun and the districts of Agra, Jhansi, Hamirpur, Banda, Allahabad and Mirzapur. Important minerals found in the State are given below :

Lime-stone—Sufficient reserves of limestone suitable for sugar, paper, chemical and cement industries exist in Dehra Dun tehsil. It is estimated that about 40 million tonnes of cement grade limestone is available in this area. Large reserves of cement grade limestone are also available in the Chakrata tehsil. Reserves of sandy limestone which may be used for cement industry after beneficiation are available in Lansdowne tehsil of Garhwal District in large quantities. High grade limestone in considerable quantity is also available in Robertsganj tehsil of Mirzapur District. Besides the existing Government Cement Factory at Churk, one more factory at Dalla is under construction for which large reserves of limestone are available in Kajrahat area.

Dolomite—It is found in the tehsils of Dehra Dun, Tehri, Karwi (Banda) and Robertsganj (Mirzapur). It is suitable for use as flux in steel industry. The Dolomite of Robertsganj is of a high grade and is being used for steel melting.

Magnesite and Soapstone—It is used, *inter alia*, as a refractory material in steel industry. It is found inter-bedded with dolomite in Almora District and in Alakananda valley of Chamoli District.

Coal—Large reserves of about 900 million tonnes of second to third grade coal are available in Makhrikhoh and Bansi areas near Kotah on the Madhya Pradesh border in Mirzapur District.

Copper Ore—Deposits have been found in Pokeohori and Dhanpur areas of Chamoli District. These areas appear to be the most promising out of all the copper occurrences in the other districts of Naini Tal, Almora, Garhwal and Tehri-Garhwal. The State Directorate of Geology is at present investigating the copper deposits at Sonrain in Mahroni tehsil (Jhansi) where the prospects appear to be promising.

Gypsum—Substantial reserves are available in Dehra Dun and Tehri-Garhwal Districts.

Glass Sand—Extensive deposits of high grade glass-sand occur in about 20 sq. kms. in the Karchhana tehsil of Allahabad District and the Karwi and Mau tehsils of Banda District. Most of the country's requirements of glass sand are met from these areas.

Marble—Substantial reserves of pure white marble suitable for making chips and chemical lime are available in Dehra Dun and Almora Districts. Large deposits suitable for chips and chemical industries are also available near Obra, in the Robertsganj tehsil of Mirzapur District. The area has been investigated by the State Directorate of Geology and Mining and 4 to 5 million tonnes of marble are likely to be available.

Phosphorite—The Geological Survey of India have found substantial deposits in the Maldevta/Nagini and other areas of Tehri Tehsil of Tehri Garhwal District which are under investigation. The adjoining Mussoorie area of Dehra Dun District also contains large deposits of phosphorite.

Morrum-Sand—Morrum sand in significant quantities is found in Kanpur, Jhansi, Jalaun, Hamirpur, Banda and Varanasi Districts. The banks of the Yamuna river and the bed of the Ken river near Banda have good quality Morrum sand which is useful for construction purposes.

Diaspore and Pyrophyllite—Substantial quantities of these materials are found in Jhansi and Hamirpur Districts. Diaspore is presently the most valuable mineral being queried in the State.

Barytes—The State Directorate of Geology has found some deposits of this very important mineral in Maldevta area of district Dehra Dun and investigations are in progress.

Andalusite—The Geological Survey of India has reported good deposits of this mineral in Mirzapur District.

Bauxite—The State Directorate of Geology has discovered large deposits of Bauxite in the Manikpur Forest Range, Banda District and the same are under investigation for use by the Hindustan Aluminium Corporation, Renukoot, Mirzapur. It is expected that over ten million tonnes of metal grade bauxite would be available.

Marl—Large deposits of this mineral which can be used for cement manufacture are available in the beds of lakes in the Lucknow, Bara Banki, Unnao and Rae Bareli Districts. Actual testing of the material for cement manufacture has not so far been done.

1.27. Besides, there are many unimportant minerals found in this State. Vindhyan sand stone, a building material of high quality is being quarried extensively in Agra, Banda, Varanasi and Mirzapur Districts. Kankar, Reh, Saltpetre and sand are also found in large quantities in the districts of Western, Central and Eastern regions of the State. A potential reserve of nearly three million tonnes of non-plastic fine clay has also been explored in Mirzapur District which can be of use in refractories and ceramic industries.

Animal Husbandry

1.28. Livestock and poultry are important for the development of agriculture, supply of milk, meat and eggs and for industrial purposes. Though Uttar Pradesh has only 9 per cent of the country's total area, it supports about 15 per cent of its total livestock population. Some communities like Gujar and Ahir have animal husbandry as their principal occupation. Mostly animal husbandry is practised as a subsidiary activity along with agriculture.

1.29: Among various categories of livestock, the State accounted for 16 per cent of cattle over 3 years, 22 per cent of buffaloes over 3 years, 13 per cent of goats and 12 per cent of other livestock in India in 1966. Cattle outnumber buffaloes and goats among milch animals, the proportion of cattle being 58 per cent. The following table† gives the number of livestock and poultry in the State :

		(In thousands)			
Category		1951*	1956*	1961	1966P
<i>Cattle and Buffaloes—</i>					
(1) Males	.. Breeding	38	47	50	79
	Working	.. 1,29,67	1,32,95	1,40,81	1,43,75
	Total	.. 1,31,93	1,34,85	1,43,34	1,46,59
(2) Female	.. Breeding	1,19,24	1,17,54	1,23,87	1,26,65
	Total	.. 1,19,89	1,18,21	1,24,80	1,27,42
(3) Young Stock	. Total	95,58	94,49	1,04,43	1,01,44
	Total, Livestock	.. 4,39,96	4,55,78	4,94,04	4,99,72
	Total, Poultry	.. 20,46	21,31	32,54	37,71

Between 1951–1966 livestock recorded an overall increase of 14 per cent in U. P. This was contributed by goats (43 per cent), sheep (38 per cent), buffalo (18 per cent) and cattle (4 per cent). Cattle and buffaloes showed a rise of only 8 per cent as against 30 per cent in the human population during the same period. The poultry almost doubled itself in the last 15 years.

1.30. The following table gives the number of livestock and poultry per thousand of human population :

Region	Cattle and Buffalo Male (over 3 years)	Cattle Female (over 3 years)	Buffalo Female (over 3 years)	Goats	Sheep	Total Live-stock	Total Poultry
Hill	.. 232	204	123	255	119	1,159	78
Western	.. 145	47	91	47	18	488	40
Central	.. 192	91	69	132	25	672	39
Eastern	.. 188	83	50	100	32	571	51
Bundelkhand	.. 238	177	91	200	81	1,029	35
U. P.	.. 178	82	73	99	32	607	46

†Source—Livestock Census, 1956, 1961 and 1966, Board of Revenue, U. P.

*Include estimates for hill portion not covered by the Livestock Census.

P=Provisional.

As far as numbers are concerned, the Hill and Bundelkhand regions have clearly a larger share of livestock ; in these regions, total livestock which consists, mostly of cattle, goats and sheep is more than one per head. Considering female buffaloes separately, the Western region is bracketted with the Bundelkhand region, but the hill region is again at the top with 123 female buffaloes per thousand persons. The cattle and buffaloes of the Hill and Bundelkhand regions are, however, not good producers of milk. In this respect Western region leads other parts of the State. The following table* gives the Index Number of yield of milk for various regions, taking the State average as 100 :

Region	Cattle	Buffalo
Hill	59	59
Western	164	132
Central	82	85
Eastern	111	79
Bundelkhand	69	71
State	100	100

1.31. The Hill region leads in poultry, as well, with 78 birds per thousand human population. In the rest of the State Eastern region only has more than 50 birds per thousand persons, Bundelkhand being at the bottom with only 35 birds.

Fisheries†

1.32. Rivers in the Gangetic plain flow first from north to south and then from west to east. In the *doabs* of these rivers there are a large number of streams and ponds, and lakes which provide good potential for fisheries development in the State. In the northern region, specially in the lower reaches of Naini Tal district, a large number of reservoirs have been constructed. Similarly in the southern region, south of the river Yamuna the topography is amenable to construction of reservoirs. Besides, all the village sites in the State have a number of large and small seasonal and perennial tanks. It has been estimated that there is a length of about 14 thousand Kms. of running waters and 3.24 lakh hectares of confined waters including 1.94 lakh hectares of irrigation reservoirs. The Fisheries Department has already taken up 1.29 lakh hectares of water for fisheries development. The rivers are mainly under the private sector and most of the tanks in the village sites are managed by the Gram Samaj. The fish culture in these small sheets of waters is dependent on the rainfall.

*Based on data obtained from the Directorate of Animal Husbandry, U. P.

†Based on information obtained from the Directorate of Fisheries, U. P.

1.33. In the Hill region where cold water species like Snow trout and Mirror carp are found, the productivity of fish is much less compared to the plains where the water is more productive due to high temperature and greater amount of dissolved nutrient salts. In the plains are found a large number of species belonging to carp and cat fishes, the later being predatory.

1.34. The production of fish per unit area under culture fisheries can be as high as 300 Kgs. per hectare but as the area increases, as in the case of reservoirs, the production per unit of area decreases considerably. Average production in the reservoirs of U. P. is only about 8 Kgs. per hectare.

1.35. The rivers are the natural source of fish seed required for stocking the confined waters. There are nearly 75 seed collection centres on the main rivers of the State giving over 1,200 lakhs of spawn. Rivers Ganga, Jamuna and Gomti produce over two-third of the total catch of the spawn. The quality of the seed in terms of major carp species is also good from these rivers but the seed collected from the rivers Ram Ganga, Rapti and Ghaghra is poor in quality.

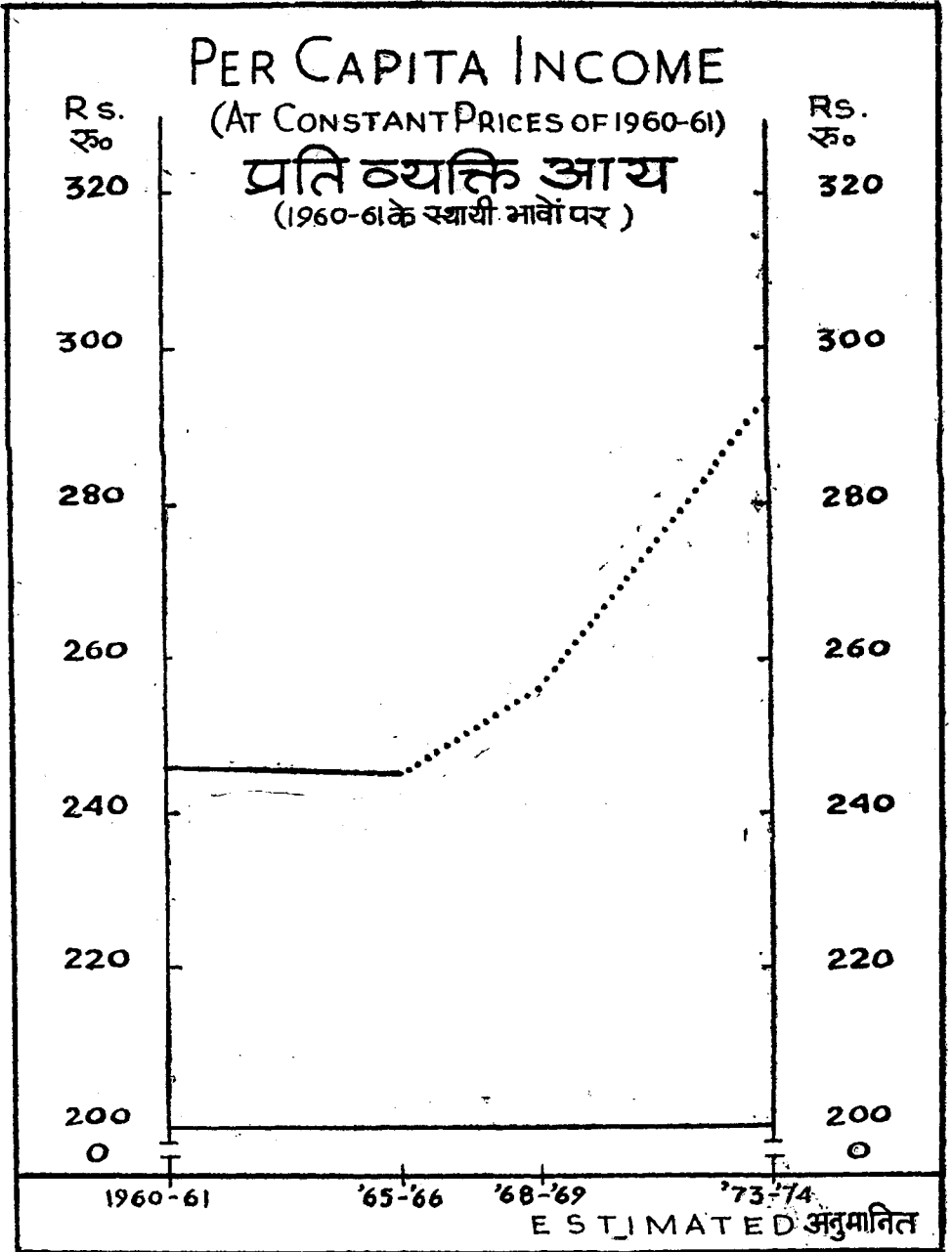
EIGHTEEN YEARS OF PLANNING

2.1. Sometimes in the history of a people decades weigh more than centuries. Eighteen years ago the country accepted planning as an essential instrument for achieving accelerated economic and social development. Planning being a dynamic process, the Five Year or Annual Plans form a continuing series in terms of both effort and benefit. Completion of one Plan and the commencement of another, however, provide an opportunity for stock-taking and for reviewing various policies and programmes which have been in operation. Accordingly analysis of certain basic factors which effect the economy of the State, has been attempted in this chapter, so that objectives and goals for the Fourth Five-Year Plan might be defined in the light of past experience and future hopes and possibilities.

Per capita Income

2.2. Per capita income is one of the most significant indicators of the economic well-being of the people. Therefore a study of the variations of the per capita income of the State during the period under review would help in assessing the impact of development programmes. At the commencement of the First Plan (1950-51) the per capita income of U. P. was Rs.260 as against Rs.247.5 for the country at the constant prices of 1948-49. After a decade viz. at the end of the Second Plan, the State's per capita income was Rs.246 as against Rs.306.7 for the country at the constant prices of 1960-61. It is true that the per capita income of 1950-51 is not directly comparable with that of 1960-61 as the base for the two years happens to be different. Even so, these figures at least indicate the gap between the State and the country. There is, however, no such difficulty of comparison after 1960-61 as the constant prices of 1960-61 constitute the base for subsequent years. At the end of the Third Plan, while the country's per capita income rose to Rs.307.3 in the case of U. P. it came down to Rs.245. In 1966-67 the State's per capita income fell to Rs.228 as against Rs.302.4 for the country. Its main reason was the fall in agricultural production due to the drought. In the year 1967-68, the per capita income in the State rose to Rs.247 against a corresponding increase of the national per capita income to Rs.312.3.

2.3. For having a comparative view of the prosperity of different States of the Union, Statement III has been prepared to show the per capita income of various States at current prices. If we take the figures relating to 1964-65, for which the data are available for most of the States, it would be seen that the per capita income of U. P. was Rs.372. Only three States, viz. Kerala, Orissa and Bihar, had lower per capita incomes.



2.4. Per capita income is a derivative from the total State income. It will, therefore, be useful to give the figures relating to the State income also. The total income of U. P., in 1950-51 at 1948-49 prices was Rs.1,632 crores which formed 18.4 per cent of the National income of Rs.8,850 crores. Against this, in 1960-61 the income of U. P. was Rs.1,799 crores at 1960-61 prices i.e., 13.5 per cent of the National income of Rs.13,308 crores. In 1965-66 this share in terms of 1960-61 prices went down to 13.3 per cent. By 1967-68 it fell further to 12.8 per cent, when the State income of U. P. was Rs.2,107 crores against Rs.16,525 crores for the country. Thus, the share of the State in the national income which was a little higher than its share in the country's population in 1950-51 has been continuously decreasing. During the seven year period ending 1967-68, the State income showed an annual growth rate of 2.28 per cent. As the rate of population increase (2.21 per cent) in the State during this period was almost the same as the growth rate in income, the per capita income in the State has, on the whole, remained around the same level.

2.5. As regards the comparative growth rates, the average annual growth rate of the State income at constant prices of 1960-61 was 2.28 per cent as against 3.14 per cent of the country during the period 1960-61 to 1967-68. Sectorwise, the growth rate at the State level in the primary sectors was 1.23 per cent during the seven-year period ending 1967-68. Due to poor crops in the preceding year of 1966-67, the income of primary sectors had gone down by 8.3 per cent from the 1960-61 level. This was not true of U. P. alone. Even at the National level the income of primary sectors was 6.0 per cent less than the 1960-61 level. In the secondary sectors the annual growth in the State was 4.56 per cent till 1967-68 as against the corresponding rate at the National level of 4.63 per cent.

2.6. The low per capita income in the State is an indicator of the fact that U. P.'s economy is still undiversified. As against the all-India percentage of 22.7 engaged as cultivators, the percentage for U. P. is 25.0. The corresponding figures for Kerala, West Bengal, Punjab and Madras are 7.0, 12.8, 14.4 and 19.2 respectively. The percentage of workers engaged on mining, quarrying, livestock, forestry, fishing, hunting, plantations, orchards and allied activities in Uttar Pradesh is only 0.2 as against 4.4 in Assam, 2.9 in Kerala, 1.7 in West Bengal, 1.6 in Andhra Pradesh, 1.5 in Madhya Pradesh, 1.4 in Bihar and 1.04 in Maharashtra. The percentage of workers engaged in manufacturing in U. P. is only 1.1 as against 3.8 in West Bengal, 2.2 in Punjab and 3.3 in Maharashtra. The percentage in respect of trade and commerce, transport, storage and communication, household industries, construction and other services also is more or less the lowest in U. P. barring a few States. The economy of U. P. is thus handicapped not only by the large percentage (60.9) of non-workers but also by the fact that the percentage of workers engaged in cultivation in this State is very high.

Average Holdings and Yields

2.7. The average agricultural holding in U. P. is 1.86 hectares as against the national average of 2.69 hectares (N. S. S. XVI round). The average holdings in some of the other States are :

	Hectares
(1) Punjab*	4.52
(2) Maharashtra	5.29
(3) Gujarat	4.85
(4) Mysore	3.89
(5) Madhya Pradesh	4.05
(6) Rajasthan	5.58

2.8. Only West Bengal, Madras, Kerala, Bihar and Assam have comparatively smaller holdings. The yields per hectare in U. P. are also lower than the average yields in the country in respect of a number of important crops, specially rice, maize and sugarcane. The comparative yield per hectare of principal crops during 1967-68 as compiled by the Ministry of Food and Agriculture are given in Statement IV. The yield of rice per hectare in U. P. (730 Kgs.) is substantially lower than the All-India average of 1,031 Kgs. and is lower than that of all the other States except Nagaland. The same is almost true of maize, which is 792 Kgs. for U. P. as against 1,125 Kgs. for the country. The average yields per hectare of U. P. in respect of wheat, juar, bajra, barley, gram, and sugarcane, however, broadly correspond to the All-India averages.

Urban Sector

2.9. The State has comparatively a very small urban sector. The urban population in U. P., according to 1961 Census, was only 12.85 per cent of the population as against 17.98 per cent for the country as a whole. The Economics and Statistics Directorate of the State made a socio-economic enquiry during 1964-65 to assess the extent of unemployment and general characteristics of the unemployed persons in the urban areas of Uttar Pradesh. Certain interesting results were brought out by the report, which are briefly mentioned below :

- (i) Average age per person of the urban population was about 24 years and 57.8 per cent of the urban population was below this age.
- (ii) 54.2 per cent of the urban population was illiterate. Only 8.3 per cent of the urban population had passed at least the higher secondary examination.
- (iii) Only 26.8 per cent of the urban population was in the labour force and could be considered economically active.
- (iv) Nearly half (49.3 per cent) of the employed persons were employees mostly engaged in services and manufacturing industries.
- (v) Own account workers formed 37.3 per cent of the employed persons mainly doing trade and commerce.

*Prior to reorganisation.

(vi) Average weekly earnings comprising salary or wages during the study were Rs.26 in the principal occupation.

(vii) The percentage of immigrants was 0.8 of the total urban population and 58.5 per cent of them moved from the rural areas of U. P. alone.

Industrialization

2.10. According to 1967 figures, only 481 persons were employed in factories in U. P. per lakh of population as against 935 for the country. The share of large and medium industries in net domestic product of manufacturing enterprises in U. P. was only 39.4 per cent as against the corresponding figure of 60.4 per cent for the country. The gross industrial output per person employed in U. P. in 1966 was only Rs.17,716 as against an average of 18,332 for the whole country.

According to the 1966 figures, the percentage share of U. P. in the large-scale organised industry was extremely low. It had only 6.70 per cent of the total number of reporting factories in the country, with a share of 8.17 per cent of the productive capital, 7.15 per cent of employment, 6.91 per cent of ex-factory value of output and only 6.31 per cent of the value added by manufacturing. These percentages may be viewed in the context of U. P.'s population which is about 17 per cent of the Country's. States like Maharashtra, West Bengal, Madras and Gujarat have a large percentage of total number of reporting factories with a smaller population. The three main industries of the State, namely, cotton textiles, sugar and oil, are in a bad shape. In the case of oil industry, a number of units have gone out of commission. The other two industries are also working much below their rated capacity.

Level of development

2.11 Apart from the above figures which indicate the comparative position of this State vis-a-vis the rest of the country, there have been a number of independent studies relating to backwardness. In a study of inter-district and inter-State income differentials of 1955-56 relating to 289 districts in the country, the National Council of Applied Economic Research, found that out of 29 most backward districts in the whole country with a per capita income of less than Rs.146, 11 were in U. P. In another group of 29 districts with per capita income between Rs.147 and Rs.173, 11 were in U. P. Thus out of the 58 poorest districts of India, U. P. had 22, Bihar 12, Orissa and Madhya Pradesh 5 each, Mysore and Maharashtra 3 each, Assam, Andhra and West Bengal 2 each, Madras and Rajasthan 1 each. According to this study, 35 per cent population of the State was living in these backward districts. According to the Census report of India, 1961, the total population was distributed among different levels of development. Each district was classified in one of the 4 categories as bottom, second, third or top according to the level of development. Out of the total

78 districts of the lowest category in the country, U. P. had 28. The population of these 28 districts of the State was 50.12 per cent of the total population as against 19.66 per cent of the country's population falling in the bottom category. The States like Andhra Pradesh, Assam, Maharashtra, Mysore, Punjab and West Bengal had population in the bottom category ranging from 3.9 for West Bengal to 7.83 per cent for Assam. The States of Gujarat, Kerala and Madras did not have even one per cent of their population falling in the bottom category.

Outlays

2.12. The statement below would show the development outlays provided under the State Plan during the 18-year period (1951-69) per capita Plan outlay for U. P., all-States average and per capita Central Assistance provided by the Centre :

Plan period	State Plan Outlay	Per Capita Plan Outlay		Per Capita Central assistance	
	Actual expenditure (Rs. in crores)	U.P.	All States	U.P.	All States
1	2	3	4	5	6
		Rs.	Rs.	Rs.	Rs.
First Plan	153.37	24	40	14	25
Second Plan	233.35	34	52	18	27
Third Plan	557.40	75	92	46	58
1966-67	150.70	18	20	11	12
1967-68	153.81	18	20	10	12
1968-69	146.04 (Outlay)	16	18	9	12
Total ..	1394.67				

2.13. It would be seen that the per capita plan outlay in U. P. as well as per capita Central Assistance to this State was considerably less than the average for all the States.

2.14. Since the Third Plan the actual expenditure has been more than the original Plan outlay. For the Third Plan an amount of Rs.502.25 crores was originally provided. The actual expenditure was Rs.557.40 crores. For 1966-67 the original outlay was Rs.151.13 crores while the actual expenditure was Rs.150.70 crores. For 1967-68 the original outlay was Rs.153.54 crores, while the actual expenditure was Rs.153.81 crores. For 1968-69 the original provision was Rs.140.18 crores but additional funds have been made available mostly from the State's own resources to enable it to have a Plan of Rs.146.04 crores.

Investment

2.15. Besides the State's own funds, some of the other important sources of investment are (i) Central assistance, (ii) Central industrial projects, (iii) institutional investments, (iv) commercial banks, (v) Private enterprise.

2.16. The Planning Commission has circulated figures of Central investments in the States. For certain sectors, for which precise information of investment is not available, some projections have been made by the Directorate of Economics and Statistics of the State.

Central Assistance

2.17. The Central Government finances a part of the State Plans by providing Central assistance to the States. During the 18-year period (1951-69) an assistance of Rs.822.6 crores was received by U. P. out of the total Central Assistance of Rs.6,226 crores to all the States. U. P.'s share was thus only 13.2 per cent of the total divisible pool even though her population constituted 17 per cent of the country's population.

Central Industrial Projects

2.18. The following table would show the comparative position of investments on Central industrial projects in U. P. and in the country as a whole.

(Rupees in crores)

Plan period	Investment		
	U. P.	India	Col. 2 as percentage of col. 3
1	2	3	4
First Plan	..	45.3	..
Second Plan	..	694.2	..
Third Plan	..	1144.2	6.3
1966-68 (estimated)	..	566.0	13.4
Total investment (1951-68)	..	2449.7	6.0

2.19. Being a land-locked State, U. P. did not get any share of Rs.192.42 crores invested on major parts during the period 1951-68. During the same period an investment of Rs.372.84 crores was made by the Centre on Central Power generation schemes. As none of the projects was located in this State, U. P. did not get any share of this investment also.

Investments by Central Financial Institutions

2.20. The Industrial Finance Corporation, Industrial Development Bank of India, State Financial Corporation and Agricultural Refinance Corporation make investments in different States. The position of U. P. vis-a-vis the total investments through these institutions in the country is indicated below.

*Institutional Investment in U. P.**

Institution	Period	Sanctions (In crore rupees)		
		India	U. P.	Col. (4) as percentage of col. (3)
1	2	3	4	5
1. Industrial Development Bank of India ..	1964—68	227.07	10.67	4.7
2. State Financial Corporations ..	1960—68	139.53	6.64	4.8
3. Agricultural Refinance Corporation ..	Upto June, 1968.	90.59	2.81	3.1
4. Industrial Finance Corporation ..	1948—68	305.05	21.83	7.2

Commercial Banks

2.21. A study of bank deposits and credits granted by the banking system showed that in 1967 while U. P. contributed 7.9 per cent of the total bank deposits, its share in the bank credit was only 4.1 per cent. In per capita terms bank deposits and bank credit amounted to Rs.36.5 and Rs.13.0 respectively, as against Rs.77.1 and Rs.53.5 in the country as a whole. Thus, bank credit amounted to only 36 per cent of the total deposits in U. P. as against the all-India average of 69 per cent, and 114 and 109 per cent respectively for Madras and West Bengal. It has been estimated that through banking institutions about Rs.345 crores collected in other States was diverted to a few States. As would be revealed by Statement X showing loans given by Commercial Banks in March 1968, there is scope for augmenting availability of credit through banking institutions for the development of the State's economy.

Private Enterprise

2.22. During the first three plan periods, out of a total estimated investment of Rs.9,000 crores in the private sector in the country, an investment of

*Source—“The Operations of Financial Institutions” A paper circulated by the Planning Commission in the meeting of the National Development Council held at Delhi on 13th September, 1968.

Rss.680 crores is assessed to have been made in U. P. in the private sector (77.56 per cent). No doubt, there were several reasons for it like inadequate availability of power, absence of any organised money market, lack of financial institutions and non-orientation of licensing policy towards the development of economically less developed States to the degree and extent desirable, yett the fact remains that this contributed not in a small measure to the present backwardness of the State.

2.23. The comparative position of total investments made in U. P. and the country during the first three plans would be aparent from the following table :

Total investments during the First Three Plans

(Rupees in crores)

Item	U. P.	All India	Col. (2) as per centage of col. (3)
1	2	3	4
1. State Plan Investment	625	..	..
2. Central Investment including Central industrial projects but excluding Central assistance to States.	407	11,510	3.5
3. Private sector investment	680	9,000	7.6

Special Problem Areas

2.24. While the entire State is backward in the matter of economic development, there are particularly depressed pockets within the State itself. Those are (1) 15 eastern districts of U. P., (2) four districts of Bundelkhand and (3) eight hill districts. Together, these areas have 47.3 per cent of the total population of the State.

Eastern Districts

2.25. This region is economically the most backward in the State. The density of population is the highest and the *per capita* gross value of agricultural output is the lowest in the State. The cultivable area per worker is also the lowest. The number of agricultural workers per hundred of working population is the highest in the State. The pressure of population on land is very heavy due to lack of alternative occupations. The number of hospital beds per lakh of population is again the lowest here. In certain respects the area is a little better off, for example, in respect of the percentage of gross area irrigated to that of the area sown; the area sown more than once as a percentage of the net area sown and the mileage of surfaced roads per thousand sq. kilometres of area. A special Committee known as Patel Committee had

undertaken a study of the economic and social conditions in the four eastern districts of Azamgarh, Deoria, Ghazipur and Jaunpur and suggested special programmes for accelerated development.

Bundelkhand

2.26. Four districts of Bundelkhand have 10 per cent of the total area of the State but a substantial part is not fit for cultivation. 4.7 per cent of the people of the State lived in this area. The density of population is 1442 persons per kilometre as against 300 for the State. The percentage of workers engaged in agriculture in 1961 was 75.9 against 75.2 for the State as a whole. The number of workers* in registered factories in 1967 was only 141 per lakh of population as against 377 for the State. The percentage of literacy was 18.3 in 1961.

Hill Districts

2.27. The districts of Uttar Kashi, Chamoli, Pithoragarh, Tehri, Pauri, Almora, Naini Tal and Dehra Dun constitute a very sensitive area. The problems of communication, drinking water, irrigation, un-employment etc. are particularly acute. These districts account for 4.2 per cent of the population of the State giving a density of 73 persons per kilometre. The proportion of cultivable land to the total area was 22.5 per cent as compared to 72.6 per cent for the State as a whole in 1950-51. This declined to 21.6 per cent in the case of hills and 71.9 per cent in the case of the State in 1955-56. The net area sown per agricultural worker was 0.65 hectare in the hill region as compared to 0.82 hectare for the whole State. In 1955-56 the net area sown declined to 0.55 hectare in the hills and to 0.70 hectare in the State. About 80 per cent of the working population was engaged in agriculture in 1960-61.

2.28. In order to relieve the extreme poverty and backwardness of these regions substantial investments are necessary to improve the economic and social overheads.

Review of Important Programmes

2.29. A review of the programmes has been attempted in chapters which deal with the sectoral programmes. Only a brief reference is being made in this chapter in respect of some of the important items.

2.30. *Agricultural Production*—The level of production reached under foodgrains and important cash crops will be apparent from the following table :

* Source—Labour Commissioner, U. P.

Selected physical achievements

Year	Food Grains (Lakh tonnes)	Oilseeds (Lakh tonnes)	Sugar cane in terms of Gur (Lakh tonnes)	Cotton (Lakh bales)	Jute (Lakh bales)
1	2	3	4	5	6
1950-51	117.75	7.79	29.50	0.45	0.49
1955-56	120.58	7.67	29.87	0.29	0.89
1960-61	144.86	13.06	54.52	0.40	0.92
1961-62	140.61	13.22	51.26	0.43	1.92
1962-63	134.96	12.37	43.20	0.59	1.53
1963-64	117.95	11.19	47.55	0.44	1.41
1964-55	152.47	17.38	56.24	0.45	1.62
1965-66	132.91	15.00	56.65	0.57	1.87
1966-67	117.71	12.95	39.37	0.51	1.53
1967-68	166.27	15.84	40.00	0.31	1.85
1968-69 (anticipated)	176.00	17.68	50.00	0.60	2.04

2.31. It would be seen that there have been very wide fluctuations in the levels of food production in the various years. The production reached the peak figure of 144.86 lakh tonnes in 1960-61, when the State had a very favourable weather, but slumped to 117.95 lakh tonnes in 1963-64 and 117.71 lakh tonnes in 1966-67. The years 1965-66 and 1966-67, were the years of severe droughts. With the introduction of High Yielding Varieties on a large scale coupled with the package of practices in agriculture and acceleration of private minor irrigation programmes during the last 4-5 years it appears that the State is on the threshold of a break-through in agriculture. Even though the weather has not been satisfactory and the rains have not been timely in 1968-69, it is expected that the food production in 1968-69, would not be less than that of 1967-68. The loss of production potential in areas not served with assured irrigation works is compensated by higher yields in a limited area covered under the exotic and other high-yielding varieties.

2.32. Under cash crops, oilseeds have shown a progressively increasing higher production. Starting from a production base of 7.79 lakh tonnes in 1950-51, it reached the level of 17.38 lakh tonnes in 1964-65. In 1968-69 also the production level is expected to be maintained at 17.68 lakh tonnes. The production of sugarcane is governed by the prevailing market price of sugarcane

as well as the comparative economy of sugarcane crop *vis-a-vis* the cereals. If sugarcane sowing is more economic to the cultivator, larger areas come under sugarcane cultivation, which was the situation in 1964-65 and 1965-66 when a record production of over 56 lakh tonnes of sugarcane in terms of gur was achieved. In the following two years, namely, 1966-67 and 1967-68 the prices of cereal crops were much more favourable with the result that the area under sugarcane showed a downward trend and the production of sugarcane in terms of gur reached the low level of 39.40 lakh tonnes. A balance now appears to be in the process of being created between the cash crops and the cereal crops. It is expected that the production of sugarcane in terms of gur would be about 50 lakh tonnes in 1968-69. While the production of jute in the State has been slowly but steadily increasing, the production of cotton has been more or less static with minor variations depending on weather in the various years.

2.33. *Irrigation*—The following table indicates the additional irrigation potential created through State Major and Medium Irrigation works, State Minor Irrigation works and private Minor Irrigation works.

Irrigation potential created in lakh hectares

Year	State Irrigation Works			Total
	Major-Medium schemes	Minor Irrigation schemes	Private Minor Irrigation works	
1	2	3	4	5
By the end of—				
1950-51	25.53	4.82	14.44	444.79
1955-56	28.83	8.74	15.20	522.77
1960-61	31.54	13.08	16.65	611.27
1961-62	32.18	13.20	17.47	622.85
1962-63	33.22	13.68	18.59	655.49
1963-64	33.94	14.76	20.06	688.76
1964-65	34.57	15.44	22.22	722.23
1965-66	35.11	16.56	25.13	766.80
1966-67	35.43	17.06	30.29	822.78
1967-68	35.69	17.68	35.27	888.64
1968-69	36.09	18.37	40.84	995.30

There has been good increase in the area under irrigation during the various plans. The area under State Minor Irrigation and Private Minor irrigation has shown significant rise during the Third Plan and the three Annual *Ad-hoc* Plans.

2.34. *Power*—The State had a very low base so far as power is concerned. In 1950-51, the total installed power capacity of the State was 178.54 MW. During the decade 1951-61, the addition was only of 191.63 MW. During the Third Plan concentrated efforts were made to accelerate power generation and the installed capacity at the end of 1965-66 was 910.14 MW., which further increased to 1310.04 MW., by the end of 1968-69. The following figures indicate installed capacity, power generated and power sold from 1950-51 to 1968-69 :

Year	Installed capacity (MW)	Power generated (MKWH)	Power sold (MKWH)	Remarks
1	2	3	4	5
1950-51	178.54	570*	458*	*For the year 1951.
1955-56	263.84	652**	512**	**For the year 1953.
1960-61	370.17	1,213	930	
1961-62	620.17	1,270	1,098	
1962-63	698.90	1,940	1,379	
1963-64	715.14	2,400	1,651	
1964-65	755.14	2,700	1,884	
1965-66	910.14	3,022	2,588	
1966-67	910.14	3,294	2,634	
1967-68	1186.64	3,754	2,902	
1968-69	1310.04	5,302	4,140	

2.35. The progress under the Power Sector in the State while making significant progress during the year would still be regarded to be much below the average for the country. At the end of 1966-67, *per capita* electricity produced in U. P. was 39.69 KWH as against a level of 38.68 KWH achieved by the country in 1960-61 and a level of 72.49 KWH achieved by the country in 1966-67. The table below gives comparative figures of *per capita* electricity produced and consumed in the State and in the country for the various years from 1960-61 to 1966-67 :

Year	(In KWH)			
	Electricity produced (Per capita)		Electricity consumed (Per capita)	
	U. P.	India	U. P.	India
1960-61	16.98	38.68	13.23	31.85
1961-62	18.18	43.96	14.65	36.76
1962-63	24.50	49.13	18.12	41.03
1963-64	32.20	54.78	21.37	45.94
1964-65	32.42	60.77	23.21	49.79
1965-66	36.54	66.21	28.58	53.66
1966-67	39.69	72.49	34.17	58.04

2.36. *Industries*—The following table gives production of important industries of U. P. The share in the all-India output has been shown in the brackets below the figures concerned :

Commodity	Unit	1951	1956	1961	1965	1966	1967
1	2	3	4	5	6	7	8
1. Cement ..	'000 tonnes.	N. A.	204.5 (4.1)	217.2 (2.6)	416.5 (3.9)	389.9 (3.5)	3380.4 (3.4)
2. Vanaspati ..	'000 quintals.	N. A.	390 (15.0)	641 (18.9)	969 (22.6)	830 (23.2)	840 (21.4)
3. Electricity generated.	Lakh KWH.	5,698 (9.7)	7,435 (7.7)	13,053 (6.8)	26,620 (8.5)	30,249 (8.9)	322,573 (8.9)
4. Cotton textiles	Lakh metres.	2,830 (7.6)	3,489 (7.2)	3,358 (7.2)	3,281 (7.2)	2,869 (6.8)	2,772 (6.8)
5. Cotton Yarn	Tonnes	49,874 (8.4)	53,448 (7.1)	67,427 (7.8)	71,506 (7.8)	67,074 (7.4)	64,447 (7.2)
6. Paper and Paper Board.	Tonnes	6,024 (4.5)	19,128 (9.7)	30,432 (8.4)	29,999 (5.6)	29,866 (5.1)	27,074 (4.4)
7. Ingot and Metal casting	'000 tonnes.	4.5	10.6	16.0 (0.39)	16.1* (0.25)	13.1* (0.22)	N. A.
8. Finished steel	Do.	23.0 (0.21)	49.6 (0.36)	60.9 (2.6)	56.6 (1.3)	79.4 (1.9)	N. A.
9. Sugar† ..	Do.	603 (53.2)	1,005 (53.3)	1,427 (47.1)	1,251 (38.4)	1,372 (39.0)	710 (33.1)
10. Jute	Do.	N. A.	23.2 (2.1)	21.7 (2.2)	27.5 (2.1)	20.2 (1.8)	17.4 (1.5)
11. Rectified Spirit	'000 litres.	N. A.	N. A.	21,197 (41.8)	93,870 (50.0)	97,496 (50.9)	56,433 (44.1)

2.37. *Education*—The enrolment of Class I—V by the end of the Third Plan rose to 91.59 lakhs from 27.27 lakhs in 1950-51 and 40.93 lakhs at the end of the second plan. By the end of 1968-69 the enrolment is expected to reach 99.35 lakhs including 36.45 lakh girls. In the group of Class VI—VIII the enrolment has increased from 5.02 lakhs in 1950-51 to 14.46 lakhs at the end of the Third Plan. By 1968-69, it is expected to rise to 16.59 lakhs including 3.19 lakh girls. In Class IX—XII the enrolment rose from 1.85 lakhs in 1950-51 to 7.80 at the end of the Third Plan. It is expected to go up to 9.30 lakhs by 1968-69 including 1.59 lakh girls.

*Excludes metal for casting.

†Year : 1st November of the preceding year to 31st October of the current year.

2.38. The sanctioned annual admission capacity of engineering colleges in the State rose from 80 in 1950-51 to 1,105 in 1965-66 and is likely to increase to 1,565 by 1968-69. The number of polytechnics rose from six in 1950-51 to 33 in 1967-68 and is likely to go up to 34 by the end of 1968-69. The intake capacity increased from 655 in 1950-51 to 5,690 in 1967-68.

2.39. *Health*—The number of Allopathic hospital beds increased from 13,950 in 1950-51 to about 31,000 by the end of the Third Plan and is likely to reach the figure of 32,742 by the end of 1968-69.

2.40. The intake capacity of medical colleges was 250 in 1960-61. It is expected to rise to 875 by the end of 1968-69.

2.41. As a result of Malaria Eradication Programme the morbidity rate came down from 10.71 per cent in 1947 to 0.6 per cent in 1964. Under the Small-pox Eradication Programme which is in operation in all the 54 districts of the State, about 80–100 per cent of the population has been covered. Programmes are in operation for the control of Trachoma, Filaria, T. B., Leprosy, etc.

2.42. A very high priority has been assigned to family planning. The following table will indicate the achievements under this programme:

Year	I.U.C.D.	Sterli- zations (Number)
1	2	3
1963-64	.. ..	7,307
1964-65	.. ..	42,818
1965-66	.. .. 45,347	76,243
1966-67	.. .. 1,06,462	79,435
1967-68	.. .. 1,03,042	1,59,168
1968-69	.. .. 90,792	1,55,883

2.43. *General*—Economic and social overheads particularly in the field of irrigation, power, communication, health and education and institutional support through co-operative financing and Panchayat Raj institutions still constitute a weak link and would need to be strengthened and expanded to accelerate the pace of economic and social development during the Fourth Plan period.

Pattern of Utilization of Funds

2.44. Statement VIII shows the expenditure under various sectors of development during the first three Plans and the three *ad hoc* Annual plans. The expenditure under agricultural and allied programmes has ranged between 17 per cent in the Second Plan to 25.7 per cent in the three *ad hoc* Annual Plans. The expenditure under Irrigation and Power has shown a persistent upward trend. It was 35.2 per cent of the total plan expenditure in the Second Plan, 39 per cent in the Third Plan and 50.5 per cent in the period 1966-69. The expenditure in the Industries and Mining Sector has been between 3.7 to 5.5 per cent, while the expenditure under Transport and Communication has ranged between 3.7 to 6.6 per cent. The expenditure under social services in the Plan sector has shown a descending trend because most of the expenditure of a particular plan in the Social Services sector becomes committed at the end of the plan period and is transferred to the non-plan. This does not, therefore, mean an unfavourable trend from the overall point of development of these sectors.

2.45. Statement IX shows the comparative position of expenditure in different sectors of development of the various States of the Indian Union since the Third Plan. It would be observed that Uttar Pradesh spent 29.1 per cent of its total outlays on Agriculture and C. D. in the Third Plan as against an average of 23.4 per cent for all States. Only the State of Maharashtra and Mysore spend a slightly higher percentage on Agriculture. The same is true of 1966-67 and 1967-68 also. The State spent only 39 per cent of its Plan outlays on Irrigation and Power in the Third Plan as against an average of 43 per cent for all the States and as against much higher percentages in Bihar, Andhra, Gujarat and some other States. In 1966-67 and 1967-68, the order was somewhat reversed when the State utilized a comparatively higher percentage for Irrigation and Power as compared to the average of all States of the Indian Union. In the two groups of Industry and Mining and Transport and Communication, the State has been spending considerably less than the average for the country. In the sector of social services also, the expenditure in U. P. is less than the average for all States of the Indian Union. The expenditure under Agricultural Production, Irrigation and Power had to be stepped up in the interest of the economic progress of the State. It is obvious that unless the State has adequate Irrigation and Power supplies, technological changes cannot make much headways in the agricultural and industrial sectors particularly.

Low Level Equilibrium Trap

2.46. The analysis made in this chapter with regard to Central assistance location of Central industrial projects, investment made by Central Financial Institutions and commercial banks, licensing of industries, etc., would clearly

show that U. P. did not get its due share. U. P.'s per capita plan outlay and the per capita Central assistance have been among the lowest in the country. As the State income, consequently the per capita income also, is a function of investment and incremental capital-output ratio, the State income could grow only in proportion to investment. Lower volume of investment was bound to adversely affect not only the pace of development but also the State's relative position with the other States of the Union. The "Low Level Equilibrium Trap" which has been created, can be overcome by substantial investments and a larger measure of enterprise.

STATEMENT I

District-wise population and density of population in U. P.

State/Districts	Population 1969 ('000)	Density of population per sq. km.
1. Allahabad	2,918	402
2. Azamgarh	2,881	501
3. Bahraich	1,796	265
4. Ballia	1,599	522
5. Basti	3,143	430
6. Deoria	2,843	526
7. Faizabad	1,954	442
8. Ghazipur	1,580	467
9. Gonda	2,481	339
10. Gorakhpur	3,069	486
11. Jaunpur	2,067	517
12. Mirzapur	1,495	132
13. Pratapgarh	1,498	397
14. Sultanpur	1,691	381
15. Varanasi	2,827	555
16. Almora	758	108
17. Pithoragarh	315	43
18. Dehra Dun	513	165
13. Garhwal	578	106
20. Chamoli	302	33
21. Naini Tal	686	101
22. Tehri Garhwal	417	92
23. Uttarkashi	147	19
24. Banda	1,141	149
25. Hamirpur	951	132
26. Jalaun	793	174
27. Jhansi	1,302	129

STATEMENT I—(Concl'd.)

State/Districts	Population 1969 ('000)	Density of population Per sq. km.
28. Agra	2,228	462
29. Aligarh	2,112	420
30. Bareilly	1,768	429
31. Bijnor	1,424	295
32. Budaun	1,690	327
33. Bulandshahr	2,078	425
34. Etah	1,556	350
35. Etawah	1,414	327
36. Farrukhabad	1,549	364
37. Mainpuri	1,413	325
38. Mathura	1,282	337
39. Meerut	3,246	539
40. Moradabad	2,360	398
41. Muzaffarnagar	1,729	397
42. Pilibhit	738	211
43. Rampur	839	362
44. Saharanpur	1,932	350
45. Shahjahanpur	1,352	296
46. Bara Banki	1,693	381
47. Fatehpur	1,282	305
48. Hardoi	1,882	313
49. Kanpur	2,850	467
50. Kheri	1,505	196
51. Lucknow	1,602	633
52. Rae Bareli	1,573	345
53. Sitapur	1,923	332
54. Unnao	1,469	320
Total State, U. P.	88,234	300

STATEMENT II

Area, population and allied data State-wise (1961)

States/Union Territories	Area ('000 sq. kilometers)	Population (Million)	Percentage of rural population	Density of popula- tion (Persons per sq. kilometer)	Sex ratio Females per 1,000 males)	Percentage of workers
1	(1)	3	4	(2)	6	7
Andhra Pradesh	275.2	36.0	82.6	131	981	51.9
Assam including N. E. F. A.	203.4†*	12.2†	92.5	60	878	43.4
Bihar	174.0	46.5	91.6	267	994	41.4
Gujarat	187.1	20.6	74.2	110	940	41.1
Haryana	...	2.6	82.8	...	868	37.9
Jammu and Kashmir	222.9	3.6	83.3	26	878	42.8
Kerala	38.9	16.9	84.9	435	1022	33.2
Madhya Pradesh	443.5	32.4	85.7	73	953	52.3
Madras	130.0	33.7	73.3	259	992	45.6
Maharashtra	307.3	39.6	71.8	129	936	47.9
Mysore	191.8	23.6	77.7	123	959	45.5
Nagaland	16.5	0.4	94.8	22	933	59.4
Orissa	155.9	17.5	93.7	113	1001	43.7
Punjab	...	11.3	76.9	..	854	31.1
Rajasthan	342.3	20.2	83.7	59	908	47.6
Uttar Pradesh	294.4	73.7	87.1	251	909	39.1
West Bengal	87.7	34.9	75.5	398	878	33.2

Union territories—

Delhi	...	...	...	...	1.5	2.7	11.2	1,793	785	32.1
Himachal Pradesh	...	...	...	...	..	2.8	93.7	..	..	..
Tripura	...	...	...	...	10.5	1.1	91.0	109	932	38.3
Manipur	...	...	...	...	22.3	0.8	91.3	35	1,015	45.9
Goa, Daman and Diu ‡	...	...	...	...	3.7	0.6	83.9	168	1,070	N. A.
Pondicherry	...	...	...	...	0.5	0.4	75.9	780	1,013	37.5
Andaman Nicobar	...	...	...	...	8.3	0.06	77.9	8	617	49.1
Chandigarh	...	...	...	...	..	0.1	17.2	..	..	..
Dadra Nagar Haveli	...	...	...	...	0.5	0.06	100.0	119	96,3	60.0
Lakshadweep Islands	...	...	...	...	0.03	0.02	100.0	861	1,020	51.6
ALL-INDIA	...	...	...	...	3268.1	439.1	82.0§	134	941	43.0@

*Including 81.4 thousand Sq. kms. area of N.E.F.A.

†Including 337 thousand population of N.E.F.A.

‡Relates to December 15, 1960.

@Excluding Goa, Daman, and Diu.

§Excluding Goa, Daman and Diu and N. E. F. A.

N.B.—(1) Area figures as on 1. 1. 1966 are of Surveyor General of India, published by Central Statistical Organisation.

(2) Density figures are based on area as on 1. 1. 1966.

STATEMENT III

Estimates of per capita income of various States and Indian Union' (at current prices)

(Rupees)

State	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67
1	2	3	4	5	6	7	8
Andhra Pradesh	284	313	322	360	406	393	449
Assam	311	327	323	357	394	418	507
Bihar	206	212	222	245	284	325	298
Gujarat	339	359	351	380	429	416	..
Jammu and Kashmir .. .. .	..	..	..	..	..	..	..
Kerala	276	289	297	311	370	..	..
Madhya Pradesh	285	307	303	335	387	350	399
Madras	335	354	361	387	416	437	503
Maharashtra	409	411	441	483	524	521	606
Mysore	290	300	310	356	392	..	..
Orissa	249	253	273	304	318	..	..
Punjab (including Haryana)	388	401	416	483	576	553	..
Rajasthan	323	343	342	336	400	385	449
Uttar Pradesh	246	257	261	288	372	365	423
West Bengal	318	328	335	361	388	..	..
India	307	317	327	367	420	420	471

STATEMENT IV

State-wise average yield per hectare of Principal Crops in 1967-68 in kilograms

States/Crops	Rice	Jwar	Bajra	Maize	Wheat	Barley	Gram	Sugarcane (cane)
1	2	3	4	5	6	7	8	9
Andhra Pradesh	1,366	528	481	1,214	*	..	242	81,902
Assam	951	..	..	537	*	..	*	33,516
Bihar	900	*	*	1,142	835	739	746	34,334
Gujarat	902	296	660	1,170	1,267	*	539	50,492
Haryana	1,324	197	519	1,089	1,734	953	1,092	39,016
Jammu and Kashmir	1,234	*	*	760	697	670	*	*
Kerala	1,375	*	..	..	..	..	..	*
Madhya Pradesh	778	831	539	1,117	731	984	543	25,618
Madras	1,553	743	663	*	*	*	*	79,400
Maharashtra	1,044	544	271	1,355	395	*	277	63,377
Mysore	1,584	499	274	*	266	*	451	95,542
Nagaland	648	..	..	..	..	..	..	..
Orissa	842	*	*	913	925	..	544	50,762
Punjab	1,325	*	995	1,648	1,885	999	921	36,875
Rajasthan	999	354	291	1,375	1,047	1,175	798	15,848
Uttar Pradesh	730	526	458	792	1,186	1,104	726	40,270
West Bengal	1,101	*	*	889	1,000	741	747	44,109
India	1,031	543	409	1,125	1,111	1,043	734	47,565

NOTE—Figures are based on final estimates and subject to change.

* Indicates that yield per hectare for small figures of area and production (Generally less than 10 thousand hectares/tonnes/bales etc.) has not been calculated.

STATEMENT V
Net Area Irrigated (by sources) in India, 1965-66

(Thousand hectares)

States	Net area irrigated					Total	Percentage of net area irrigated to net area sown
	Govt. canals	Private canals	Tanks	Wells	Others		
1	2	3	4	5	6	7	8
Andhra Pradesh	1,209	17	1,189	455	108	2,978	27.1
Assam (*)	72	292	..	..	248	612	26.2
Bihar	613	19	175	289	895	1,991	23.9
Gujarat (†)	110	1	22	668	36	837	8.8
Jammu and Kashmir (‡)	65	214	1	2	6	288	42.9
Kerala	169	8	60	4	121	362	17.5
Madhya Pradesh	461	1	118	345	52	977	5.9
Madras	798	1	903	659	38	2,399	40.4
Maharashtra (†)	215	33	213	683	86	1,230	6.8
Mysore	356	5	325	163	128	977	9.8
Nagaland	..	..	..	..	12	12	25.5
Orissa (‡)	197	28	495	38	219	977	16.3
Punjab	2,245	49	8	1,169	80	3,551	47.9
Rajasthan	487	..	203	1,023	40	1,753	12.4
U. P.	2,291	9	391	2,905	279	5,875	33.9
West Bengal (§)	514	388	328	16	184	1,430	26.3
Union Territories	25	68	10	26	63	192	20.5
ALL-INDIA	9,827	1,133	4,441	8,445	2,595	26,441	19.5

- (*) Relates to the year, 1953-54.
(†) Relates to the year, 1964-65.
(‡) Relates to the year, 1955-56.
(§) Relates to the year, 1962-63.

STATEMENT VI

Per Capita Generation and Consumption of Electricity in different States of India

1	States	1966-67	
		Per capita generation (KWH)	Per capita consumption (KWH)
2	3		
1.	Andhra Pradesh	39.94	25.46
2.	Assam	10.09	7.40
3.	Bihar	67.51	40.18
4.	Gujarat	103.83	84.13
5.	Jammu and Kashmir	28.69	34.74
6.	Kerala	55.77	46.41
7.	Madhya Pradesh	38.65	31.32
8.	Madras	106.42	91.98
9.	Maharashtra	138.88	113.51
10.	Mysore	91.64	56.03
11.	Orissa	32.84	38.56
12.	Punjab	158.13	106.12
13.	Rajasthan	6.76	13.48
14.	Uttar Pradesh	39.69	34.17
15.	West Bengal	118.58	105.45
16.	Nagaland	4.69	4.36
	All-India	72.49	58.04

STATEMENT VII
Plan Outlay and Central Assistance to States

(Rupees in crores)

State	First Plan			Second Plan			Third Plan		
	Actual expenditure	Central assistance	Percentage of the total	Actual expenditure	Central assistance	Percentage of the total	Actual expenditure	Central assistance	Percentage of the total
1	2	3	4	5	6	7	8	9	10
Andhra Pradesh	107.0	61.0	6.9	180.6	96.0	9.1	339.0	220.5	8.8
Assam	28.0	21.0	2.4	63.1	31.0	2.9	133.5	99.9	4.0
Bihar	102.0	55.0	6.2	176.9	84.0	7.9	315.2	215.9	8.6
Gujarat	99.0	32.0	3.6	147.0	50.0	4.7	237.2	111.6	4.4
Haryana .. ..	..	..	..	..	..	..	..	..	..
Jammu and Kashmir	13.0	10.0	1.1	26.8	20.0	1.9	64.6	61.6	2.4
Kerala	44.0	24.0	2.7	79.0	38.0	3.6	178.7	121.7	4.8
Madhya Pradesh	94.0	61.0	6.9	145.5	96.0	9.1	284.8	219.5	8.7
Madras	85.0	42.0	4.8	186.9	95.0	9.0	337.2	186.8	7.4
Maharashtra	125.0	48.0	5.5	214.0	74.0	7.1	413.8	166.8	6.6
Mysore	94.0	47.0	5.3	138.7	67.0	6.3	253.3	156.5	6.3
Orissa	85.0	77.0	8.7	89.4	66.0	6.2	205.2	136.7	5.4
Punjab	163.0	141.0	16.2	151.4	88.0	8.3	246.7	134.4	5.3
Rajasthan	66.0	60.0	6.8	99.9	59.0	5.6	205.0	161.4	6.4
Uttar Pradesh	166.0	88.0	10.0	228.3	121.0	11.4	542.1	356.2	14.2
West Bengal	154.0	113.0	12.9	155.8	73.0	6.9	301.5	155.1	6.2
Nagaland .. ..	..	..	..	..	..	..	10.8	10.8	0.5
Total	1,425.0	880.0	100.0	2,083.1	1,058.0	100.0	4,068.6	2,515.3	100.0

STATEMENT VII—(Concl'd.)

(Rupees in crores)

States	1966-67			1967-68			1968-69			Total (1951-69)		
	Actual expenditure	Central assistance	Percentage of the total	Outlay	Central assistance	Percentage of the total	Outlay	Central assistance	Percentage of the total	Outlay	Central assistance	Percentage of the total
1	11	12	13	14	15	16	17	18	19	20	21	22
Andhra Pradesh ..	90.5	61.3	10.4	68.9	57.5	9.7	61.6	37.3	6.3	847.6	533.6	8.6
Assam ..	29.4	26.4	4.5	30.0	30.0	5.0	29.4	29.4	5.0	313.4	237.7	3.8
Bihar ..	78.5	50.2	8.5	66.2	51.5	8.7	71.7	46.8	7.9	810.5	503.4	8.1
Gujarat ..	52.0	21.7	3.7	72.6	25.0	4.2	79.7	29.7	5.0	687.5	270.0	4.3
Haryana	included in Punjab.	17.0	2.9	24.2	15.0	2.5	22.0	13.9	2.4	46.2	45.9	0.7
Jammu and Kashmir	19.0	18.8	3.2	20.3	19.5	3.3	21.7	21.7	3.7	165.4	151.6	2.4
Kerala ..	40.6	28.3	4.8	42.6	31.0	5.2	44.3	30.4	5.2	429.2	273.4	4.4
Madhya Pradesh ..	62.3	43.8	7.4	60.4	49.5	8.3	57.0	48.6	8.2	704.0	518.4	8.3
Madras ..	79.6	40.1	6.8	77.3	38.0	6.4	66.4	42.9	7.3	832.4	444.8	7.1
Maharashtra ..	123.1	25.7	4.4	122.4	33.0	5.5	139.0	52.3	8.9	1,137.3	399.8	6.4
Mysore ..	53.1	36.3	6.2	60.3	36.0	6.1	51.3	36.9	6.3	650.7	379.7	6.1
Orissa ..	51.4	30.0	5.1	46.0	26.0	4.4	31.6	22.7	3.8	508.3	358.4	5.8
Punjab ..	62.4	20.7	3.5	42.0	16.0	2.7	30.3	14.3	2.4	695.8	414.4	6.7
Rajasthan ..	47.4	36.9	6.3	43.0	39.0	6.6	43.6	37.3	6.3	504.9	393.6	6.3
Uttar Pradesh ..	148.8	94.3	16.0	156.0	87.5	14.7	142.2	75.6	12.8	1,383.4	822.6	13.2
West Bengal ..	61.3	31.3	5.3	60.8	34.0	5.7	54.7	46.1	7.8	788.1	452.5	7.3
Nagaland ..	5.1	5.1	1.0	6.3	6.3	1.0	6.0	4.1	0.7	28.2	26.3	0.5
Total ..	1,004.2	587.9	100.0	999.3	594.8	100.0	952.5	590.0	100.0	10,532.9	6,226.1	100.0

Source: Planning Commission.

STATEMENT VIII
Sector-wise expenditure under the Plans (1955-69)

(Rupees round lakhs)

Head of Development/Sector	First Plan Expendi- ture	Second Plan		Third Plan		Annual Plans	
		Outlay	Expendi- ture	Outlay	Expendi- ture	1966-67 to 1968-69	
						Outlay	Anticipated expenditure
1	2	3	4	5	6	7	8
<i>Agricultural and Allied Programmes</i>	2936	4473	3978	8582	10568	11694	11492
1. <i>Agricultural Programmes</i>	2663	3886	3487	6958	9042	10690	10683
1.1 Agricultural production	1984	1936	1797	3269	2976	2692	2638
1.2 Minor Irrigation	580	1806	1567	3290	5615	7181	7358
1.3 Soil Conservation	99	144	123	399	451	817	687
1.4 Ayacut Development	—	—	—	—	—	—	—
2. <i>Allied Programmes</i>	273	587	491	1624	1526	1004	809
2.1 Animal Husbandry	112	270	219	594	465	368	275
2.2 Dairying and Milk Supply	19	50	21	302	384	225	180
2.3 Forests	139	227	224	597	613	332	308
2.4 Fisheries	3	40	27	102	60	74	46
2.5 Warehousing and Marketing	—	—	—	29	4	5	—
3. <i>Co-operation and Community Development</i>	982	3249	3178	6523	5673	1532	1450
3.1 Co-operation	131	469	414	1084	798	302	246
3.2 Community Development	851	2780	2764	5028	4765	1176	1160

3.3	Panchayats	..	..	..	..	..	..	..
4.	<i>Irrigation and Power</i>	..	..	..	..	..	..	5622
4.1	Major and Medium Irrigation	..	..	..	..	..	..	3081
4.2	Flood Control	..	..	..	..	..	..	210
4.3	Power	..	..	..	..	..	..	2331
5.	<i>Industries and Mining</i>	..	..	..	..	..	..	637
5.1	Large and Medium Industries	..	..	..	..	..	..	345
5.2	Mineral Development	..	..	..	..	..	..	..
5.3	Village and Small Industries	..	..	..	..	..	..	292
6.	<i>Transport and Communication</i>	..	..	..	..	..	..	686
6.1	Roads	..	..	..	..	..	..	551
6.2	Road Transport	..	..	..	..	..	..	135
6.3	Tourism	..	..	..	..	..	..	..
7.	<i>Social Services</i>	..	..	..	..	..	..	4474
7.1	General Education	..	..	..	..	..	..	1957
7.2	Technical Education	..	..	..	..	..	..	..
7.3	Scientific Research	..	..	..	..	..	..	..
7.4	Health and Family Planning	..	..	..	..	..	..	..
7.5	Water Supply	..	..	..	..	..	..	1309
7.6	Housing	..	..	..	..	..	..	762
7.7	Welfare of Backward Classes	..	..	..	..	..	..	345
7.8	Social Welfare	..	..	..	..	..	..	..

..	...	411	110	54	44
8630	8218	16507	21738	22325	23523
2600	2543	5171	5490	4514	4817
--	...	575	662	366	314
6030	5675	10761	15586	17445	18392
1312	1292	2017	2070	1852	1743
336	376	368	714	1403	1314
6	6	5	25	28	35
970	910	1644	1331	421	394
1728	1537	1815	2816	1703	1634
1614	1453	1800	2808	1685	1625
86	66	..	..	..	..
28	18	15	8	18	9
5657	4545	11877	10266	4939	4919
1650	1430 ✓	4681	4560 ✓	1237	1254
407	317	915	721	501	445
		59	42		
1655	1233	3888	3638	1521	1508
				964	1070
1045	858	905	447	143	149
600	523	930	562	190	189
50	30	79	26	17	13

STATEMENT VIII— (Concl.)

(Rupees round lakhs)

Head of Development/Sector	First Plan Expenditure	Second Plan		Third Plan		Annual Plan 1966-67 to 1968-69	
		Outlay	Expenditure	Outlay	Expenditure	Outlay	Anticipated expenditure
		1	2	3	4	5	6
7.9 Craftsmen Training and Labour Welfare	101	250	154	414	267	365	290
7.10 Public Co-operation .. .. .	..	..	..	6	3	1	1
8. Miscellaneous .. .. .	..	251	200	2904	2609	1027	1008
8.1 Miscellaneous .. .. .	..	36	24	46	40	3	3
8.2 Information and Publicity .. .. .	..	82	57	58	62	12	10
8.3 Hill and Border Areas .. .. .	..	..	..	2800	2507	997	983
8.4 Evaluation Organisation .. .. .	..	..	..	..	..	8	7
8.5 Others .. .. .	..	133	119	..	..	7	5
Total (Heads 1—8)	15337	25300	22948	50225	55740	45072	45769
Special schemes for Backward Areas .. .. .	..	400	387	..	..	..	..
GRAND TOTAL	15337	25700	23335	50225	55740	45072	45769

STATEMENT IX

Statement showing actual expenditure in different States since Third Plan and their percentages

(Rupees in crores)

State	Agriculture and Community Development						Irrigation and Power					
	Third Plan		1966-67		1967-68		Third Plan		1966-67		1967-68	
	Exp.	%	Exp.	%	Exp.	%	Exp.	%	Exp.	%	Exp.	%
1	2	3	4	5	6	7	8	9	10	11	12	13
1. Andhra Pradesh	78.2	22.4	17.2	18.6	14.0	19.6	185.7	53.2	62.1	67.0	44.7	62.6
2. Assam	24.8	17.7	7.1	24.3	8.4	23.7	57.7	41.3	10.4	35.6	12.1	34.2
3. Bihar	67.8	20.6	20.4	25.9	19.1	28.8	175.8	53.6	44.6	56.6	34.3	51.7
4. Gujarat	47.0	19.6	14.8	25.8	16.5	22.3	111.7	46.5	23.1	40.3	29.8	40.2
5. Jammu and Kashmir	9.3	15.0	2.6	14.9	4.7	22.0	16.1	26.0	5.9	33.9	6.4	30.0
6. Kerala	36.8	20.2	11.2	27.4	11.2	22.8	76.4	41.9	17.7	43.4	22.7	46.1
7. Madhya Pradesh	70.5	24.6	17.9	31.8	16.9	27.6	126.1	44.0	24.9	44.3	27.2	44.4
8. Madras	79.8	23.3	24.0	29.8	21.7	25.5	150.1	43.8	32.3	40.1	36.4	42.8
9. Maharashtra	134.2	30.9	37.6	32.6	30.7	25.1	158.7	36.5	48.1	41.6	55.5	45.4
10. Mysore	84.4	32.0	17.1	32.8	18.4	24.3	100.2	37.9	23.2	44.4	43.0	56.8
11. Nagaland	2.9	26.9	1.2	25.0	1.3	21.0	0.9	8.3	0.5	10.4	0.7	11.3
12. Orissa	42.3	18.9	9.6	20.4	11.1	23.7	80.8	36.1	19.3	41.0	18.1	38.6
13. Punjab	43.2	17.1	5.6	18.0	9.0	21.3	133.1	52.8	20.2	64.7	22.5	52.9
14. Rajasthan	40.6	19.1	11.3	22.9	7.7	17.7	115.9	54.5	29.0	58.8	24.1	55.3
15. Uttar Pradesh	162.4	29.1	47.8	31.7	43.6	28.5	217.4	39.0	73.5	48.8	79.9	51.8
16. West Bengal	53.9	17.7	15.6	27.4	17.5	31.4	92.5	30.4	14.9	26.1	12.2	21.9
17. Haryana	—	—	3.6	18.5	5.8	23.5	—	—	12.3	63.1	13.1	53.0
ALL STATES	978.1	23.4	264.6	27.0	257.6	24.9	1799.1	43.0	462.0	47.1	482.7	46.6

STATEMENT IX—(Contd.)

(Rupees in crores)

State	Industries and Mining						Transport and Communications					
	Third Plan		1966-67		1967-68		Third Plan		1966-67		1967-68	
	Exp.	%	Exp.	%	Exp.	%	Exp.	%	Exp.	%	Exp.	%
	14	15	16	17	18	19	20	21	22	23	24	25
1. Andhra Pradesh	15.1	4.4	2.3	2.5	2.2	3.1	17.0	4.9	3.2	3.4	2.2	3.1
2. Assam	8.3	5.9	2.3	7.9	2.0	5.6	9.3	6.6	3.3	11.3	5.5	15.6
3. Bihar	10.3	3.1	2.1	2.7	2.4	3.5	17.5	5.3	3.3	4.2	1.8	2.6
4. Gujarat	10.2	4.3	4.3	7.5	6.0	8.1	23.3	9.7	7.6	13.3	7.6	10.3
5. Jammu and Kashmir	8.6	13.9	1.0	5.8	1.5	7.0	10.3	16.7	2.7	15.5	3.6	16.8
6. Kerala	14.4	7.9	2.8	6.9	4.4	8.9	11.9	6.5	2.2	5.4	2.6	5.3
7. Madhya Pradesh	8.1	2.8	2.0	3.6	2.0	3.3	15.4	5.4	3.7	6.6	4.8	7.8
8. Madras	24.0	7.0	5.7	7.1	6.2	7.3	11.4	3.3	3.1	3.8	2.5	2.9
9. Maharashtra	14.8	3.4	3.4	2.9	3.4	2.8	37.5	8.6	13.4	11.6	11.2	9.2
10. Mysore	15.5	5.9	1.1	2.1	3.1	4.1	22.4	8.5	3.6	6.9	3.6	4.8
11. Nagaland	3.1	0.9	0.1	2.1	0.4	6.5	3.7	34.3	1.7	35.4	1.8	29.0
12. Orissa	20.3	9.1	4.9	10.4	5.2	11.1	37.7	16.8	7.6	16.1	4.7	10.0
13. Punjab	10.2	4.1	0.6	1.9	2.5	5.9	14.3	5.7	1.6	5.1	2.4	5.6
14. Rajasthan	3.3	1.5	0.4	0.8	0.9	2.1	9.8	4.6	2.7	5.5	1.2	2.7
15. Uttar Pradesh	20.7	3.7	5.7	3.8	6.2	4.0	28.2	5.1	5.9	3.9	4.9	3.2
16. West Bengal	25.1	8.2	5.1	9.0	4.5	8.1	26.2	8.6	5.5	9.6	5.0	8.9
17. Haryana .. .. .	..	..	0.4	2.1	1.0	4.0	..	..	1.3	6.6	1.4	5.7
ALL STATES	209.0	5.0	44.2	4.5	53.9	5.2	295.9	7.0	72.4	7.4	66.8	6.4

STATEMENT IX—(Concl'd.)

(Rupees in crores)

State	Social Services						Miscellaneous					
	Third Plan		1966-67		1967-68		Third Plan		1966-67		1967-68	
	Exp.	%	Exp.	%	Exp.	%	Exp.	%	Exp.	%	Exp.	%
	26	27	28	29	30	31	32	33	34	35	36	37
1. Andhra Pradesh	52.5	15.1	7.8	8.4	8.2	11.5	0.4	0.01	0.1	0.1	0.1	0.1
2. Assam	38.3	27.4	5.8	19.9	6.9	19.5	1.5	1.1	0.3	1.0	0.5	1.4
3. Bihar	56.8	17.3	8.4	10.6	8.5	12.8	0.2	0.1	0.05	..	0.04	0.6
4. Gujarat	47.4	19.7	7.0	12.2	9.5	12.8	0.6	0.2	0.5	0.9	4.7	6.3
5. Jammu and Kashmir	14.8	23.9	3.4	19.5	3.9	18.2	2.8	4.5	1.8	10.4	1.3	6.0
6. Kerala	42.5	23.3	6.8	16.7	8.2	16.7	0.3	0.2	0.1	0.2	0.1	0.2
7. Madhya Pradesh	59.6	20.8	6.6	11.7	9.5	15.5	6.8	2.4	1.1	2.0	0.9	1.4
8. Madras	76.5	22.4	15.5	19.2	18.2	21.4	0.6	0.2	0.02	..	0.03	0.1
9. Maharashtra	39.1	20.5	12.9	11.2	21.2	17.4	0.4	0.1	0.1	0.1	0.1	0.1
10. Mysore	41.1	15.5	7.0	13.4	7.4	9.8	0.5	0.2	0.2	0.4	0.2	0.2
11. Nagaland	3.1	23.7	1.2	25.0	1.9	30.6	0.1	0.9	0.05	2.1	0.1	1.6
12. Orissa	38.7	17.3	5.1	10.8	6.7	14.3	4.1	1.8	0.6	1.3	1.1	2.3
13. Punjab	46.2	18.3	3.1	10.0	5.8	13.6	5.0	2.0	0.1	0.3	0.3	0.7
14. Rajasthan	42.1	19.8	5.5	11.2	9.2	21.1	1.0	0.5	0.4	0.8	0.5	1.1
15. Uttar Pradesh	102.7	18.4	14.4	9.5	16.0	10.4	26.0	4.7	3.4	2.3	3.2	2.1
16. West Bengal	100.5	33.0	12.8	22.5	15.5	27.7	6.5	2.1	3.1	5.4	1.1	2.0
17. Haryana	..	..	1.9	9.6	3.3	13.4	..	..	0.02	0.1	0.1	0.4
ALL STATES	851.9	20.3	125.2	12.8	160.2	15.5	50.8	1.3	11.9	1.2	14.4	1.4

STATEMENT X
Advance made by Commercial Banks in India

(Figures in Lakhs as on March 28, 1968.)

Serial no.	Name of the State	Food article	Industrial Raw Material	Plantation Products	Manufacture and Minerals	Other Securities	Total Secured advances (2 to 7)	Unsecured (Clean) Advances	Total
1	2	3	4	5	6	7	8	9	10
1	Andhra Pradesh	1743	515	13	3517	4380	10168	1029	11197
2	Assam	41	83	44	353	294	815	250	1065
3	Bihar	1132	105	14	1165	989	3405	465	3870
4	Gujarat	392	2451	20	7679	5607	16149	1723	17872
5	Haryana	744	232	3	868	349	2165	173	2369
6	Kerala	144	200	1844	2556	3004	7748	664	8412
7	Madhya Pradesh	445	839	3	3402	1215	5904	644	6548
8	Madras	2150	2229	359	9462	11157	25357	3343	28700
9	Maharashtra	2650	6974	386	41954	26302	78273	717	92990
10	Mysore	321	641	1326	4162	4636	11086	2350	13436
11	Orissa	23	3	...	549	458	1033	98	1131
12	Punjab	476	803	25	2354	805	4463	328	4791
13	Rajasthan	360	541	9	1442	761	3113	395	3508
14	Uttar Pradesh	8257	861	7	4132	2665	15922	884	16806
15	West Bengal	2040	4675	5378	32295	13657	58045	7102	65147
16	Delhi	8681	361	26	7516	5841	22425	2709	25128
	ALL STATES	29599	21513	9457	123406	82127	266102	36868	302970

5

3

OBJECTIVES AND STRATEGY

3.1. A special feature of India's struggle for independence has been that even while fighting the British imperialism, constructive programmes in the economic and social fields had formed an important part of the national movement. Even at that time, attention was being devoted to the future shape of the country. After attaining independence an organised attempt was initiated for the economic and social development of the country through the Five-Year Plans, keeping in view certain fundamental national values and aspirations. The directive principles of the Constitution provide guide-lines for the governance of the country. According to Article 38 of the Constitution "the State shall strive to promote the welfare of the people securing and protecting, as effectively as it may, a social order in which justice, social, economic and political, shall inform all the institutions of national life". It is also specified that "the State shall, in particular, direct its policy towards securing—

(a) that the citizens, men and women, equally, have the right to an adequate means of livelihood ;

(b) that the ownership and control of the material resources of the community are so distributed as best to subserve the common good ;

(c) that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment."

3.2. According to the Government of India's resolution of March, 1950, planning in India was intended to promote a rapid rise in the standard of living of the people by efficient exploitation of the resources of the country, increasing production and offering opportunities to all for employment in the service of the community. In December, 1954, the Parliament adopted a resolution, according to which the objective of the national economic policy was to establish a socialistic pattern. For achieving this end, the tempo of economic activity in general and industrial development in particular, was to be stepped up to the maximum possible extent.

3.3. While clarifying the underlying economic policies of the Second and Third Five-Year Plans, it was stated that for an economically backward country, the aim should be not merely to get better results within the existing framework of economic and social institutions but also to introduce such structural changes so that the institutions and structures become more effective instruments of achieving the desired objectives. The Third Plan was conceived as "the first stage of a decade or more of intensive development leading

to a self-reliant and self-generating economy." It sought to ensure a minimum level of living to every family in the country while narrowing economic and social disparities. It was then anticipated that at the end of the Fifth Five-Year Plan, the rate of investment would rise to 19-20 per cent and the rate of savings to 18-19 per cent of the national income for establishing a self-generating economy. Due to the conflict with China and Pakistan, much dislocation was caused to the economy and certain changes had to be made in the targets.

3.4. The Fourth Five-Year Plan which should normally have followed the Third Plan, could not be implemented as such for certain unavoidable reasons and a period of three Annual Plans intervened between the Third Plan and the Fourth Plan. The Fourth Plan commenced with effect from 1st April, 1969.

Objectives of the State's Fourth Plan

3.5. The State Plan is an integral part of the National Plan and is formulated in consultation with the Planning Commission. It thus reflects national objectives and priorities also besides the social and economic needs of the State. The broad objectives of the State's Fourth Plan are given below :

- (1) To aim at 5-6 per cent annual rate of growth of the economy as a whole with a growth rate of 5 per cent in the agricultural sector as a whole and 8-10 per cent in industry.
- (2) To ensure 6.9 per cent annual rate of growth in the production of foodgrains to achieve self-sufficiency.
- (3) To maximise employment opportunities compatible with the proposed growth rate.
- (4) To reduce disparities in social services and economic infra-structure between backward and developed areas.
- (5) To redress imbalances arising from a high rate of population growth and inadequate expansion in agricultural production by bringing, in the shortest possible time, the fertility rate to 25 per thousand.
- (6) To provide potable drinking water in the hill areas, Harijan *bastis* and other scarcity areas.

Long Term Perspective

3.6. The problem of economic development is essentially that of rapidly assimilating the resources of modern technology in order to raise the living standards of the people. It, however, requires substantial investments. While preparing the old Fourth Plan, a perspective of development for the period 1966-76 was presented. At that time, the *per capita* income of the country at the end of the old Fourth Plan was anticipated around Rs.425. In order to reach the all-India level of *per capita* income of Rs.425 at the end of the Fourth Plan itself, an investment of the order of Rs.5,100 crores at 1960-61

prices was considered necessary during the period 1966-71, assuming an incremental capital output ratio of 3 : 1. If the State aimed at reaching a *per capita* income of Rs.530 at the end of the Fifth Plan, as envisaged in India's Third Plan, the requirement of additional investment during the decade ending 1975-76 would have been Rs.9,000 crores at 1960-61 prices. It would now require an upward revision in the light of the revised projections of the State's population, which is expected to be 98.7 million in March, 1974. Consequently, in order to secure the *per capita* income mentioned earlier, an investment of Rs.5,800 crores and Rs.10,400 crores respectively would be necessary.

3.7. This perspective has been mentioned to highlight the present and the long term gap between the State's *per capita* income and that of the country as a whole. It is obvious that the scale of investment necessary to achieve the *per capita* income of Rs.425 or Rs.530 would be extremely difficult of realisation and the State will have to be satisfied with a more modest target. It will also not be out of place to mention that it would be difficult for the country as a whole to achieve the desired rate of growth if a State of the size and population of Uttar Pradesh were to lag far behind.

Fourth Plan Outlay

3.8. For achieving a 6 per cent annual rate of growth it was calculated earlier that an investment of the order of Rs.2,800 crores would be necessary. If the current outlays (revenue expenditure in respect of Plan schemes) amounting to Rs.250 crores were also added, the total outlay would have amounted to Rs.3,050 crores. The three main sources of capital investment are :

- (1) State plans.
- (2) Central projects.
- (3) Private sector investments.

In the Preliminary Memorandum the break-up of the aforesaid outlay of Rs.3,050 crores was (1) State plan Rs.1,350 crores, (2) Central projects Rs.800 crores, (3) Investments in the private sector Rs.900 crores. As far as the State plan is concerned, its financing depends on the State's own resources and the Central assistance. The Planning Commission after taking into consideration the expected resources for the Fourth Plan reduced the size of the State's Plan from Rs.1,350 crores to Rs.951 crores. The Planning Commission did not consider the anticipated investments in the Central and the private sectors. Even if it is assumed that the expectations relating to the investments in the Central and the private sectors would be realised a total outlay of about Rs.2,651 crores during the Plan period will not give a rate of growth higher than 5 per cent per year. If, therefore, it is intended to achieve a higher rate of growth, say of 6 per cent, additional resources will have to be mobilised.

3.9. On taking up the reins of administration, the popular Government, after examining the draft plan, found that outlays for certain important items

like drinking water, landless labour, youth and child programmes, Harijan welfare, etc. needed to be stepped up. According to the earlier plan proposals no new big irrigation project was to be taken up during the Fourth Plan period and in the power sector there was provision for taking only a single power project. It was realised that unless new projects in the irrigation and power sectors were taken up during the Fourth Plan period, great difficulty would be experienced during the Fifth Plan period. After taking into consideration all these factors a supplementary plan of Rs.127.50 crores has been prepared. Its implementation, however, will depend on the mobilisation of additional resources by the State and additional Central assistance. The break-up of the revised total outlay of Rs.2,778.50 crores is given below :

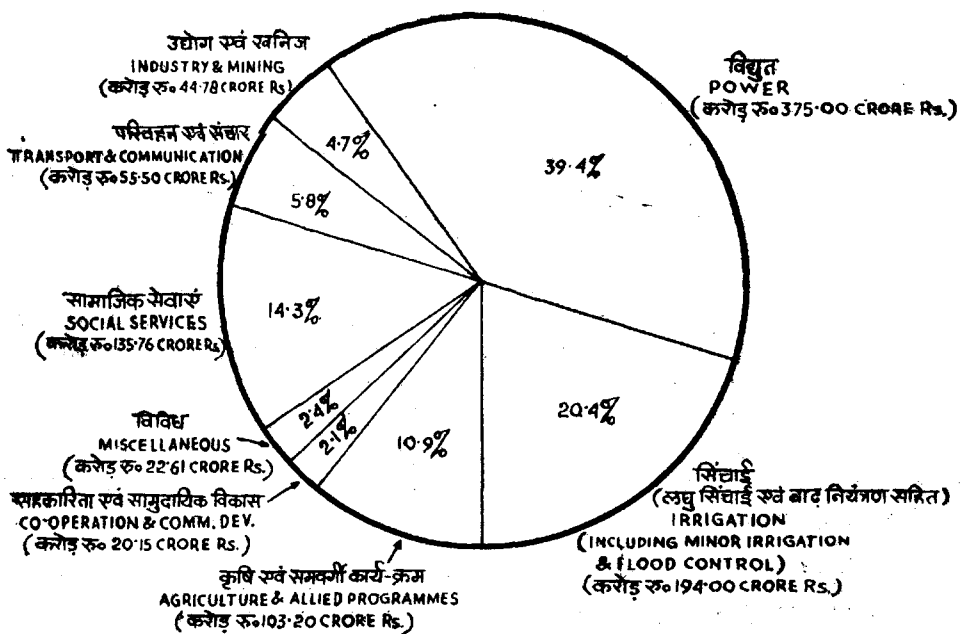
		(Rs. in crores)
(1) State Plan—		
(a) Original Plan	... ..	951.00
(b) Supplementary Plan	... ..	127.50
		1078.50
(2) Investment in Central projects and activities	..	800.00
(3) Investments in the private sector	..	900.00
		TOTAL ... 2,778.50

It is hoped that if an outlay of about Rs.2,778.50 crores is made possible during the Fourth Plan period, it would be possible to achieve a rate of growth of 5.6 per cent per year. The anticipated *per capita* income of Rs.459 in 1968-69 is expected to go up to Rs.523 at the end of 1973-74. In terms of constant prices of 1960-61 the anticipated *per capita* income of Rs.254 at the end of 1968-69 is expected to rise to Rs.289 in 1973-74. The State income is a function of investment. Therefore, a higher rate of growth is to be aimed at, proportionately larger investments are imperative.

3.10. An outlay of the order of Rs.2,651 crores envisaged for the Fourth Plan (based on the State Plan of Rs.951 crores), would be feasible only if at least one-third of the additional income created during the Plan period is ploughed back into the economy. Moreover, every effort shall have to be made to keep the revenue expenditure or current outlays to the minimum. There must be an atmosphere of austerity and any expansion of staff or up-grading of posts should not be allowed except when absolutely necessary. It is imperative that full use of existing institutions and structures is made. Instead of thinking in terms of financial outlays, the emphasis has to be on the optimum utilisation of existing capacity.

चतुर्थ पंचवर्षीय योजना 1969-74 में खण्डवार प्राविधान SECTORAL OUTLAY IN FOURTH FIVE-YEAR PLAN (1969-74)

कुल प्राविधान 951 करोड़ रुपया
TOTAL OUTLAY 951 CRORE RS.



3.11. A minimum level of living has to be ensured to every family. Economic and social disparities between different sections of the community have to be narrowed. The small-scale farmer and producer, village artisan and other vulnerable sections of the community have to be provided all possible help in improving their productivity and living standards. Similarly regional imbalances within the State have to be reduced, if not altogether eliminated within a reasonable period of time.

Strategy for Development

3.12. Investment in human resources is as vital for economic development as for strengthening political democracy coupled with social justice. However, in pursuing the welfare objectives the constraints on resources cannot be ignored. All the social services and amenities programmes involve revenue expenditure on a large-scale and the State Government cannot overlook the committed expenditure that they involve.

3.13. The really worthwhile urgent needs for the majority of population are food, drinking water, increase in agriculture and industrial production, irrigation, power, education, health and communication. It is undisputable that social amenities are necessary. Indeed the need and scope for developing them is so great that not all the resources of the State would suffice for the purpose. The approach has, therefore, to be selective. The emphasis has to be on qualitative improvement rather than quantitative expansion. The State Government feels that in all the social services programme, it would be more useful to consolidate the expansion already brought about in many directions during the 18 years of planning, undertake measures to utilise the existing institutions to their full capacity and confine expansion to a small number of priority items.

Agriculture

3.14. U. P.'s economy is primarily based on agriculture. Taking the agriculture sector as a whole which includes Animal Husbandry, Forestry, Pisciculture, etc. a higher target will have to be fixed for cereal production to make up for the lower rate of growth in sectors like Forestry and Animal Husbandry. For attaining self-sufficiency in foodgrains at the rate of 19 ounces (16 ounces cereals and 3 ounces pulses) per adult, it has been calculated that about 162 lakh tonnes of foodgrains would be needed by the end of the Fourth Plan. This target has to be raised by 34 per cent to meet the requirements of seed, animal feed, storage losses, etc. It would be prudent to add another 12 per cent to make allowance for the gap between the potential and the actual production in periods of drought and other natural calamities. The target for food production for the Fourth Plan should, therefore, be around 246 lakh tonnes. The production of foodgrains by the end of 1968-69 is expected to be about 176 lakh tonnes. Thus, in order to reach the target of 246 lakh tonnes in 1973-74, an additional potential of 70 lakh tonnes would have to be created.

This would mean a 6.9 per cent rate of growth in foodgrains and would help in achieving a 5 per cent annual rate of growth in the agricultural sector as a whole. The High Yielding Variety Programme forms the main prop for achieving the production target of foodgrains. For the economy of the State the development of commercial crops like sugarcane, oil-seeds, cotton and Jute is also vital. Concentrated efforts will, therefore, be made to raise their production also.

3.15. For the development of agriculture, it is essential that the cultivator should get adequate returns for his produce. Efforts will be made in consultation with the Centre to get minimum prices of foodgrains and commercial crops fixed well before the sowing season.

Drinking water

3.16. Potable water-supply is a pre-requisite of public health. Arrangements will have to be made for providing drinking water in such areas of the State where there is scarcity, such as hill areas, Harijan *bastis* and other scarcity pockets. In the Supplementary Plan an additional outlay of Rs.12 crores has been provided for drinking water schemes.

Industry

3.17. In the past industrial activity in the State has been at a low level in spite of favourable factors like nearness to market, availability of skilled and unskilled labour etc. The role of the Central Government in promoting industrial development is not less important. Sometimes an attempt is made to under-estimate the far-reaching effects of the location of Central projects. It has been mentioned earlier that during the first two plans, no Central industrial project was located in the State. In the Third Plan period, an investment of Rs.72.1 crores constituting 6.3 per cent of the total Central investment was made in the State. The spill-over expenditure continued during the period of Annual Plans. It is necessary that industries in the categories of fertilizer and pesticides, machine-building and engineering, intermediate and consumer goods should be established in U. P. in keeping with the size and population of the State and also to rectify the neglect suffered by the State in the past. As a result of technological advances, the nearness of the sources of raw materials is no longer an over-riding factor in the location of industrial projects and U. P. today provides all the other necessary wherewithals : power, land, water-supply and an assured and growing market. When a claim is made for a due share in the matter of the location of Central industrial projects it does not mean that the place of cottage and village industries is not fully appreciated. The two are entirely separate issues. The State Government is fully committed to the promotion of village, cottage and small-scale industries.

3.18. The big Central projects, with their huge potential for lifting up the whole economy of an area, are so valuable that States often vie with each other in offering certain concessions. It needs no detailed argument to see that this acts to the dis-advantage of less developed States whose own resources do not allow them to indulge in such competitive bidding. This is an extremely

unhealthy practice. It defeats the very purpose of the policy of balanced regional development. It is necessary that careful thought should be given to the problem early and a more rational approach evolved for the location of Central projects in less developed States in the country.

3.19. It is essential that an investment of Rs.800 crores should be made in Uttar Pradesh, in the Central sector, of which Rs.400 crores should be in the Central industrial projects. The remaining Rs.400 crores may be invested in other Central activities in the State.

Private Sector

3.20. The powers vested in the Central Government to regulate private industries should be used effectively to prevent concentration of industries in the already bulging metropolitan and other industrial centres. The social cost of the concentration of industries in a few centres is already formidable. The investment policies of financial institutions and banks have also to be re-oriented so as to help in the diversification of the economics of backward States. With the nationalisation of the leading commercial banks and the powers that are already vested in the Central Government for laying down guiding principles for the operations of Central financial institutions, it should be possible to pursue active policies for the development of industries in the States which have so far remained neglected.

3.21. As far as the State Government is concerned, besides establishing certain industries in the State sector, it will provide all reasonable facilities to the private sector to play its role in the economic development of the State.

Irrigation

3.22. Owing to limitation of funds, it would not be possible, except as provided in the Supplementary Plan, to take up any new major irrigation projects. The strategy during the Fourth Plan would, therefore, be to complete the maximum number of continuing projects and to concentrate on medium and minor irrigation schemes. It is expected that an additional irrigation potential of 48.91 lakh hectares would be created during the Plan period. In the Supplementary Plan, an additional outlay of Rs.35.50 crores has been provided, of which a sum of Rs.10 crores is for new schemes.

Power

3.23. Shortage of power has been one of the retarding factors of the economic growth of the State. A very high priority has, therefore, been accorded to power during the Fourth Plan to facilitate agricultural and industrial development. In 1968-69, the system demand is of the order of 990 MW. Besides 35 MW has to be supplied to other States. The firm capacity available in the State is expected to be 870 MW at the end of 1968-69. Thus the Fourth Plan

will open its account with a debit of 120 MW. At the end of 1973-74 the system demand is expected to go up to 2683.26 MW although the Central Water and Power Commission has kept it at 2050 MW which is obviously an under-estimate. The firm capacity that is expected to be available at the end of 1973-74 will not be more than 1750 MW. Taking into account the export of 67 MW to neighbouring States, the shortfall at the end of the Fourth Plan is likely to be in the neighbourhood of 367 MW. This shortfall can be wiped off or reduced if Central financial institutions and the banking system help in raising additional resources. Due to shortage of funds it was envisaged to take up only one new project. As the power projects have long gestation periods, the Fifth Plan period will have to face considerable difficulties in the matter of power supply. Keeping this difficulty in view, a sum of Rs.30 crores has been provided in the Supplementary Plan for undertaking new projects. As regards the present gap between generation and utilisation of power, the State Electricity Board is concentrating its efforts on improving transmission and distribution and also on reducing system losses.

Education

3.24. The percentage of enrolment expected to be achieved in the age-group 6-11 years by 1968-69, namely 85 per cent, will be maintained while the present teacher pupil ratio is proposed to be brought down from 1 : 53 to 1 : 47. The enrolment in Classes I-V is expected to increase from 99.35 lakhs in 1968-69 to 110.68 lakhs at the end of the Fourth Plan. The number of girls in this age-group is expected to go up from 36.45 lakhs at the end of 1968-69 to 40.82 lakhs at the end of the Fourth Plan. It would mean that 65 per cent of the girls in this age-group would have been provided with facilities. It is expected that the percentage of enrolment in the age-group 11-14 would rise from 16.6 in 1968-69 to 20.8 in 1973-74. Emphasis would continue to be laid on qualitative improvement in the educational sector. An additional outlay of Rs.5 crores has been included in the Supplementary Plan.

Youth Programmes

3.25. Youth welfare programmes are at present being implemented through different departments. In order to make the best use of the limited resources, co-ordination of these programmes is very necessary. The setting up of a Youth Board in the State is under consideration which would be helpful in running these programmes in a co-ordinated manner. The restlessness among the youth is attributed by some to the uncertainty about the future and lack of self-confidence. The youth will have to be given such constructive programmes as would help in utilising their energies for the development of the country and creating confidence in the future. For youth and child welfare programmes an outlay of Rs.3.50 crores has been provided in the Supplementary Plan.

Health

3.26. The present doctor population ratio in the State is 1 : 8320 against the all-India average of 1 : 5800. It is proposed to bring it down to 1 : 4600 by the end of the Fourth Plan. The bed-population ratio at the end of the Third Plan was 1 : 2593 as against the all-India average of 1 : 2049. It is likely to be reduced to 1 : 2250 against the projected country's ratio of 1 : 1666. An additional outlay of Rs.2 crores has been provided in the Supplementary Plan for the establishment of new hospitals.

SOME PROGRAMMES INCLUDED IN THE SUPPLEMENTARY PLAN

(Landless Labour, Rural Manpower etc.)

3.27. The additional outlays provided for some of the schemes in the Supplementary Plan are landless labour—Rs.5 crores; Rural Manpower—Rs.3 crores; Backward Areas—Rs.4.50 crores; Rural Roads—Rs.5 crores; Co-operation—Rs.5 crores; Scheduled and Backward Classes—Rs.7 crores; Housing—Rs.5 crores and Animal Husbandry—Rs.1.50 crores.

Employment

3.28. The employment situation has not been satisfactory in the country for the obvious reason that the growth in employment opportunities could not keep pace with the increase in labour force from year to year. But for the intensification of economic activities as a result of the Five-Year Plans, the unemployment situation would have been still more formidable. Uttar Pradesh also has its share of worries in respect of this problem. Employment has a direct bearing on the welfare of the people. Therefore, one of the important objectives of the State's Fourth Five-Year Plan is to maximise employment opportunities. It should, however, be appreciated that in each sector there are compelling requirements which have to be met. To that extent the scope for making changes in the Plan from the angle of employment gets somewhat limited. Yet every effort will be made to absorb, as much as possible, the net addition to the labour force into productive and gainful employment.

3.29. Increase in the labour force during 1969—74, is likely to be of the order of 37 lakhs. This figure is based on the population projections of the Expert Committee appointed by the Planning Commission and the participation rates indicated for the State in the population Census of 1961. The Fourth Plan envisages an outlay of Rs.951 crores in the State sector, Rs.800 crores in the Central sector and Rs.900 crores in the private sector. Though no definite details of capital investment in Central and private sectors are available and the industry-wise break-up of investment is also not known, even so an attempt has been made to indicate the employment opportunities that would be

available from the investments proposed in different sectors. The following table summarises the projections :

(Figures in lakhs)

	Employment			Total
	Agriculture	Non- Agriculture	Construction	
1. State Sector	5.14	1.78	1.17	8.09
2. Central Sector .. .. .	..	1.38	0.91	2.29
3. Private Sector	5.61	2.43	1.60	9.64
4. Industrial Sector (Organised) .. .. .	..	1.00	0.26	1.26
5. Educational Sector .. .. .	..	0.77	0.01	0.78
Sub-Total (1—5)	10.75	7.36	3.95	22.06
Indirect employment .. .. .	..	..	..	5.65
Defence Services .. .. .	..	..	..	0.83
Total .. .. .	..	..	..	28.54

It would be clear from the above table that the outlay of Rs.2651 crores is likely to create 28.54 lakh employment opportunities.

3.30. It is true that the problem of unemployment cannot be solved by creating only 28.54 lakh new jobs. The position has, therefore, to be examined from time to time to find out what other measures could be taken for improving the employment situation. As a result of Plan implementation certain new employment opportunities would be created. At the same time additional employment opportunities are also likely to result from the expansion of existing enterprises and the fuller utilisation of the present installed capacities. Fuller utilisation of idle capacity has the advantage of increasing employment opportunities without requiring more capital investment. The employment component of each programme is to be kept under constant review to give a fillip to generation of employment opportunities without sacrificing other objectives.

3.31. Intensive agriculture is opening new employment avenues in the rural areas. Programmes which can relieve the pressure of population on land have to be encouraged. There is considerable scope for the expansion of programmes like poultry, animal husbandry, piggery, etc., at least as subsidiary occupations. They would reduce under-employment.

3.32. Intensive agriculture and diversification, expansion of cottage and village industries, rural electrification, introduction of improved techniques and general economic and industrial development would help in generating new employment and in reducing the pressure of population on land. The main objective of the village, block and district plans is the allround integrated development of the areas concerned. Optimum utilisation of natural resources, existing potentialities and other resources through area development plans will help in accelerating the rate of growth. Programmes like minor irrigation, soil and water conservation, improvement of communications and development of the infra-structure, which form part of the area development plans, generally create employment opportunities for the local population and also help in giving work to the under-employed.

DISTRICT PLANS

4.1. "Planning from below" has been an accepted method of formulating the State Plans. The preparation of plans at the village, block and district levels ensures the participation of the people and the Panchayati Raj institutions in the process of Plan making and is also a valuable source of public education. While preparing the old Fourth Plan Village Panchayats, Kshettra Samitis and Zila Parishads were fully involved. At the time of preparing the present Plan, as much work had already been done, the exercise relating to the collection of physico-geographical data determination of priorities and analysis of the performance of different programmes was mainly undertaken at the district level. It was impressed on the districts that their plans should not give rise to undue expectations or to the listing of demands for which resources were not likely to be available. The emphasis was laid on the identification of local resources and their maximum mobilization for local benefit.

4.2. The Draft District Plans were placed before the Zila Parishads for their consideration. The Plans approved by them were then considered by the Divisional Planning Committees. A special cell functioned at the headquarters for the scrutiny of the District Plans. Normally a District Plan will consist of the following four categories of schemes :

(i) Schemes which can be implemented mostly with the help of local resources, like green manuring, compost, approach roads, village sanitation, etc.

(ii) Schemes which require technical guidance from Government agencies but can be executed with local resources, like those relating to agriculture, animal husbandry, etc.

(iii) Facilities like schools and dispensaries which are financed by the Government but whose location is decided in consultation with local bodies.

(iv) Schemes which are to be entirely in the State Public Sector like irrigation and power projects.

4.3. While formulating the Plans, the concept of "Area Development" has been kept in mind to ensure an integrated approach and to avoid overlapping and waste. An attempt has also been made to give special consideration to the less developed areas within a district, the idea being to bring them to the level of the rest of the district.

4.4. The progress achieved so far has been depicted on three maps. The first map shows relief and drainage, State tube-wells, intensity of irrigation in blocks having below 15 per cent, 15 to 25 per cent, 25 to 45 per cent, 40 to 45 per cent, and above 50 per cent; distribution of soil types; areas subject to water-logging; soil erosion and alkalinity. The second map shows the seed farms, seed stores, fertiliser depots, cold storages, different types of roads, bridges, *ghats* and ferries, existing and proposed power lines and power stations, banks, *mandies*, warehouses, marketing societies and processing societies, etc. The third map shows higher secondary schools, normal schools, colleges and technical institutions, hospitals, allopathic and ayurvedic dispensaries, maternity centres, primary health centres, family planning clinics, waterworks, drainage schemes, veterinary hospitals, artificial insemination centres and sub-centres, poultry development centres and places of tourist interest. The proposals for the Fourth Five Year Plan in various sectors have also been shown on these maps.

4.5. Some of the conclusions which have emerged as a result of the exercise done at the district level are enumerated below :

(1) There is an increasing awareness of the importance of roads and communications. In every district there is demand for more roads. The alignment of roads has to be such as to connect the villages to the nearest marketing centres which are likely to have banking, warehousing, postal, educational and other facilities. This awareness will give impetus to the construction of approach roads through voluntary labour.

(2) In most of the districts the energization of tube-wells and pump-sets has been slow for want of transmission lines. The district maps showing the transmission lines, types of soil and the present distribution of tube-wells will help in the optimum utilization of the present transmission lines and also indicate the areas where transmission lines could help in energising tube-wells in cluster. Efforts are being made to determine the best alignment of power lines.

(3) The High Yielding Varieties Programme has made its impact on the peasantry. Every district has chalked out a programme of taking up High Yielding Varieties during the Fourth Plan period. Further, the extension agency in the districts is being geared to ensure that the farmers are able to adopt in full the package of practices recommended for the High Yielding Varieties Programme.

(4) A consequence of the High Yielding Varieties Programme has been that the traditional modes of cultivation are giving way to modern and scientific techniques. Consequently there is a great demand for improved agricultural implements and machinery, specially tractors, tillers and threshers, and for warehouses and cold storages, marketing societies, and soil testing facilities.

(5) In the educational field it has been observed that there is a bottleneck after the primary stage as the present number of junior high schools is not able to cope with the number completing primary education. This factor has been taken into consideration while formulating the educational policy at the State level.

(6) There is an increasing awareness of utilising the potential that has already been created in various fields. The performance of the State and private tube-wells will illustrate the point. A conscious effort is being made to irrigate a larger area by those tube-wells whose performance is below the optimum. As a necessary corollary, the double and multiple cropped area will also increase.

(7) Emphasis on raising of local resources is likely to give impetus to the mobilization of manpower for executing self-help schemes, the raising of owned capital and deposits by the co-operatives and the raising of resources by the Panchayats. Programmes like soil conservation, tree plantation, drainage, improvement of irrigation channels, etc. are also likely to receive a fillip if the spirit of self-help and mutual aid gains momentum.

(8) The introduction of high yielding variety seeds has highlighted the importance of timely supply of fertilizers, pesticides, irrigation, etc. The need for godowns for keeping the bumper crop has also come to the forefront. The inability of small co-operatives to cater to the increasing needs of the progressive farmers has led to a demand for organising more viable units by amalgamating, if necessary, some of the neighbouring societies.

4.6. It is obvious that the State's development plan has to be conceived in such a fashion that it should be flexible and comprehensive enough to deal with the variety of problems in different areas and of different strata of population. It has to remain sensitive to the actual needs of the field. The total efforts inherent in the concept of area planning will now make it possible to take into account the financial, the physical and the technological resources of the local bodies, the co-operatives and credit and banking institutions.

4.7. It is proposed to bring out a separate volume giving a summary of district plans.

5

RESOURCES

5.1. The position of resources for the Fourth Plan and the Annual Plan for 1969-70 as tentatively fixed during discussions with the Planning Commission is given in the statement. The estimate of balance from current revenues which the State Government would be able to make available for financing the Fourth Plan, after meeting commitments on non-Plan account, would depend on the devolution of finances that the fifth Finance Commission may recommend for this State in their report. For the present it has been assumed that it will be just enough to cover the non-Plan budgetary gap of the State Government. The outlay for the Fourth Plan has been put at Rs.951 crores and that for 1969-70 at Rs.160 crores. The resources of the State Government have been estimated at Rs.425 crores for the Fourth Five-Year Plan and at Rs.64.50 crores for the Annual Plan 1969-70 and Central assistance has been kept at Rs.526 crores and Rs.94 crores respectively. To implement the Supplementary Plan of Rs.127.50 crores, additional corresponding resources would be needed. The responsibility for mobilising them would lie mainly on the State. It is hoped that the burden of the State would be lessened to some extent on account of the expected rescheduling of central loans to the State. It is also hoped that the States would get some extra central assistance out of the additional resources likely to be raised by the Centre during the Fourth Plan period. Any reduction in the outlay in the Central sector may also benefit the State Government.

5.2. The estimate of resources of the State Electricity Board has been put at Rs.93 crores by the Planning Commission. The latest statement sent by the Board puts the estimate at Rs.65 crores. These two figures will have to be got reconciled and whatever shortfall is there on this account will also have to be made good through other possible sources.

5.3. An Enquiry Committee was appointed by the State Government to examine the problem of resource mobilisation. The Committee has submitted its report to the Government. The original plan of Rs.951 crores and the Supplementary Plan of Rs.127.50 crores cannot be implemented without mobilising additional resources. It has already been made clear that public funds would be utilised with utmost economy and care. It is the sacred duty of the Government departments and public enterprises that every paisa should be spent with care so that people should have faith that whatever resources they would make available for the plans, would be utilised properly.

Statement of Resources of the State Government for the Fourth Plan and the Annual Plan, 1969-70, on the basis of estimates approved by Planning Commission.

(Rupees in crores)

	Fourth Plan 1969-70	
1. Balance from current revenues at 1968-69 rates of taxation .. .. .	..	..
2. Loans from Public (Net)	37	4.42
3. Loans from L. I. C. and R.B.I.	7	1.29
4. Share in Small Savings	100	18.00
5. Unfunded debt	34	5.93
6. Miscellaneous capital receipts (Net)	(-)-81	(-)-1.50
7. Contribution of State Electricity Board	93	14.36
8. Additional taxation including measures to increase the surplus of public enterprises.	175	20.00
9. Economy in expenditure	10	2.00
10. Withdrawal from reserves (Liquidation of Securities)	50	..
11. Central assistance for the Fourth Plan	5261	94.00
Aggregate Resources	951	158.50

AGRICULTURE

1. AGRICULTURAL PRODUCTION

6.1. Uttar Pradesh has a predominantly agricultural economy. According to 1961 census, 75.2 per cent of the State's working population is engaged in cultivation as against 69.5 per cent for the country as a whole. Agriculture contributed 60.9 per cent of the State income in 1960-61. The share of agriculture in State income at current prices rose to 63 per cent in 1965-66 although at constant prices of 1960-61, it was only 55.9 per cent in the same year. This apparent difference was due to the fact that whereas agricultural wholesale price index rose from 99.9 in 1960-61 to 163.2 in 1965-66, the increase in the industrial wholesale price index was from 139.6 in 1960-61 to 165.6 in 1965-66.

6.2. The State produces the largest quantity of food-grains of the country. In 1965-66 it contributed 18.48 per cent of the country's total foodgrains production. It also produced 33.05 per cent of the total production of potato and 47.35 per cent of the total production of sugar-cane in the country in 1965-66. Its production of oil-seed has been the highest in the country from 1960-61 onward. Agriculture is the main source of raw material of most of the State's industries. The average yields per hectare of most of the crops, e.g. rice and maize are, however, lower for the State than the average of the country (table at page 87). The cost of cultivation as percentage of gross value of output is also considerably higher in U. P. as compared to the all-India average. The average agricultural holding in U. P. is only 1.86 hectares as against the all-India average of 2.69 hectares.

6.3. The annual compound rate of growth in agriculture in the State upto 1965-66 over 1960-61 was 0.33 against a decrease of 0.93 for the country as a whole over the same period, which shows that during this period agricultural production was in a bad shape throughout the country mainly due to adverse weather conditions. So far as this State is concerned, it has also to be admitted that due to lack of adequate financial resources, an adequate infrastructure for agriculture, specially irrigation and power, could not be built up over the period, which alone could lay the foundation for a stable agricultural production base.

6.4. The net cultivated area as percentage of total area has shown a steady rise during the last 18 years. It has increased from 62.1 per cent in 1950-51 to 66 per cent in 1965-66. The net area sown in 1950-51 was 162 lakh hectares which increased to 173 lakh hectares in 1966-67, being 13 per cent

of the net area sown in the country. Area sown more than once was 37 lakh hectares in 1950-51 (26 per cent of such area in the country) and this increased to 45 lakh hectares by 1960-61 and 48 lakh hectares by 1966-67.

6.5. The State has vast ground and surface water resources. The net irrigated area as percentage of the net area sown in U. P. is higher than in other States of the country except Punjab and Madras. This was 29.6 per cent in 1950-51, 30.1 per cent in 1960-61 and 36.1 per cent in 1966-67.

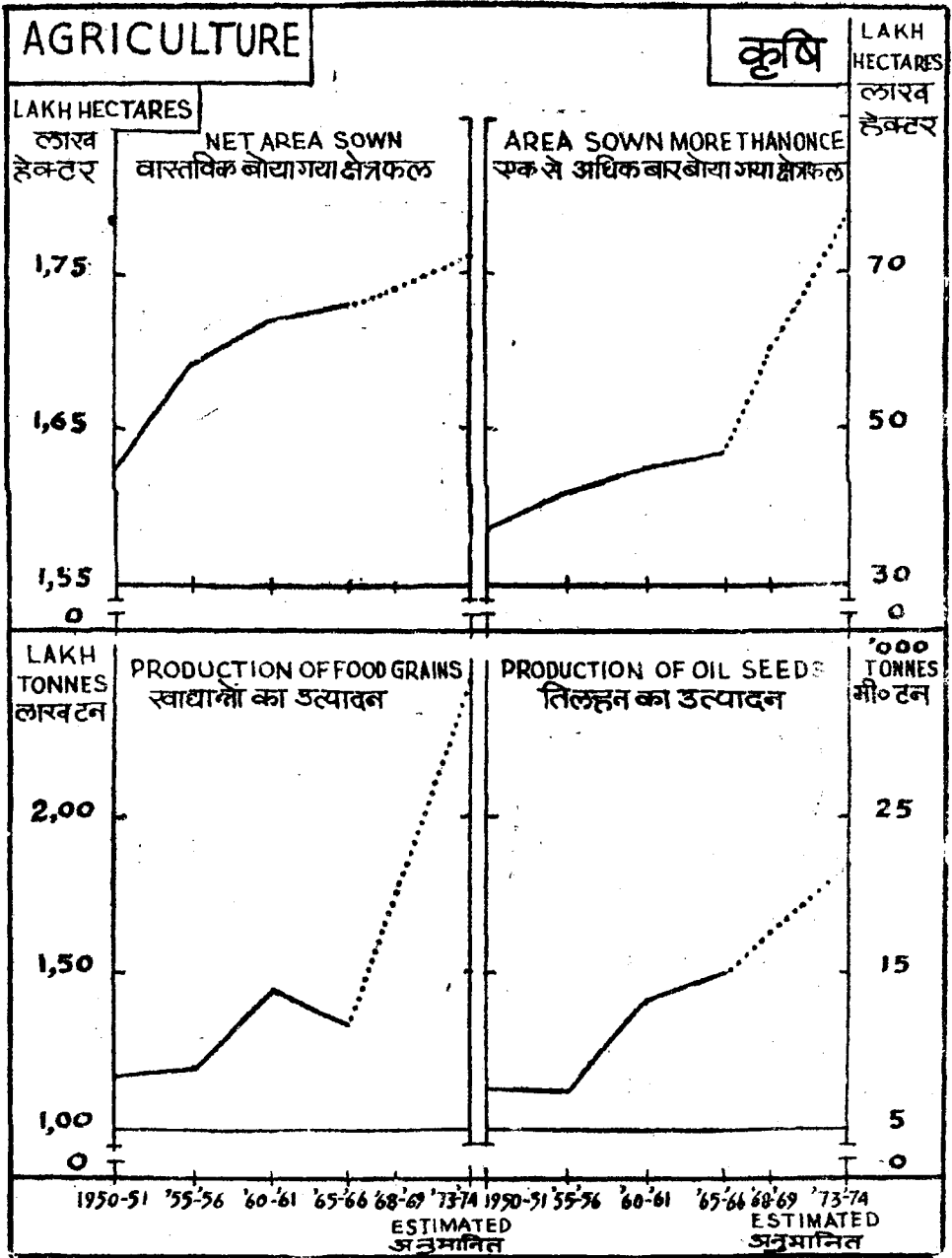
6.6. In spite of a substantial irrigated area, agriculture in the State largely depends on timely monsoons. The canals in U. P., provide only protective irrigation and do not have the capacity to provide for intensive cultivation. Agricultural production in the State has, therefore, fluctuated from year to year depending upon the quantity and distribution of rains.

6.7. Food production in U. P. increased from 120.58 lakh tonnes in 1955-56 to 144.86 lakh tonnes in 1960-61, registering an increase of 20.1 per cent over the period as against the corresponding increase of 21.1 per cent in the country. It may, however, be mentioned that the State had already reached a level of 132.79 lakh tonnes in 1954-55. It may also be mentioned that the production reached the low figure of 113.62 lakh tonnes in 1957-58. In the third Five Year Plan, four out of five years had adverse weather conditions. Consequently, production declined considerably and fell to 117.95 lakh tonnes in 1963-64. It rose again to 132.91 lakh tonnes in 1965-66. During 1964-65, however, when weather conditions were again favourable the production reached a level of 152.47 lakh tonnes.

6.8. The target of agricultural production for the three Annual Plans beginning from 1966-67; achievements for 1966-67 and 1967-68; and anticipated achievement for 1968-69 are given below :

Item	Unit	1966-67		1967-68		1968-69	
		Target	Achievement	Target	Achievement (estimated)	Target	Anticipated achievement
1. Foodgrains	Lakh tonnes	160.52	117.71	178.99	166.27	193.29	176.00
2. Sugarcane (<i>Gur</i>)	„	54.39	39.37	57.95	40.00	61.50	50.00
3. Oilseeds	„	15.15	12.95	16.87	15.84	17.68	17.68
4. Cotton	Lakh bales	0.90	0.51	0.95	0.31	1.00	0.60
5. Jute	„	1.75	1.53	1.82	1.85	2.04	2.04

6.9. The production sharply declined in 1966-67 due to an unprecedented drought in the State. However, owing to intensive efforts made for developing minor irrigation and a substantial High Yielding Varieties programme, it was possible to achieve a record production of 42.17 lakh tonnes of wheat in that year. The year 1967-68 was a favourable agricultural year and with the help



of High Yielding Varieties and infra-structure that had already been built up, it was possible to establish a new production record of 166.27 lakh tonnes of foodgrains. A real break through in agriculture has taken place because of extensive High Yielding Varieties Programme, intensive Minor Irrigation ; emphasis on package of practices and good prices. The area under foodgrain crops also increased. The area under sugarcane, however, touched the low figure of 6.55 lakh hectares in 1967-68 as against 10.30 lakh hectares in 1965-66. The principal factor responsible for reduction in sugarcane area was the comparatively lesser return from cultivation of sugarcane vis-a-vis other competing crops, particularly foodgrains. The production of jute and oilseeds has shown a more or less constant upward trend whereas the production of cotton has not made much headway.

6.10. Achievement under improved agricultural inputs during the past years is indicated below:

Item	Unit	1955-56	1960-61	1965-66	1968-69 (Anticipated)
1. Fertilizers :					
N	Lakh tonnes	0.17	0.29	0.80	2.00
P ₂ O ₅	Lakh tonnes	0.002	0.02	0.99	9.50
K ₂ O	Lakh tonnes	...	...	..	0.36
2. Green Manuring	Lakh hectares	0.23	3.75	7.54	6.88
3. Urban Compost	Lakh tonnes	4.04	5.26	6.70	7.00
4. Plant Protection (area covered)	Lakh hectares	0.16	1.30	25.06	40.47
5. Improved implements	Lakh nos.	...	1.30	2.22	2.25
6. Soil Conservation	Lakh hectares	..	0.31	2.97	4.27
7. Double Cropping	Lakh hectares	41.50	45.42	47.31	57.80
8. Area under improved seed	Lakh hectares	18.01	76.94	103.34	131.05
9. Area under HVP	Lakh hectares	..	..	..	30.75

6.11. It would be observed that there has been progressively greater utilization of chemical fertilizers from Plan to Plan. The green manuring programme has been rather static and the urban compost programme has made only marginal progress. The area under Plant Protection has considerably increased. The area under improved seed has also shown an upward trend as is also the case in respect of double cropping area.

6.12. The agricultural strategy adopted in the Third Five Year Plan was to concentrate efforts in potential area through intensive cultivation programme

rather than dispersal of resources over large areas. The strategy during the three Annual Plans has been to develop Minor Irrigation at a faster rate and to simultaneously introduce High Yielding exotic and hybrid varieties and local High Yielding varieties with supporting programmes of fertilizer application, plant protection, other improved agricultural practices and improved marketing facilities.

6.13. A number of administrative and organizational measures were also taken during the Third Five-Year Plan and the three Annual Plans to boost up agricultural production. These included creation of Agricultural Supplies Organization, linking of Co-operative credit with the distribution of supplies, raising credit limits of *Bhoomidars* and *Sirdars* to 150 and 120 times respectively of the land revenue paid by them, provision of soil testing service for the farmers and establishment of Agro-Industries Corporation for taking up activities like providing hire-purchase facilities to the cultivators, assembly of tractors and their manufacture, construction of ware-houses and cold storages, setting up of processing units and the manufacture of pesticides.

6.14. For proper coordination and synchronization of efforts in the inter-dependent sectors and programmes relating to agricultural production, a department of Agricultural Production and Rural Development was created during the Third Plan. The Departments like Agriculture, Cane, Co-operation, Minor Irrigation, Animal Husbandry, Fisheries, Community Development and Panchayati Raj, which hitherto used to function separately, were brought within the fold of the new Department of Agricultural Production and Rural Development. It was a step forward towards coordination of programmes in the Agriculture sector. A State Coordination Committee consisting of officers of various development departments was also set up. Besides, a Cabinet Sub-Committee on Agricultural Production under the Chairmanship of the Chief Minister was formed to resolve bottlenecks, if any, in the expeditious execution of agricultural programmes.

6.15. Overall economic development and higher levels of *per capita* income in the State would not be possible without a higher rate of growth in the Agriculture Sector. The National Development Council has recommended an annual compound rate of growth of 5 per cent in agriculture during the Fourth Plan period. As it would not be possible to achieve this rate of growth in sub-sectors like Forestry and Animal Husbandry, it is proposed to aim at a higher rate of growth of 6-7 per cent under Agricultural Production proper so as to achieve an overall rate of growth at 5 per cent.

6.16. The strategy during the Fourth Plan is based on the concentration of efforts according to the need of an area and to secure maximum participation of small farmers. It is proposed to develop optimum land-use pattern with a view to putting it to the best economic use for obtaining the maximum productivity per hectare. Accordingly, it will be ensured that the irrigated area, by and large, attains maximum productivity level as quickly as possible through

adoption of intensive cultivation programmes on a gradually increasing scale. The High Yielding Varieties programme will be concentrated in areas of assured irrigation. Besides, intensive crop rotations with multiple crops will be encouraged in such areas. It will be ensured that inputs required by the farmers are made available in time to meet their full production needs.

6.17. About 77 per cent of the holdings in the State are below 5 acres. As such, most of the cultivators belong to the class of small farmers. During the Fourth Plan special efforts will be made to ensure that this class of farmers is not handicapped due to lack of resources. Co-operative credit, *taqavi* loans, etc., will be made available to them to fully meet their production needs. The resources of commercial banks and other co-operative bodies will be fully mobilised for supplementing the credit needs of the small farmers. It is proposed to regulate the main markets and the assembly yards with a view to ensuring adequate returns for their produce.

Efforts will also be made, in consultation with the Government of India, to fix minimum prices of foodgrains and commercial crops well before their sowing seasons.

6.18. In the phasing of programmes it will be ensured that the existing regional disparities are reduced to the minimum by concentration of efforts and resources according to the specific needs of the area. For instance, in dry areas, irrigation programme will precede other intensive measures like seeds, fertilizers, and multiple cropping. In Bundelkhand region and other such areas which have inadequate irrigation facilities, special emphasis will be laid on soil conservation programmes, development of High Yielding varieties of crops like *jowar* and *bajra* suited to dry conditions and intensification of dry farming practices. Attention will also be paid on mechanisation by means of custom service units established through the Agro-Industries Corporation. In Eastern Districts, intensive cultivation programme will be taken up. A scheme for Ayacut development will be launched in Azamgarh for consuming the unutilised potential of Dohrighat Pumped Canal. Drainage schemes for flood control and special schemes for chronically drought affected districts mainly based on soil conservation programmes and development of Minor Irrigation works are being given priority in the Fourth Plan.

6.19. The main objective of the Fourth Five Year Plan is to achieve self-sufficiency in food. The requirement of foodgrains at 16 oz. of cereals and 3 oz. of pulses per adult per day for the projected population of 96.77 millions by 1973-74 works out to 161.71 lakh tonnes. Besides, some quantities will also be needed for cattle feed, seed for sowing, losses in storage and reserve for lean years. The total requirement, therefore, works out to 217.42 lakh tonnes. There is usually a gap of 12-14 per cent between the production potential created and actual production, particularly in lean years. In order to achieve an effective production of 217.42 lakh tonnes of food-grains, it is proposed to build up a production potential of 245.90 lakh tonnes. The cushion of

12-14 per cent between the production potential created and actual production has been kept on the basis of the trends during the last several years to overcome the effects of unfavourable weather conditions in bad years. Therefore, it will be safe to presume that the targeted production is possible of achievement. This will ensure a compound rate of growth of about 6.9 per cent in the production of foodgrains over the anticipated production of 176 lakh tonnes during 1968-69. The target proposed for the Fourth Plan in respect of foodgrains and important cash crops are as follows :

Item	Unit	Base year production 1968-69 (estimated)	Targets for Fourth Plan		Target for 1969-70	
			Total	Additional	Total	Additional
1	2	3	4	5	6	7
1. Foodgrains	Lakh tonnes	176.00	245.90	69.90	188.17	12.17
2. Oilseeds	Lakh tonnes	17.68	22.00	4.32	18.83	1.15
3. Cotton	Lakh bales	0.60	1.00	0.40	0.65	0.05
4. Jute	Lakh bales	2.04	2.20	0.16	2.07	0.03
5. Sugarcane (<i>Gur</i>)	Lakh tonnes	50.00	67.50	17.50	52.00	2.00

6.20. The aforesaid additional production potential of 69.90 lakh tonnes is proposed to be achieved through the following sources :

Item	Level 1968-69 (Lakh hectares)	Physical Targets (Lakh hectares)		Additional Production (Lakh tonnes)	
		1969-70	1973-74	1969-70	1973-74
1	2	3	4	5	6
1. Major and Medium Irrigation	24.77 (35.40)	0.23 (0.32)	5.11 (7.30)	0.140	3.159
2. State Minor Irrigation	12.01 (17.15)	0.78 (1.11)	3.39 (4.85)	0.424	1.866
3. Private Minor Irrigation	10.70 (15.29)	4.26 (6.08)	21.20 (30.29)	2.315	11.573
4. Soil Conservation					
(a) Extension	6.61	1.83	10.24	0.228	1.281
(b) Hilly areas	0.04	0.02	0.22	0.015	0.137
5. Land Reclamation	0.04	0.004	0.004	0.002	0.003
6. Ravine Reclamation	0.20	0.11	0.67	0.021	0.125
7. HVP—					
(1) Wheat	12.14	14.57	26.30	4.500	26.250
(2) Paddy	3.44	4.86	12.14	2.345	14.405
(3) Maize	1.42	2.02	4.05	0.750	3.250
(4) <i>Jowar</i>	0.20	0.24	0.40	0.025	0.125
(5) <i>Bajra</i>	0.20	0.24	0.40	0.025	0.125
8. Multiple cropping	57.80	60.60	73.17	1.380	7.600
Total	..	..	..	12.170	69.899

(Figures in brackets shown as denominator in columns 2, 3 and 4 indicate the total irrigation potential created.)

6.21. In reckoning the additional production potential of foodgrains through Major, Medium, and Minor Irrigation, only 70 per cent of the expected utilisation of the additional irrigation potential likely to be created during the Fourth Five Year Plan has been taken into account. The remaining 30 per cent, it is assumed, will be utilised for cash crops. The additional irrigation potential proposed to be created and the expected utilization is indicated below :

(Lakh hectares)

Item	Potential to be created by 1973-74	Utilization expected by 1973-74
1. Major and Medium Irrigation	12.83	7.30
2. State Minor Irrigation	5.55	4.85
3. Private Minor Irrigation	30.29	30.29

6.22. Major emphasis in increasing overall production would be on higher value crops like wheat, paddy, pulses. Higher production in coarse grains would be achieved through introduction of Hybrid varieties of *Jowar*, *Bajra* and maize. High Yielding Varieties programme including local high yielding varieties is proposed to be taken in an area of 71.6 lakh hectares against the target of 37 lakh hectares proposed by the Central Working Group on Intensive Agricultural Programmes. A higher target has been fixed keeping in view the large scale expansion of Minor Irrigation programme which has already taken place and the proposed intensification during the Fourth Five Year Plan.

6.23. *Improved Seeds*—It is proposed to cover 153.9 lakh hectares under improved seed by the end of the Fourth Five Year Plan against the anticipated coverage of 131.05 lakh hectares by the end of 1968-69. This will involve supply of 3.13 lakh Quintals of registered seed against current distribution of 1.51 lakh Quintals. Registered Seed of the self pollinated and composite varieties will need to be supplied to the farmers once for replacement only. In case of hybrid varieties, however, the entire seed requirement of the total area sown will have to be met year after year. Seed will continue to be produced on State Farms, University Farms at Pantnagar and the holdings of registered growers. The deficit, if any, would be met by utilising the agency of National Seed Corporation. So far as local high yielding varieties are concerned, their seeds will largely be produced on State farms for which purpose it is proposed to increase the productivity of the existing farms by augmenting the facilities. It is also proposed to strengthen the existing seed laboratory at Kanpur and the regional laboratories.

6.24. *Fertilizers and Manures*—On the basis of prescribed doses, the total requirement of fertilizers for the Fourth Five-Year Plan would be 11.01 lakh

tonnes of N, 6.76 lakh tonnes of P_2O_5 , and 6.40 lakh tonnes of K_2O . However, it is felt that for practical reasons it would not be possible for all the farmers to use the fertilizers in the recommended doses, as experience has shown that despite the incentive of high prices of foodgrains the farmers did not apply full doses of nutrients even in the H.V.P. either because of lack of financial resources or for other reasons. Therefore, a more realistic approach would be to fix the target at 66 per cent of the calculated quantities. The requirement of fertilizers for the Fourth Plan has, therefore, been assessed at 7.50 lakh tonnes of N, 3.90 lakh tonnes of P_2O_5 and 2.70 lakh tonnes of K_2O against the present consumption level of 2 lakh tonnes of N, 0.50 lakh tonnes of P_2O_5 and 0.36 lakh tonnes of K_2O . Distribution will be made through Agricultural Supplies Organization, Provincial Co-operative Federation, Co-operative Cane Unions and private agencies. Storage capacity of 2.48 lakh tonnes is likely to be available to the Agriculture Department against the present capacity of 1.40 lakh tonnes. This will be in addition to the storage capacity proposed to be built in the co-operative sector to meet the requirements of that sector.

6.25. *Sewage Utilization*—A sum of Rs.1.87 crores was allocated for Sewage Utilization schemes during the first three Plans and 35 schemes were initiated including 15 schemes taken up under the Crash Programme in 1964-65. Out of these, only 4 schemes could be completed up to the end of the Third Plan. Progress in this regard suffered a set-back in the initial stages owing to difficulties in acquisition of land for pump houses and sewage farms and in procurement of pumps and machinery. Three new schemes viz. at Gola Gokaran Nath, Kandhla and Ballia were taken up during the three Annual Plans. A sum of Rs.0.86 crores would be utilized during 1966-69 and sewage farms will be established in 24 towns. About 5,670 hectares would be brought under sewage irrigation during this period. A sum of Rs.3 crores has been proposed for Sewage Utilization schemes during the Fourth Plan including Rs.0.90 crores for continuing schemes. As many as 32 schemes are expected to be completed during the Fourth Plan period bringing an additional area of 7,283 hectares under sewage irrigation. The outlay proposed for 1969-70 is Rs.30 lakhs.

6.26. *Rural Compost*—It is expected that production of rural compost by 1968-69 would reach a level of 650 lakh tonnes. A target of 886.06 lakh tonnes has been fixed for the Fourth Five Year Plan.

6.27. *Urban Compost*—It is estimated that there is scope for 8.20 lakh tonnes of Urban compost in the towns and notified areas. The present level of production of urban compost is about 7.0 lakh tonnes. It is proposed to raise this production to 8 lakh tonnes by 1973-74.

6.28. *Green Manuring*—The coverage under green manuring by the end of 1968-69 is expected to be 6.88 lakh hectares. It is proposed to bring 12.14 lakh hectares under green manuring by the end of 1973-74. Emphasis in the

programme will be on short duration leguminous crops in areas where irrigation facilities are available and in the monsoon fallows kept for sugarcane plantations.

6.29. *Plant Protection*—The area under cultivation in U. P. including fruit trees would rise to about 254.87 lakh hectares by the end of the Fourth Plan. It is estimated that 20 per cent of the total agricultural produce is damaged through ravages of pests and diseases. The Plant Protection Programme is functioning in the State since 1947. Beginning with a meagre coverage of about 0.27 lakh hectares in 1947-48, a coverage of 35.67 lakh hectares was achieved by 1967-68. The plant protection measures are expected to cover an area of about 40.47 lakh hectares by the end of 1968-69. In the Fourth Plan, the plant protection measures will be intensified both in intensity and coverage. It is proposed to cover 91.05 lakh hectares annually by 1973-74. The details of various measures proposed are given below :

Item	(Lakh hectares)	
	Target	
	1969-70	1973-74
1	2	3
1. Seed treatment	20.24	36.42
2. Control of field rats	12.14	20.23
3. Control of soil and polyphagus pests	3.24	9.71
4. Intensive plant protection measures	14.16	22.26
5. Weed control	0.81	2.43
Total	50.59	91.05

6.30. Thirty per cent of this area will be covered through the State Plant protection organisation and the remaining 70 per cent through private agencies and by the farmers themselves. Private firms are increasingly establishing their sale and service points in the State. Besides, it is proposed to take up the programme of training of farmers in the techniques of control operations.

6.31. *Agricultural Implements*—The demand for small and medium size tractors, power tillers, thrashers, etc. has of late increased considerably. This increased demand is proposed to be met through the agency of Agro-Industries Corporation which would be distributing tractors, power tillers and other farm machinery to the farmers. Besides, it is also proposed to make available various improved implements and power machinery to small cultivators on hire. It is targeted to distribute 10 lakh implements during the Fourth Plan. Besides, it is also proposed to distribute at least 10,000 tractors and power tillers through the Agro-Industries Corporation. Private firms and institutions will also be catering to the needs of the farmers in this respect.

6.32. *Commercial Crops*—The chief commercial crops of the State are oilseeds, jute, cotton, sugarcane and potato.

6.33. *Oilseeds*—The requirements of edible and non-edible oils for the State by 1973-74 has been estimated at 3.20 lakh tonnes which in terms of oilseeds would be about 16 lakh tonnes. Besides, there is possibility of developing an exportable surplus of about 6 lakh tonnes. The main oilseed crops in the State are groundnut and mustard. It is expected that the production level of oilseed by end of 1968-69 would reach a level of 17.68 lakh tonnes. Therefore, measures are proposed to be taken up for building an additional potential of 4.32 lakh tonnes.

6.34. *Jute*—The present requirement of jute of the State is estimated at about 2 lakh bales. The present production is estimated to touch 2.04 lakh bales by 1968-69. There is little scope for increasing the production of jute by expansion of the area. However, there is good scope for increasing the per acre production as the present average yield is only 3.5 bales per acre. A target of 2.20 lakh bales by 1973-74 has been proposed which will be achieved by intensification and improvement of cultural practices.

6.35. *Cotton*—The present requirement of cotton lint in the State is estimated at 4.82 lakh bales. Taking into consideration the rising population as well as increased demand of industries, the domestic requirement is expected to rise to 4.99 lakh bales by 1973-74. The present production of cotton is estimated to range between 0.51 to 0.57 lakh bales per annum. Taking into consideration the limitations of the area and climate, a target of 1 lakh bale by 1973-74 has been fixed. The increase in production will be achieved mainly through pest control measures and other improved agricultural practices.

6.36. *Cane Development*—The area under sugarcane is proposed to be raised from the present level of 8.09 lakh hectares to 10.32 lakh hectares. The main strategy of stepping up average yield per hectare during the Fourth Plan will be to provide all the necessary inputs for such sugarcane areas as have assured means of providing 6-8 irrigations through growers' own resources, supplemented by other resources, if necessary. A programme for intensification of cane production in the assured irrigated areas has accordingly been drawn up on the lines of H. V. P. for the Fourth Plan. It is proposed to create an additional irrigation potential of 3.24 lakh hectares through Minor Irrigation works. The level of consumption of chemical fertilizers is proposed to be raised from the present level of 1.50 lakh tonnes to 3.50 lakh tonnes by 1973-74. The target of distribution of cane seed has been kept at 3.14 lakh tonnes against the concurrent year's achievement of 0.94 lakh tonnes. With these measures it should be possible to increase the average per hectare yield from the present 16.20 tonnes to 20.60 tonnes by end of 1973-74. An outlay of Rs.4 crores has been provided for the Fourth Five Year Plan.

6.37. *Potato*—The production of potato was 13.20 lakh tonnes during 1965-66 which is expected to rise to 15 lakh tonnes by 1968-69. Besides, 12.50 lakh tonnes of tuber crops like sweet potato will also be produced in the State. The total requirement of tuber crops by 1973-74 is assessed at 33.35 lakh tonnes. It is proposed to increase the area under potato from the present 2.02 lakh hectares to 2.43 lakh hectares by 1973-74 and the per acre yield from the present 3 tonnes to 4 tonnes by end of the Fourth Plan. It is proposed to grow sweet potatoes over 0.91 lakh hectares. The total production target of tubers for the Fourth Plan has been kept at 38.50 lakh tonnes.

6.38. *Fruit Utilization*—Hills offer great possibilities of growing temperate and sub-tropical fruits and vegetables. The total area of the 4 Hill districts of Kumaon Division viz., Almora, Naini Tal, Garhwal and Tehri-Garhwal is approximately 23.73 lakh hectares of which the area under cultivation and that of culturable waste is estimated to be 6.47 lakh hectares and 2.02 lakh hectares respectively. Of these, the area considered suitable for orcharding is about 3.23 lakh hectares. The total area brought under orchards by the end of the Third Five Year Plan was 0.27 lakh hectares which is expected to rise to 0.34 lakh hectares by the end of 1968-69. Along with the intensive drive for plantation of new orchards, emphasis is also being laid on increasing vegetable production. Under the vegetables programme about 930 hectares of land was brought under cultivation by the end of the Third Plan which is expected to rise to 1,922 hectares by 1968-69.

6.39. A notable achievement of the horticulture programme since 1964-65 has been the establishment of a fruit belt along the newly constructed 30-mile Chamba-Mussoorie road in Tehri-Garhwal District. About 356 hectares of land was planted under orchards by 1967-68. A total of 1,071 persons received training in horticulture development till 1967-68 and a batch of 40 trainees will pass out during 1968-69. Horticultural Plant protection mobile teams numbering 51 were established by the end of 1967-68, thereby providing one team for every block in Kumaon Division.

6.40. With a view to linking horticultural development programme with the proper utilization of horticultural produce, 20 community canning centres were established by the end of Third Five Year Plan. During 1966-67, 3 more centres were added bringing the total number of centres to 23. The number of trainees at these centres increased from 3,910 in 1964-65 to 4,920 in 1967-68. The number of persons availing canning facilities also increased from 6,287 in 1964-65 to 6,469 in 1965-66. It, however, declined to 5,801 during 1966-67. The quantity of fruits and vegetables processed at these centres during 1964-65, 1965-66 and 1967-68 was 0.535 lakh kg., 0.531 lakh kg. and 0.480 lakh kg. respectively. Shortfalls were due mainly to scarcity of sugar and high cost of containers.

6.41. Keeping in view the progress made during the previous plans and the vast scope that still exists for expansion of horticulture, a target of bringing

an additional area of 0.16 lakh hectares under orchards and 1,400 hectares under vegetables has been proposed for the Fourth Plan. Besides, it is proposed to train 200 growers per year in horticultural practices by holding camps of 2-3 days' duration in the Fourth plan period. Under the scheme for fruit belt and garden colonies, it is proposed to take up selected areas in order of priority in 14 belts and 14 compact blocks out of a group of 36 fruit belts and 20 garden colonies during the Fourth Plan. Also, five Community canning-cum-training centres are proposed to be established during the Fourth Plan to train about 3,700 persons in Fruit and vegetable preservation and to prepare and pack about 22,000 kg. of fruit and vegetable produce during the plan period. Besides, the Hill Fruit Research Station, Chaubattia and Fruit Preservation and Canning Institute, Lucknow would be suitably strengthened to meet the requirements of the various programmes prepared for the Fourth Plan.

6.42. An outlay of Rs.1 crore has been proposed for Fruit Utilization schemes during the Fourth Plan.

6.43. *Agricultural Education*—There are, in all, 35 Agricultural institutions including the Agricultural University at Rudrapur which impart higher agricultural education in the State. It is proposed to lay greater emphasis on improving the standard of agricultural education in the existing institutions by providing more facilities rather than to expand the number of institutions. The instructional farms at the Government Agricultural schools will be provided with mechanised equipment and adequate irrigation facilities for adopting intensive cultivation methods. It is proposed to introduce a 3-year degree course after Intermediate for B. Sc. (Agriculture) Honours degree. The U. P. Agricultural University Pantnagar is being developed on the pattern of Land Grant College in U. S. A. However, it still lacks in buildings, equipment and library facilities in the various disciplines. Also, there is need for new departments of food technology, entomology and schools for advance research on various crops.

6.44. During the Fourth Plan it is proposed to re-organize the Government Agriculture College, Kanpur. At present, there are a number of Research Officers, e.g. Plant Pathologist, Entomologist, Economic Botanist, Soil Chemist, etc. who carry out their research work almost without any coordination between them and independently of the teaching programme of the college. It is proposed to integrate the *research* units with education and extension and upgrade the college into a full fledged Institute under the charge of a Director who will be in overall charge of agricultural research, education and extension. Such a reorganisation will not only improve the quality of research and education but will also go a long way in strengthening the technical base so necessary for scientific agriculture.

6.45. *Agricultural Research*—With the introduction of HVP it has become necessary to strengthen the various research sections to deal with new problems. It is proposed to take up co-ordinated research programme on barley, rice,

wheat, maize, pulses and jute. It is also proposed to intensify research on millets and production of high-yielding and disease-resistant varieties of vegetables and disease-free potato seed. Soil testing programme will be considerably expanded for making systematic recommendations and fertilizer use.

6.46. *High Yielding Varieties Programme*—Some of the exotic varieties of wheat and paddy and hybrids of maize, jowar, and bajra have immense yield potential. Therefore, a programme of high yielding varieties was introduced in the State in 1966-67, on a modest scale to start with, over an area of 4.66 lakh hectares. The programme made rapid strides in 1967-68 and an area of 21.72 lakh hectares was covered against the all-India achievement of 61 lakh hectares. A target of 31 lakh hectares has been fixed for 1968-69 against the all-India target of 84.98 lakh hectares. During the Fourth Plan it is proposed to cover an area of 71.6 lakh hectares by 1973-74 under the HVP (including local varieties), in an all-India target of 242.81 lakh hectares. The HVP forms the main source for achieving the production target of 245.90 lakh tonnes of foodgrains by 1973-74 in the State. HVP will also include introduction of intensive crop rotation and multiple cropping on a large scale.

6.47. For the successful execution of the programme it will be ensured through the agencies of the Agriculture Department as well as Co-operatives that all the necessary inputs are made available to the farmers in time, nearer home and in sufficient quantities to meet fully their requirements.

6.48. *Land Reforms*—A comprehensive law, viz. the “U. P. Zamindari Abolition and Land Reforms Act”, was enacted in 1950, for the major portion of the State to end the system of intermediaries on land, reduce multiplicity of tenures, rationalize rents, and to bring the cultivators in direct relationship with the State. Other important features of the Act were: payment of equitable compensation to displaced Zamindars, undisturbed possession of land by the actual tiller of the soil and conferment of stable rights on him, undisturbed possession of every person over his house, well or grove, prohibition on sub-letting except in special cases of disability, prevention of un-economic holdings, ownership of common land by the village community with powers of land management and supervision of holdings and groves, and individual and joint responsibility of the entire body of tenure holders for payment of land revenue to the State.

6.49. The U. P. Zamindari Abolition Act of 1950, applied only to rural areas in the plains. Accordingly, for the remaining areas where peculiar and special conditions existed, special laws to abolish the landlord tenancy system and to introduce land reform therein were enacted, during the Second Plan period. Important among these, were the “U. P. Urban Areas Zamindari Abolition and Land Reforms Act, 1956” and the “Kumaon and Uttarakhand Zamindari Abolition and Land Reforms Act, 1960.”

6.50. In order to effect a more even distribution of land, particularly to provide land to the landless, the, "U. P. Imposition of Ceiling on Land Holdings Act, 1960," was also enacted during the Second Plan. As a result of enforcement of the Act, a total area of 0.91 lakh hectares of land was declared as surplus in the State till March 31, 1968, out of which 0.73 lakh hectares was taken possession of and 0.48 lakh hectares settled provisionally.

6.51. During the Third Plan, certain consequential amendments, which were found necessary on the basis of experience gained of the working of all the land reforms laws, were carried out.

6.52. The State Government felt the need for simplifying the revenue law and for this purpose a committee has been set up to study the various revenue and tenancy laws at present in force in the various areas of the State and to suggest a draft for a consolidated Revenue Code.

6.53. The State Government have also set up another committee to examine the problem of allotment of land to landless persons of the State in the Tarai districts.

6.54. In view of recurring complaints regarding failure of Land Management Committee to allot Gaon Sabha Land in accordance with the priorities laid down in Law, the Zamindari Abolition Act has been so amended that in future the decisions of the Land Management Committees to let out land will be implemented only when the Sub-Divisional Officer has satisfied himself that the lease is in accordance with the provisions of the Act.

6.55. *Consolidation of Holdings*—Fragmentation and sub-division of holdings have retarded the progress of Indian agriculture. This problem is more acute in U. P. due to heavy pressure on land. The U. P. Consolidation of Holdings Act was accordingly enacted in 1954. The total area to be covered under consolidation of holdings in the State is about 125.04 lakh hectares. An area of 83.01 lakh hectares was consolidated till 1967-68 at a cost of Rs.25.47 crores. It is estimated that during 1968-69 about 6.07 lakh hectares more will be consolidated at a cost of Rs.3.82 crores. It is proposed to cover 26.30 lakh hectares during the Fourth Plan at a cost of Rs.20 crores. The average per hectare cost of consolidation of holdings during the Fourth Plan will be higher than in the past owing to the fact that till recently consolidation operations were being carried out in the Western and Central U. P. but during the Fourth Plan operations would mainly cover Eastern districts of U. P. where the holdings are smaller and litigation is more frequent. Another factor is the rise in the pay and D. A. etc. of the staff.

6.56. *Outlays*—A sum of Rs.19.84 crores was spent on Agricultural Production programmes during the First Five-Year Plan. For Second Five-Year Plan an outlay of Rs.19.36 crores was allocated, the expenditure against which was Rs.17.97 crores. The expenditure during the Third Five Year Plan

was Rs.29.76 crores against an outlay of Rs.32.69 crores. During 1966-67 and 1967-68, a sum of Rs.16.61 crores was spent against the allocation of Rs.16.52 crores. An outlay of Rs.10.40 crores has been provided for 1968-69.

6.57. The break-up of outlays proposed for the Fourth Plan under various programmes is given below :

		(Rupees in crores)	
Programme		Fourth Plan Outlays	Outlay 1969-70
1		2	3
1.	Agriculture	27.00	3.80
2.	Sewage Utilization	3.00	0.30
3.	Fruit Utilization	1.00	0.20
4.	Cane Development	4.00	0.60
5.	Consolidation of Holdings	20.00	4.10
6.	Others (Training schemes, etc.)	2.10	0.38
Total for Agricultural Production		57.10	9.38

Supplementary Plan

6.58. Besides, a sum of Rs.5 crores has also been proposed for creating employment opportunities to landless labourers during the Fourth Five Year Plan. This is a part of the Supplementary Plan and the programmes concerning this outlay will be implemented when additional resources become available.

6.59. It is felt that landless labourers can become self-employed and their dependence on wages reduced if they could be enabled to take up agricultural programmes, animal husbandry, poultry, cottage industries, etc. For recommending suitable programmes for this weaker section, a Working Group comprising officers of Agriculture, Industries, Animal Husbandry, Labour, Co-operation, Revenue and Harijan and Social Welfare departments has been set up.

TABLE

Average yield of important crops (quintal per hectare) in U. P. as compared to all-India average

Name of the crop	1950-51	During First Plan	During Second Plan	1961-62		1962-63		1963-64		1964-65		1965-66		1966-67	
				India	U.P.	India	U.P.	India	U.P.	India	U.P.	India	U.P.	India	U.P.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Rice ..	4.9	5.5	6.3	10.3	7.9	9.1	7.2	20.4	7.5	10.7	7.4	8.7	5.5	8.6	4.4
2. <i>Juar</i> ..	6.9	6.4	6.0	4.4	3.7	5.3	6.7	5.1	5.6	5.5	6.6	4.4	5.2	N.A.	4.0
3. <i>Bajra</i> ..	6.4	6.0	4.9	3.2	4.0	3.6	6.0	3.5	5.3	3.8	6.5	3.2	5.9	N.A.	5.1
4. Maize ..	7.8	7.7	7.7	9.6	6.4	9.9	9.3	9.9	7.1	9.9	7.9	9.9	9.6	9.9	8.4
5. Wheat ..	8.2	8.1	8.3	8.9	10.2	7.9	7.9	7.3	6.9	9.0	10.4	8.4	9.3	8.8	9.8
6. Barley ..	8.9	8.7	8.1	9.5	9.6	8.0	8.0	7.3	7.0	9.3	9.8	9.0	9.1	8.6	8.7
7. Gram ..	6.0	6.2	6.2	6.1	5.9	5.8	6.3	4.8	5.5	6.4	7.3	5.7	6.1	4.5	4.1
8. Sugarcane	291.0	272.3	303.7	423.5	376.2	414.3	342.3	464.8	387.0	466.8	404.8	427.8	380.3	N.A.	330.2

N.A.—Not Available.

2. SOIL CONSERVATION

6.60. One of the reasons for low productivity in agriculture in the State is the progressive deterioration of soil due to erosion. It has been estimated that out of a total area of 8.094 crore hectares suffering from soil erosion in the country, 52.61 lakh hectares is in Uttar Pradesh. It will not be possible to maintain even the present yields per hectare, much less to increase them, if the soil is allowed to deteriorate. Effective steps are, therefore, necessary to undertake soil and water conservation on a large scale in this State. Improper land use, reckless destruction of forests, indiscriminate grazing and wrong cropping patterns are among the important causes of soil erosion. Out of the 52.61 lakh hectares in need of soil and water conservation measures in the State, 30.38 lakh hectares fall in the Gangetic Alluvial region, 15.80 lakh hectares in the Central Indian Plateau and 6.48 lakh hectares in the Himalayan region.

6.61. There are areas which have heavy soil erosion leading to the formation of ravines extending over vast areas in the catchment of the Yamuna, Chambal, Betwa and their tributaries. In such problematic areas, only afforestation work can lead to protection of soil. Other areas not so severely eroded can be improved or reclaimed for agricultural production with ordinary methods like contour bunding, construction of field channels and adoption of dry farming techniques. The area requiring afforestation has to be tackled by the Forest Department. The work done so far has been reviewed in the following paragraphs.

6.62. *Agriculture Department Schemes*—The Soil Conservation work in the State was started in 1950, when 3,642 hectares of *usar* and eroded land was acquired in the districts of Lucknow and Hardoi for reclamation. This land was almost out of cultivation and crops like *Jwar*, *Bajra* only used to grow there and that too in scattered small patches. During the First Plan, 162 hectares of eroded land and 879 hectares of *usar* land were reclaimed and upgraded to different stages of reclamation and brought under cultivation. The work was further extended by establishing farms at (1) Dhakuni (Hardoi), (2) Katiyar, (3) Rahimabad, and (4) Rehmankhara (Lucknow). The food-grains produced on these farms during the First Plan period were to the tune of 3,510 tonnes.

6.63. Soil Conservation Programme in cultivators' fields was taken up in the districts of Jalaun, Agra, Jhansi, Mirzapur, Tehri-Garhwal, Mathura and Sultanpur. A Soil Conservation Research, Demonstration and Training Centre was started at Rehmankhara (Lucknow), in 1956-57, with a view to having sufficient data on different aspects of soil conservation measures and trained field staff for the execution of the programme. During the Second Plan period an area of 30,711 hectares was treated with different soil conservation measures. The expenditure during the period amounted to Rs.100.235 lakhs.

6.64. The main emphasis in the Third Plan was on contour bunding and terracing in the agricultural land although at some places land-shaping and levelling were also carried out. Two more training centres at Majkhali and Mauranipur for training sub-assistants were established and a condensed course for Agricultural Overseers was started at Rehmankhera. The soil conservation programme was further extended to the districts of Fatehpur, Hamirpur, Sitapur, Dehra Dun, Meerut, Saharanpur, Muzaffarnagar, Farrukhabad, Unnao, Rae Bareli, Jaunpur, Varanasi, Ghazipur, Pratapgarh, Uttarkashi, Kanpur, Banda, Bulandshahr and Etawah. In all 31 districts were covered by soil conservation programme by the end of the Third Plan with 43 *Bhoomi Sanrakshan Adhikari* Units functioning. A scheme for soil and water conservation in the rehabilitated areas of Rihand Reservoir was also started for the re-settlement of the persons displaced as a result of the construction of Rihand Reservoir.

6.65. During the Third Plan period, as many as 895 sub-assistants were trained, 2.97 lakh hectares of land protected, and 4,720 hectares reclaimed. The total amount spent on the soil conservation schemes of the Agriculture Department during the Third Plan period was of the order of Rs.340.28 lakhs.

6.66. During the Annual Plans (1966-69), the scheme of soil and land use survey was started and the soil conservation extension programme was extended to cover 48 districts with 98 *Bhoomi Sanrakshan Adhikari* Units in action. During this period, an area of about 3.541 lakh hectares would have benefited from soil and water conservation schemes. The total State expenditure on these schemes was Rs.609.31 lakhs.

6.67. During the severe drought of 1965-66 and 1966-67, soil conservation programme was taken up as one of the measures to provide immediate relief in the shape of employment and also as a part of soil husbandry against future droughts in the worst affected areas of Mirzapur and Varanasi where contour bunding work was taken up in an area of 2.02 lakh hectares mainly through test relief works.

6.68. By the end of 1968-69, an area of 6.751 lakh hectares would be covered with soil conservation measures including 4.784 lakh hectares in the Gangetic Alluvial region, 1.943 lakh hectares in the Central Indian Plateau region and 2,400 hectares in the Himalayan region.

PROGRAMME DURING THE FOURTH PLAN

6.69. During the Fourth Plan instead of tackling scattered areas, an area saturation approach will be adopted by concentrating in selected agro-climatic regions of the State. The programme will be phased on watershed basis. Under the scheme of ravine reclamation emphasis will be given to treatment and protection of agricultural productive table lands and stabilisation of marginal lands and gully heads. This will, however, be limited to shallow ravines so far as the efforts of the Agriculture Department are concerned. During the Fourth Plan an additional area of 10.59 lakh hectares is proposed to be brought under soil conservation measures. Work in drought and

scarcity affected areas would be particularly intensified. In the eastern districts, soil conservation measures will extend over 4.25 lakh hectares. In Bundelkhand, soil conservation measures will be taken up over an area of 2.04 lakh hectares. Another area of 36,000 hectares will be taken up for land reclamation in the region. In the hills, an area of 32,000 hectares will be brought under soil conservation measures.

6.70. It has been estimated that there are nearly 2.84 million hectares of land lying waste in the State. This includes about 1.22 million hectares of barren and *usar* land. A scheme of survey and categorization of waste lands has been in operation in nine districts in the State since 1966-67. It is expected that the work in these districts would be completed by the end of 1968-69 and about 40,400 hectares would be surveyed and categorised. Reclamation of *usar* and barren land is a difficult process and requires heavy investments. Due to financial considerations, it is not proposed to carry out any sizable programme of *usar* reclamation during the Fourth Plan. It stands to reason that the scheme of Survey and Categorization of waste land should be linked with the corresponding extension programme. Work done much ahead of reclamation work is likely to prove infructuous. As regards the actual programme of reclamation of *usar* and eroded land during the Fourth Plan period, it is proposed to reclaim a further area of 405 hectares at a cost of Rs.10 lakhs at the Government Usar Reclamation Farms of Dhakoni (Hardwar), Katiyar and Rahimabad. Originally, an area of 3,645 hectares of *usar* land had been acquired for these three farms out of which 1,215 hectares has already been reclaimed.

6.71. *Forest Department Schemes*—The districts most affected by ravines in Uttar Pradesh are Agra, Mainpuri, Etawah, Jalaun and Hamirpur. Approximately, 1,12,943 hectares of ravines exist in these districts. An area of about 16,800 hectares was put under afforestation by the Forest Department under various schemes of the First, Second and the Third Plans. During 1964-65, it was considered necessary that afforestation and reclamation of ravines should be considerably stepped up under a separate scheme. An area of 4,858 hectares was treated during the two years of 1964-65 and 1965-66, under this separate scheme at a cost of Rs.31.36 lakhs. During the three Annual Plans period (1966-69), an additional area of 16,310 hectares would have been put under afforestation at a total cost of Rs.72.12 lakhs. This scheme is proposed to be continued in the Fourth Plan to cover an additional area of 25,000 hectares at a total cost of Rs.125 lakhs. The expenditure proposed to be incurred in Bundelkhand is Rs.60.00 lakhs.

6.72. A Centrally Sponsored Scheme for soil conservation in the catchment area of Ramganga was started during the Third Plan period with a view to preventing deposit of silt and to enhance the life of the dam under construction of the river Ramganga at Kalagarh. This scheme is proposed to be continued during the Fourth Five Year Plan also with an outlay of Rs.150.00 lakhs. It would primarily benefit the Hill region.

Outlays for State Plan Schemes

Head—1. AGRICULTURAL PROGRAMMES

Sector—1.1. Agricultural Production

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign exchange	Total	Capital	Foreign exchange
1	2	3	4	5	6	7	8
(1) Improved Seed Programme—							
<i>Agriculture Department—</i>							
110101	Expansion of the scheme for multiplication, storage and distribution of improved seed.	236.58	32.46	..	36.93	11.01	..
110102	Establishment of seed testing laboratory	17.78	1.50	..	..	..	..
110103	Production of hybrid and high yielding seeds at Vivekanand Laboratory Almora.	7.08	..	..	3.09	..	..
	Total for Group (1) ..	261.44	33.96	..	40.02	11.01	..
(2) Manures and Fertilizers—							
<i>Agriculture Department—</i>							
110201	Subsidising transport cost of fertilizers in hilly and inaccessible areas.	15.00	..	..	3.00	..	..

Head—1. AGRICULTURAL PROGRAMMES

Sector—1.1. Agricultural Production—(contd.)

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign exchange	Total	Capital	Foreign exchange
1	2	3	4	5	6	7	8
110202	Strengthening of agricultural supplies organisation—construction of godowns.	400.88	258.50	..	103.45	103.45	..
110203	Construction of buildings under the scheme for procurement, storage and distribution of fertilizers.	0.01	0.01	..	0.01	0.01	..
110204	Scheme for enforcement of Fertilizer Control Order.	5.21	..	..	..	..	..
	Total, Agriculture Department	421.10	258.51	..	106.46	103.46	..
<i>L.S.G. Department—</i>							
110221	Sewage utilization	300.00	300.00	5.00	30.00	30.00	1.00
	Total for Group (2)	721.10	558.51	5.00	136.46	133.46	1.00
(3) Plant Protection							
<i>Agriculture Department—</i>							
110301	Control of Kurmula pest in Hill districts	39.60	..	..	7.60	..	..
110302	Expansion of Plant Protection Service	667.60	..	..	95.72	..	..
	Total for Group (3)	707.20	..	..	103.32	..	..

Agriculture Department—

- 110401 Expansion of agricultural workshops in four Eastern Districts ...
- 110402 Scheme for demonstration, popularisation and sale of improved agricultural implements and setting up of a cell in Agriculture department for assisting farmers in their agricultural machinery and implements' programme.
- 110403 Award of prizes for designing agricultural implements and machinery ..
- 110404 Scheme for popularising distribution of improved agricultural implements.

Total for Group (4)

(5) Commercial Crops—

Agriculture Department—

- 110501 Supply of urea for foliar spray on Jute crops
- 110502 Intensification of Potato development work in Hills
- 110503 Intensive cultivation of Jute in Sitapur, Lakhimpur-Kheri and Bahraich
- 110504 Intensification of horticultural development programme ...
- 110505 Intensification of Vegetable cultivation and production of vegetable seeds.
- 110506 Intensification of horticultural development work in hills and backward areas of Jaunsar Bawar, tehsil Chakrata, district Dehradun
- 110507 Accelerated programme for potato development work ..
- 110508 Special package programme on Jute
- 110509 Aerial spraying of urea and pesticides on Jute
-

19.13	1.25	...	...	...	...
7.28	...	...	...	...	...
2.00	..	..	...	...	...
75.00	75.00	..	10.00	10.00	..
103.41	76.25	..	10.00	10.00	..
2.05	..	..	..	..	..
1.21	..	..	0.18	..	..
9.28	...	..	1.86	..	..
36.40	10.95	..	7.45	3.61	..
16.64	1.20	..	2.25	0.20	..
17.71	10.00	..	2.16	1.00	..
10.84	..	..	1.30	..	..
0.54	..	..	0.12	..	..
0.92	..	..	0.14	..	..

Head—1. AGRICULTURAL PROGRAMMES

Sector—1.1. Agricultural Production—(contd.)

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign exchange	Total	Capital	Foreign exchange
1	2	3	4	5	6	7	8
110510	Quality improvement programme for Jute and Mesta ..	1.01	.	..	0.23	--	--
110511	Subsidising distribution of improved Jute seed ..	2.31	..	..	0.45	--	--
110512	Establishment of Brood Lac farms-cum-demonstration centres	1.36	..	..	0.12	--	--
	Total, Agriculture Department ..	100.27	22.15	..	16.26	4.81	--
	Fruit Utilization—						
110541	Establishment of progeny orchards-cum-nurseries	16.38	2.85	..	2.05	--	--
110542	Strengthening of horticultural extension and plant protection service	8.54	..	..	1.59	--	--
110543	Establishment of fruit belts/garden colonies and long term horticultural loans to fruit growers.	53.60	48.90	..	11.72	10.81	--
110544	Subsidised distribution of insecticides, pesticides, fruit plants and vegetable seeds.	3.10	..	..	0.62	--	--
110545	Strengthening of research on hill fruits and vegetable	2.10	0.60	..	0.26	--	--
110546	Strengthening of Research facilities at the fruit preservation and Canning Institute, Lucknow.	9.40	2.80	..	2.08	1.00	--
110547	Spill over expenditure on building works	2.96	2.96	..	1.27	1.27	--
		3.92	..	..	0.41	--	--

110548	Establishment of additional community canning-cum-training centres			
110549	Coordinated scheme for apple and <i>Adu</i> fruits etc. in Hill districts with I.C.A.R's assistance.			
110550	Marketing and export promotion of fruits	..		..
	Total, Fruit utilization			..

Cane Department

110571	Intensive production of sugar cane	..	..	..
110572	Acceleration of manuring facilities	..	..	..
110573	Replacement of seed and layout of seed nurseries	..		..
110574	Intensification of Cane protection operations		..	..
110575	Development work in new Sugar Factory areas		..	..
110576	Sugarcane competition	..	..	..
110577	Study of operations and impact of sugarcane production programme			..
110578	Construction of Roads (spill over)	..	..	..
110579	Construction of Roads (New)	..	..	..
110580	Control of Epidemics	..	..	..
	Total, Cane Department			..

Total for Group(5) ..

*I. C. A. R's. share Rs.0.45 lakhs.

...
0.001	..	..	0.001*	..	..
..

100.00	58.11	..	20.00	13.08	..
--------	-------	----	-------	-------	----

69.00	..	..	13.00	..	..
14.14	..	..	3.53	..	..
31.84	..	..	2.90	..	..
77.00	..	..	14.69	..	..
15.02	..	..	1.09	..	..
5.00	..	..	..	..	..
4.40	..	..	0.74	..	..
72.00	72.00	..	10.80	10.80	..
90.00	90.00	..	10.00	10.00	..
21.60	21.60	..	3.25	3.25	..

400.00	183.60	..	60.00	24.05	..
--------	--------	----	-------	-------	----

600.27	263.86	..	96.26	41.94	..
--------	--------	----	-------	-------	----

Head—1. AGRICULTURAL PROGRAMMES

Sector—1.1. Agricultural Production—(Contd.)

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70			
		Total	Capital	Foreign exchange	Total	Capital	Foreign exchange	
1	2	3	4	5	6	7	8	
(6) Agricultural Education								
<i>Agriculture Department</i>								
110601	Establishment of U. P. Agricultural University Rudrapur, ..	175.00	..	..	39.10	..	..
110602	Conversion of Government Agriculture College, Kanpur into U. P. Institute of Agricultural Sciences.	86.67	16.46	..	9.27	1.50	..	
110603	Grant-in-aid to private colleges for introduction of three year degree course.	10.00	..	..	2.00	..	..
110604	Construction of a glass house at Government Agriculture College, Kanpur.	0.003	0.003	..	0.003	0.003	..	
110605	Intensification of agricultural education in three Government Agricultural Schools.	7.50	..	..	..	..	..
Total for Group (6)		..	279.17	16.46	..	50.37	1.50	..
(7) Agricultural Research								
<i>Agriculture Department</i>								
110701	Modified scheme for simple fertilizers trials on cultivators fields ..	..	2.33	..	..	0.44	..
110702	Ley farming .. .. .	..	0.36	..	..	0.07	..

thening of Sugarcane Research S tation at Golagokarannath.

- 110704 Establishment of Research and testing centres on improved agricultural implements in hilly region.
- 110705 Research on musk melon and water melon including Sarda ..
- 110706 Intensification of research at Horticultural Research Station, Saharanpur including Radio Isotopes.
- 110707 Integrated control of insects, pests and nematodes with particular reference to Biological control and use of Chemosterlants.
- 110708 Expansion of the section of Economic Botanist(Potato)
- 110709 Expansion of the section of Economic Botanist (Legumes) ..
- 110710 Strengthening of the Section of Economic Botanist (*Rabi* cereals) ..
- 110711 Intensification of existing Regional Research Stations and establishment of a new Regional Research Station at Faizabad.
- 110712 Intensification of pathological problems arising from high yielding varieties, multiple cropping and intensive cultivation programme.
- 110713 Provision for the Physiology Section at the Vivekanand Laboratory Almora
- 110714 Model Agronomic experiments
- 110715 Co-ordinated agronomic experiments (Staff at headquarters) ..
- 110716 Quality Improvement and introduction of drought resistance for exotic varieties of rice.
- 110717 Strengthening of the section of Economic Botanist (Oilseeds) ..
- 110718 Intensification of Crop Physiological Research
- 110719 Strengthening of Agricultural Chemistry Section
- 110720 Int'ensive Research on fibre crops
- 110721 Intensification of Research Work at Fruit Research Station Basti and Sub-station at Allahabad.
-

3.67	...	..	1.33	...	..
0.001	..	..	0.001	...	...
4.94	...	0.12	0.37	...	...
3.54	...	...	0.18	...	..
2.75	...	..	..	...	...
6.02	...	..	...	...	...
7.85	0.50	..	..	...	..
36.38	1.60	...	6.35	1.10	..
4.99	...	..	..	...	..
0.70	...	..	0.54	...	..
0.73	..	..	0.14	..	..
0.80	..	..	0.16	..	..
17.32	0.55	..	0.51	..	..
2.42	..	..	0.17	...	..
3.96	..	..	0.42	..	..
5.14	1.00	..	..	..	..
3.51	..	..	..	..	..
4.04	0.31	..	..	..	..

Head—1. AGRICULTURAL PROGRAMMES

Sector—1.1. Agricultural Production—(Contd.)

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign exchange	Total	Capital	Foreign exchange
1	2	3	4	5	6	7	8
110722	Expansion of Government vegetable research station, Kalianpur (Kanpur).	2.13	..	..	..	..	..
110723	Construction of buildings in connexion with establishment of five horticultural research stations.	0.10	..	..	0.10	..	..
110724	Construction of buildings in connexion with the scheme for strengthening of Sugarcane Sub-research station, Muzaffarnagar.	0.05	..	..	0.05	..	..
110725	Construction of buildings in connexion with the scheme for establishment of five new regional research stations and strengthening of five existing ones.	0.33	..	..	0.33	..	..
110726	Construction of buildings in connexion with the scheme for strengthening of Economic Botanist (<i>Rabi</i> cereals).	0.001	0.001	..	0.001	0.001	..
110727	Construction of buildings in connexion with the establishment of Jute Research Station, Bahraich.	0.26	0.26	..	0.26	0.26	..
110728	Construction of buildings in connexion with the scheme for strengthening of Pathological Section at Kanpur.	0.01	..	..	0.01	..	..
110729	Construction of buildings in connexion with the establishment of Research Testing and Training Centres, in improved agricultural implements.	0.01	0.01	..	0.01	0.01	..
110730	Establishment of pesticide-cum-Fertilizer Testing Laboratory	6.57	..	..	0.82	..	..
110731	Intensive varietal, cultural and biological studies on sugarcane in different agro-climatic regions of the State	10.38	0.50	..	..	..	..
Total, Agriculture Department		134.98	4.73	0.12	13.01	1.37	..

P. R. A. I.

110791	Establishment of Agricultural Engineering Research Workshop, Chinhat	4.35	..	..	0.85	..	..
Total for Group (7)		139.33	4.73	0.12	13.86	1.37	..

(8) Extension, Training and Farmer's Education

Agriculture Department

110801	Establishment of extension wings at the three Government Agriculture schools.	13.15	4.53
--------	---	-------	----	----	------	----	----

P. R. A. I.

110811	Farm management and agricultural training programme including establishment of a training farm at Phulpur.	5.65	1.79
--------	--	------	----	----	------	----	----

Community Development (B) Department

110815	Training of field workers at training-cum-production centres for farm mechanics.	80.00	5.00	..	15.00	1.00	-
110816	Upgrading of Gram Sewak Training Centres	36.00	..	..	6.00	..	..
110817	Farmer's Training and Education (seven days training)	12.00	..	..	2.00	..	..
110818	Training Reserve for VLWs	72.00	..	..	12.00	..	..
Total, Community Development Department		200.00	5.00	..	35.00	1.00	..
Total for Group (8)		218.80	5.00	..	41.32	1.00	..

(9) Agricultural Statistics

110901	Estimation of area and production of crops in the non-reporting hilly areas of U. P.	8.55	1.72
--------	--	------	----	----	------	----	----

(10) Intensive Cultivation Programme

111001	Extension of Soil Testing facilities to cultivators in each district of U. P.	82.77	..	..	..	..	..
111002	High Yielding Varieties and Multiple Cropping programme	184.87*	..	..	..	..	..

*The scheme is being reconsidered and the outlay is liable to change.

Head—1. AGRICULTURAL PROGRAMMES

Sector—1.1. Agricultural Production—(Concl'd.)

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign exchange	Total	Capital	Foreign exchange
1	2	3	4	5	6	7	8
111003	Intensive agricultural development in Almora under the multipurpose project.	30.85	..	..	6.07	..	..
111004	Construction of godowns in Intensive Cultivation areas under Crash programme.	0.001	..	..	0.001	..	..
	Total for Group (10)	..	298.49	..	..	6.07	..
	(11) Land Development	..	..	..	..	..	..
	(12) Consolidation of Holdings	..	..	..	..	..	..
111201	Consolidation of Holdings	..	2000.00	..	..	410.00	..
	(13) Others	..	..	..	..	..	..
	<i>Agriculture Department</i>	..	..	..	..	..	..
111301	Establishment of Agro Industries Corporation	..	167.79	167.79	..	..	..
111302	Regulation of Markets	..	52.21	17.46	..	4.65	1.41
111303	Strengthening of Agricultural marketing section for regulation of markets	..	22.14	..	..	2.46	..
111304	Strengthening of Bee-keeping development work	..	2.27	..	..	0.27	..
111305	Survey and Categorization of waste land	..	5.94	..	..	5.94	..

111306	Construction of cold storages in public sector	..	..	..
111307	<i>Ad hoc</i> provision for new programmes	..	..	..

Total for Group (13) ..

Total for Sector 1.1. Agricultural Production ..

1.3. Soil Conservation

Agriculture Department

130101	Scheme for chronically drought affected areas..	..	..	..
130102	Soil and water conservation in predominantly agricultural watersheds			
130103	Ravine reclamation—protection of marginal land	..	..	..
130104	Soil and water conservation in hilly areas (Kumaon Division)			..
130105	Setting up of Research Demonstration and Training Centres			..
130106	Loan for Soil Conservation in Agricultural land	..	..	..
130107	Reclamation of usar and Eroded land and setting up of demonstration and Soil Conservation Projects	..	..	..
130108	Soil and land use survey	..	..	..
130109	Soil and water conservation in the rehabilitated areas of Rihand Reservoir.			
	Total			..

Forest Department

130201	Reclamation/afforestation of Ravines
--------	--------------------------------------	----	----	----

P.R.A.I.

130301	Soil Conservation Training Centre, Muzaffarabad	..	..	..
130302	Soil and water conservation in Phulpur Project (Allahabad)			..

Total, P.R.A.I.

Total for Sector 1.3. Soil Conservation ..

60.00	..	..	2.00	..	..
61.89	..	..	12.92	..	..
372.24	185.25	..	28.24	1.41	..
5710.00	1144.02	5.12	937.64	201.69	1.00
45.53	..	..	5.61	..	..
1325.66	..	..	215.18	..	..
139.12	..	..	22.28	..	..
241.56	..	..	22.23	..	..
47.60	..	..	9.28	..	..
135.00	135.00	..	10.00	10.00	..
41.80	..	..	5.88	..	..
23.38	..	..	4.19	..	..
0.35	..	..	0.35	..	..
2000.00	135.00	..	295.00	10.00	..
125.00	..	..	25.00	..	..
5.40	..	..	1.41	..	..
9.60	..	..	2.59	..	..
15.00	..	..	4.00	..	..
2140.00	135.00	..	324.00	10.00	..

Outlays for Centrally Sponsored Schemes

(Rupees in lakhs)

Serial no.	Scheme	Fourth Plan Outlay	Outlay 1969-70
1	2	3	4
1. AGRICULTURAL PROGRAMMES			
1.1. AGRICULTURAL PRODUCTION			
Agriculture Department			
1.	Maximised production of groundnut	44.92	9.29
2.	Maximised cotton production	6.86	0.91
3.	Aerial spraying of urea and pesticides on jute crop	2.15	0.50
4.	Special package programme on jute	4.41	0.54
5.	Quality improvement of jute and Mesta	2.82	1.24
6.	Subsidised distribution of improved Jute seed	1.69	0.33
7.	Extension of package programme on Lac	0.49	0.06
8.	Reorganisation of existing system of reporting estimates of area and production of crops	14.35	2.70
9.	Sample survey for estimation of agricultural production at block level	0.37	0.37
10.	Pilot study on pre-harvest forecasting of crops	1.57	0.32
11.	Pilot survey for estimation of crop losses in harvesting and storage	0.86	..
12.	Sample survey for assessment of high yielding varieties	9.71	..
13.	National demonstration on major food crops	6.17	1.24
Total, Agriculture Department		96.37	17.50
Community Development (A) Department			
14.	Applied Nutrition Programme	300.90	44.54
Community Development (B) Department			
15.	Farmer's Training and Education (Audio Visual Section)	29.20	4.42
Fruit Utilization			
16.	Strengthening of Food Science Training Institute, Lucknow	13.87	2.50
Total 1.1. Agricultural Production		440.34	68.56

Outlays for Centrally Sponsored Schemes—(Concl'd.)

(Rupees in lakhs)

Serial no.	Scheme	Fourth Plan Outlay	Outlay 1969-70
1	2	3	4
1.3. SOIL CONSERVATION			
Forest Department			
1.	River Valley project in the catchment of Ramganga	150.00	26.60
Agriculture Department			
2.	Pilot Project for reclamation of Ravines	100.00	10.00
Total 1.3. Soil Conservation		250.00	36.60
1.4. AYACUT DEVELOPMENT			
1.	Pilot project for soil and water management (Ayacut Development) at Azamgarh	17.02	7.02

ANIMAL HUSBANDRY

7.1. Some of the important animal husbandry programmes relate to the improvement of livestock through disease control, the up-grading of animals and the development of fodder. Programmes have also been undertaken to meet the growing demand for milk, meat, eggs, wool and draught power for agriculture.

7.2. An amount of Rs.311.95 lakhs was utilised on animal husbandry activities during the first two Plans, Rs.461.88 lakhs during the Third Plan and an estimated amount of Rs.271.32 lakhs during the three annual Plans.

7.3. Progress achieved so far and the programme proposed for the Fourth Plan under the main groups are given in the following paragraphs :

7.4. *Cattle breeding*—No systematic efforts had been made in the State towards cattle breeding prior to the initiation of Key Village Scheme in the First Five-Year Plan except distribution of bulls of approved breeds for up-grading indigenous stock. With the establishment of artificial insemination centres and the operation of Key Village Block Scheme, cattle breeding programme has now been placed on a sound footing. By the end of the Third Plan there were 472 artificial insemination centres of which 74 were in Key Village Blocks, 384 (2 bulls) Artificial Insemination Centres and 8 Semen Collection centres. The stud bulls are either bred at 14 of the State Live stock farms or purchased from the breeding tracts of western U. P. and Punjab. There are 11,851 bulls for natural service in the State while 1,100 bulls cater to the needs of 14 semen banks, 76 Key Village blocks, and 540 Artificial Insemination centres and 466 sub-centres in the State. According to 1966 census, there were 67.9 lakhs breeding cows and 59.55 lakhs breeding buffaloes in the State. The present strength of stud animals provides a potential for coverage by improved animals of about 21 per cent of the cow and 14 per cent of the buffalo population of the State.

7.5. During the Fourth Plan period it is proposed to open 69 (2 bulls) A. I. Centres and convert 42 (2 bulls) A. I. Centres into 4 bulls centres, establish 4 semen banks and augment the facilities at the existing centres. Cattle Development work has been taken up in Intensive Cattle Development Projects. in Lucknow, Kanpur, Meerut and Moradabad Districts. Two more Intensive Cattle Development Projects are proposed to be added during the Fourth Plan. These programmes would provide coverage to 24.9 per cent of cows and 18.6 per cent of buffaloes.

7.6. Feeds and Fodder—To meet the shortage of feeds and fodder in the State, fodder development programme was initiated in 1959-60. Initially, the programme was confined to selected Key Village blocks and departmental farms. During the Third Plan, the programme was extended to all the Key Village Blocks and the areas under the Applied Nutrition Programme and the Mixed Farming Scheme. Fodder seeds of improved varieties were distributed at subsidised rates. In the Intensive Cattle Development Project areas and in the four eastern districts, demonstration plots of improved varieties of fodder were laid on cultivators' holdings to popularise the programme. Facilities for irrigation of fodder crops by State canals and tube-wells at subsidised rates were provided to cultivators in these areas but the response was rather poor. Due to limited resources, however, the fodder crop competitions had to be given up and the number of demonstrations was also considerably reduced. A provision of Rs.15.00 lakhs has been proposed in the Fourth Plan for the distribution of high yielding nutrition fodder seeds. Besides, demonstrations will be laid on cultivator's holdings. The fodder extension programme is proposed to be undertaken only in backward areas viz., hill areas, eastern districts and Bundelkhand.

7.7. Sheep and Goat Development—The sheep extension work is being carried out through 124 sheep and wool extension centres of which 51 are in the hills. Nineteen sheep farms have been established in the State for the production of rams, of which 12 are in the hills. In addition, rams are also distributed to sheep-breeders for improvement of their stock. By the end of 1968-69, 8,741 rams would be working in the State which would provide coverage for about 24.4 per cent of the breedable sheep population which, according to 1966 census, was 16.60 lakhs. These sheep farms maintain a strength of about 4,533 breeding ewes. It is proposed to increase the number of breeding ewes by 1,435, to establish 10 sheep and wool extension centres and import 250 foreign sheep during the Fourth Plan. Wool production at the end of 1968-69 is estimated at 20.96 lakh kgs. It is expected to rise to 23.24 lakh kgs. by the end of the Fourth Plan.

7.8. For goat improvement, one to four stud bucks were located at 160 hospitals of which 145 are in the eastern districts, 7 in Bundelkhand and 8 in the Agra region. The total number of bucks operating in the field, including those maintained in the veterinary hospitals, was 2,988 at the end of 1967-68. Besides purchase from private breeders, some bucks are also produced at Government farms where about 755 female adult goats are being maintained for this purpose. It is proposed to locate bucks at 400 more Veterinary hospitals during the Fourth Plan period.

7.9. Poultry Development—The birds of improved breeds are being distributed to a large number of breeders. Poultry production increased from an estimated 20 lakhs in 1956 to 32 lakhs in 1961, and 36 lakhs in 1966. About 18.7 per cent of the total poultry birds in the State are of improved variety.

7.10. The details of birds distributed since the beginning of the First Plan, are given below :

	First Plan	Second Plan	Third Plan	1966-68
1	2	3	4	5
1. Adults	66,165	1,28,335	4,82,607	4,94,225
2. Day old Chicks	13,896	28,215	11,57,362	7,938,70
3. Hatchable eggs	2,02,978	5,29,778	12,91,547	80,098

7.11. This programme is being carried out through 100 poultry farms and 36 poultry extension centres established up to the end of the Third Plan, where about 23,000 layers were being maintained. There has also been a special poultry scheme in some selected blocks under the Applied Nutrition programme where, on an average, 905 breeders were trained every year and given 29,895 two months old chicks and 5321 day old chicks. This programme is operating in 106 blocks and another 24 blocks have been taken up during 1968-69. It is proposed to extend this programme to 190 new blocks during the Fourth Plan. Thus, in all, the programme will cover 320 blocks during the Fourth Plan period.

7.12. It is also proposed to establish 2 more Intensive Poultry Development Projects in the eastern region during the Fourth Plan.

7.13. *Disease Control*—This work is carried out by the Veterinary hospitals through inoculation and vaccination against contagious diseases. The progress made in the establishment of veterinary hospitals and dispensaries during the previous Plans will be clear from the following :

	Position as in the beginning of the First Plan	First Plan	Second Plan	Third Plan	1966-69	Total
1	2	3	4	5	6	7
1. Veterinary Hospitals (No.)	228	44	383	327	11	993
2. Stockman Centres (No.)	832	191	118	186	69	1,396

7.14. Thus, at the beginning of the Fourth Plan, there would be operating 993 Veterinary hospitals and 1,396 stockman centres in the State. This gives an average of one hospital for every 50,000 heads of cattle and one stockman Centre for every 37,000 heads of cattle.

7.15. On an average, 30 lakh patients were treated and about 5.52 lakh castrations performed annually at the veterinary hospitals and stockman centres. In addition, 178 lakhs vaccinations were carried out against rinderpest during the Third Plan period. Besides, a programme of mass drenching of sheep was taken up in 1964-65, in the eastern districts.

7.16. During the Fourth Plan, it is proposed to add 35 Veterinary hospitals and 492 stockman dispensaries including those to be established in the Intensive Cattle Development Project areas. The expansion of the Biological Product Section is also proposed.

7.17. *Research and Training*—The main teaching activities are concentrated at the Veterinary College, Mathura where facilities are available for graduate and post-graduate courses including Ph. D. The stockmen courses and compounders training centres are organised at Chak Ganjaria (Lucknow), Pashulok, and Bareilly. Inservice training courses are also provided in various fields of specialisation at Chak Ganjaria, Pashulok and Mathura.

7.18. Research work is carried out at the Veterinary College, Mathura, the Livestock Research Station, Mathura and its sub-station at Chak Ganjaria (for poultry), Aligarh (for pigs) and Pashulok (for sheep breeding). The research and training programmes will continue during the Fourth Plan.

7.19. *Piggery Development*—A Pig breeding station was established at the Central Dairy Farm, Aligarh towards the end of the Second Plan to produce quality boars and gilts for field distribution or piggery development. At present, there are 33 Piggery Development Blocks in the State where improved boars are distributed to the breeders for upgrading their stocks. Four of these blocks were established during the Second Plan, 22 during the Third Plan and 7 during the three Annual Plans. In addition boars on nominal contribution basis, i.e. Rs.20.00 per boar were also being supplied to the pig breeders.

7.20. It is proposed to continue the programme of distribution of boars on a contributory basis during the Fourth Plan period. Besides, a scheme has also been proposed for the distribution of gilts to weaker section of society on a similar contributory basis. Provision of marketing facilities is also included in the proposed programme.

7.21. An outlay of Rs.550.00 lakhs has been proposed for animal husbandry schemes for the Fourth Plan, out of which an amount of Rs.100.00 lakhs is intended for the Annual Plan of 1969-70.

Supplementary Plan

7.22. In addition to this, a provision of Rs.1.50 crores has also been made in the Supplementary Plan of Rs.127.50 crores. However, the programme and schemes proposed under it would be implemented on the availability of additional resources to that extent.

Outlays for State Plan Schemes

Head—2. ALLIED PROGRAMMES

Sector—2.1. ANIMAL HUSBANDRY

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign exchange	Total	Capital	Foreign exchange
1	2	3	4	5	6	7	8
1. Cattle Breeding							
210101	Additional requirement and expansion of State Live Stock-cum-Agriculture Farms	34.99	24.92	..	13.14	3.62	..
210102	Consolidation and extension of A.I. Programme in the State ..	88.82	42.90	..	13.67	6.71	..
210103	Intensive Cattle Development-Aligarh and Haldwani	28.47	6.26	..	3.46	1.35	..
210104	Establishment of Natural Breeding Centres in Hill areas ..	2.37	1.35	..	0.19	0.15	..
210105	Purchase and distribution of bulls	7.50	..	..	3.00	..	..
210106	Goshala Development	3.92	..	..	0.68	..	..
210107	Provision of additional inputs under I. C. D. P., Kanpur, Lucknow and Moradabad	79.76	22.46	..	15.55	5.74	..
210108	Cattle Insurance Scheme	1.50	..	..	..	..	..
Total for Group (1)		247.33	97.89	..	49.69	17.57	..
2. Feeds and Fodder Development							
210201	Development of high yielding and nutritious fodder crops in Eastern, Bundelkhand and Hill Regions	15.00	..	..	3.00	..	..
Total for Group (2)		15.00	..	..	3.00	..	..

Head—2. ALLIED PROGRAMMES

Sector—2.1. ANIMAL HUSBANDRY—(contd.)

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign exchange	Total	Capital	Foreign exchange
1	2	3	4	5	6	7	8
3. Sheep and Wool Development							
210301	Scheme for improvement and expansion of the existing sheep farms and sheep and wool extension centres, etc.	28.44	15.90	5.00	1.01	0.33	..
210302	Mass Drenching of sheep to control parasitic infestation in Uttar Pradesh	3.75	..	..	1.00	..	..
210303	Purchase of rams and bucks	10.00	..	..	1.70	..	..
210304	Intensive Programme of sheep breeding in the Phulpur Project area, district Allahabad	0.35	0.35	..	0.07	0.07	..
210305	Lal Bahadur Sewa Niketan	0.37	..	..	0.07	..	..
210306	Establishment of a goat breeding farm in eastern region	0.68	0.08	..	0.12	..	..
210307	Expansion of breeding facilities for goats in the State	5.86	..	..	0.44	..	..
	Total for Group (3)	49.45	16.33	5.00	4.41	0.40	..
4. Poultry Development							
210401	Expansion of Hawalbagh Poultry Farm	8.66	6.34	..	1.63	1.57	..
210402	Strengthening of the Poultry Nutrition Research Laboratory attached to the cheap poultry ration Scheme, S. P. F. Chak Ganjaria, Lucknow	2.18	0.84	..	0.31	0.15	..

210403	I.L.O. Poultry Project, Phulpur, Allahabad	..	..	..
210404	Loan to Poultry breeders	..	..	..
210405	Intensive Poultry Development Blocks in Eastern region	..	..	..
	Total for Group 4	..	..	..

5. Disease Control

210501	Establishment of New Veterinary hospitals and stockmen centres			
	(a) Veterinary Hospitals	..	..	..
	(b) Stockmen Centres	..	..	..
210502	Provision of additional facilities to existing veterinary hospitals			
	(a) Addition and alteration in existing veterinary hospitals			
	(b) Provision of buildings for veterinary hospitals, Tuini, Jaunsar-Bawar area in Dehra Dun district	..	..	..
	(c) Provision of buildings for stockman Centres	..	..	..
	(d) Provision of Senior Veterinary Surgeon to 10 important veterinary hospitals	..	..	..
210503	Provision of additional medicines and chemical for Veterinary hospitals maintained by local bodies	..	..	..
210504	Provision of Diagnostic laboratories in the State			
	(a) Establishment of 2 Diagnostic Laboratories at the headquarters Circle, Deputy Director of Animal Husbandry	..	..	..
	(b) Establishment of a Forensic laboratory for testing of material in medico legal cases	..	..	..

6.75	..	..	1.90	..	..
2.50	2.50	..	0.50	0.50	..
9.35	..	..	1.75	..	..
29.44	9.68	..	6.09	2.22	..

17.58	10.33	..	0.76	0.46	..
14.27	..	..	0.83	..	..
5.00	5.00	..	1.00	1.00	..
0.30	0.30	..	..	..	..
10.06	10.00	..	4.00	4.00	..
2.35	..	..	0.19	..	..
4.48	..	..	0.90	..	..
1.13	..	..	..	..	..
1.37	0.10	..	0.24	..	..

Head—2. ALLIED PROGRAMMES

Sector—2.1. ANIMAL HUSBANDRY—(contd.)

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign exchange	Total	Capital	Foreign exchange
1	2	3	4	6	6	7	8
210505	Provincialisation of veterinary hospitals	6.35	2.41	..	0.63	0.14	..
210506	Expansion and improvement of Biological Product Section	19.77	6.64	0.82	2.22	1.00	..
210507	Establishment of Rinderpest Tissue Culture Vaccine laboratory	5.00	..	0.82	..	..	..
	Total for Group (5)	87.66	34.78	1.64	10.77	6.60	..
6. Animal Husbandry Research, Training and Statistics							
210601	State Share to meet the expenditure in respect of I.C.A.R. Schemes	17.43	..	..	4.00	..	..
210602	Scheme to investigate problems in major branches of Animal Husbandry and Veterinary Science with bearing on increased animal Production	2.50	..	..	0.50	..	..
210603	Expansion and Strengthening of the Livestock Research Station, Mathura and Zonal Sub-station in U. P.	2.60	0.53	..	0.72	0.05	..
210604	Establishment of a Regional Livestock Research Sub-station at Gorakhpur	4.83	3.00	..	2.05	1.75	..
210605	Investigation into indigenous System of Veterinary medicines (II Phase of the existing Schemes)	0.84	..	..	0.37	..	..
210606	Additional facilities for coordination and supervision including estate management of the U. P. College of Veterinary Science and Animal Husbandry, Mathura	2.52	0.35	..	0.44	..	..

- | | | | | | |
|--------|---|---|----|----|----|
| 210607 | Expansion of Pasture and Forage Field | March Division, U. P. College of Veterinary Science and Animal Husbandry, Mathura by adding Botany Section there to | .. | .. | .. |
| 210608 | Improvement of Dairy and Poultry Farms attached to the Veterinary Science and Animal Husbandry, Mathura | .. .. . | .. | .. | .. |
| 210609 | Inservice training of artificial insemination at Chak Ganjaria, (Lucknow) | .. .. . | .. | .. | .. |

Statistics—

- | | | | | | |
|--------|---|---------|----|----|----|
| 210610 | Analysis of breeding data accumulated on Livestock farms and under A. I. Programme as well as maintenance of recorders of Bull operating in the State | | .. | .. | .. |
|--------|---|---------|----|----|----|

Total for Group (6) ..

7. Piggery Development—

- | | | | | | |
|--------|--|---------|----|----|----|
| 210701 | Introduction of improved pigs among pig breeding and provision of facilities for marketing | .. .. . | .. | .. | .. |
| 210702 | Utilisation of effluents of Bacon Factory | .. .. . | .. | .. | .. |

Total for Group (7) ..

8. Others—

- | | | | | | |
|--------|--|---------|----|----|----|
| 210801 | Co-ordination and supervision at different levels | .. .. . | .. | .. | .. |
| 210802 | Production of Publicity extension material | .. .. . | .. | .. | .. |
| 210803 | Holding of Livestock Shows | .. .. . | .. | .. | .. |
| 210804 | Installation of the tubewell and overhead tank at Model Training-cum-Production Centre, B. K. T. Lucknow | .. .. . | .. | .. | .. |
| 210805 | Scheme for the large scale wool grading and marketing programme with the assistance of UNICEF | .. .. . | .. | .. | .. |
-

1.68	..	..	0.27	--	--
3.04	3.00	..	0.75	0.75	--
2.07	..	..	0.67	..	--
2.04	..	..	0.20	..	--
39.55	6.88	..	9.97	2.55	..

1.16	..	..	0.84	..	..
5.00	3.50	..	..	..	..
6.16	3.50	..	0.84	..	..

15.00	0.19	..	3.01	0.19	..
2.25	..	..	0.42	..	--
5.50	--	..	1.10	--	--
0.45	0.45	..	0.45	0.45	..
21.02	9.20	..	0.20	0.20	--

Head—2. ALLIED PROGRAMMES

Sector—2.1. ANIMAL HUSBANDRY—(cont'd.)

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70.		
		Total	Capital	Foreign exchange	Total	Capital	Foreign exchange
1	2	3	4	5	6	7	8
210806	Establishment of 5 Poultry marketing societies in U. P.	1.81	..	..	0.11	..	..
210807	Expansion of existing urban Hide Flaying, Curing and Carcass utilization centre (Dehra Dun and Jhansi)	2.54	1.33	..	0.33	0.33	..
210808	Rounding up of stray and wild cattle	5.73	..	..	0.55	..	..
210809	Gosadan Scheme	1.07	0.36	..	0.29	0.18	..
210810	Spill-over for the completion of construction of buildings of Third Plan	14.00	14.00	..	6.00	6.00	..
210811	Modernization of Slaughter houses	2.00	..	..	2.00	..	..
210812	Extension of Herd Registration to important breeding tracts and formation of breeding societies	4.04	..	..	0.77	..	..
	Total for Group (8) ..	75.41	25.53	..	15.23	7.35	..
	Total for Sector 2.1. Animal Husbandry ..	550.00	194.59	6.64	100.00	36.69	..

Outlays for Centrally sponsored schemes

(Rupees in lakhs)

Serial no.	Scheme	Fourth Plan Outlay	1969-70 Outlay
2. ALLIED PROGRAMMES			
2.1. ANIMAL HUSBANDRY			
1.	Establishment of additional Vaccination Station on the Indo-Nepal Border	3.35	0.35
2.	Progeny Testing of bulls	9.95	1.06
...	...	13.30	1.41
	Total 2. 1. Animal Husbandry		

8

DAIRYING AND MILK SUPPLY

8.1. Dairying and Milk Supply programme was taken up in the Co-operative sector during the Second Plan. On the one hand it has helped in augmenting the supply of milk in the urban areas by transporting it from the rural areas, on the other it has ensured remunerative prices to the milk producers.

8.2. During the Third Plan an outlay of Rs.300.00 lakhs was provided for dairying development. However, the actual expenditure amounted to Rs.351.84 lakhs; excluding Rs.32.00 lakhs, the value of the UNICEF machinery received for the Kanpur plant. During the three Annual Plans a sum of Rs.180.12 lakhs is estimated to have been utilised.

8.3. By 1967-68 nine milk plants were in operation in the towns of Lucknow, Allahabad, Varanasi, Kanpur, Haldwani, Almora, Agra, Dehra Dun and Bareilly. Three plants, one each at Gorakhpur, Mathura and Kanpur, were in an advanced stage of construction. Valuable assistance has been received from UNICEF in setting up the Kanpur plant. The plant at Dehra Dun was aided by New Zealand. Ten Rural Dairy Centres are also in various stages of construction. The Infant Milk Food Factory, which is under construction at Moradabad, is expected to be commissioned by August, 1969. Twenty two milk unions have been established by the end of 1968-69. Private sector has also been active in this field with three factories already working. The daily handling of milk by all the milk units was 82,000 litres at the end of 1966-67. It is expected to go up to 98,000 litres by the end of 1968-69. The entire production of milk has been handled by the co-operative milk unions.

8.4. During the Fourth Plan period, efforts will be made to develop dairying as an organised rural industry and to secure a larger coverage through the completion of the plants which are in progress and the expansion of some of the existing ones. It is also proposed to establish one milk factory and to undertake six new pilot milk supply projects. The emphasis would be on consolidation. Instead of taking up new schemes, the existing milk schemes, particularly in the KAVAL towns, are proposed to be expanded. The Government intend to participate in their share capital and to advance a production loan of Rs.70.00 lakhs. The Rural Dairying Extension Scheme envisages extensive development of milk production on co-operative lines in the milk sheds.

8.5. Promotional efforts will be made to increase the number of primary milk societies to 4,660. The daily handling of milk is expected to rise to about 4.00 lakh litres by the end of the Fourth Plan as against 98,000 litres

in the base year (1968-69). It is expected that milk production would increase by 30 per cent by the end of the Fourth Plan over its present level.

8.6. Co-operative milk supply schemes are proposed to be introduced in the towns of Meerut, Aligarh and Hardwar, raising the number of towns having milk supply schemes to 16. Three Rural Dairy Centres and four Rural Creamery Centres are also likely to be established during the Plan period. Some of the other listed items are the establishment of a Milk Board, a cattle feed factory, two milk product factories and a pilot scheme for the development of milk production in *kholas* and *khattas* in the Tarai. It is also proposed to impart training in dairying to a large number of officials and non-officials.

8.7. An outlay of Rs.4.00 crores has been provided for the dairying and milk supply schemes, out of which Rs.74.25 lakhs would be for the spill-over schemes and Rs.325.75 lakhs for the new schemes.

Outlays for State Plan Schemes

Head—2. ALLIED PROGRAMMES

Sector—2.2. DAIRYING AND MILK SUPPLY

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
220101	Kanpur Milk Project	20.00	16.00	..	3.10	2.48	..
220102	Establishment of New Milk Unions	6.00	1.25	..	4.65	1.25	..
220103	Baby Food Factory, Moradabad	33.00	26.40	..	23.07	18.40	..
220104	Rural Dairy Extension	67.43	31.33	..	13.98	7.34	..
220105	Establishment of Rural Dairy Centres	12.05	10.01	..	3.80	3.25	..
220106	Dairy Training	2.77	..	..	0.68	..	..
220107	Completion of expansion programme of Haldwani Milk Union	5.00	4.00	..	1.00	0.80	..
220108	Urban Milk Supply Scheme	15.00	12.42	..	5.00	4.14	..
220109	Expansion, modernisation and revitalization of existing Milk Unions	50.00	42.00	7.00	5.00	4.40	..
220110	Dairy Development Division	8.00	..	..	1.00	..	..
220111	Dairy Survey and Evaluation	0.75	..	..	0.22	..	..
220112	Production Loans	70.00	70.00	..	8.50	8.50	..
220113	Aid to Pradeshik Co-operative Dairy Federation	2.00	..	..	..	..	..
220114	Statutory Milk Board	1.00	..	..	..	..	..
220115	Milk Products Factory	32.00	26.60	2.50	..	..	..
220116	Cattle Feed Factory	20.00	17.20	..	..	..	..
220117	Pilot Project for Khattas and Kholas	5.00	2.95	..	..	..	..
220118	Milk Scheme for Eastern Districts including Faizabad	50.00	40.25	2.50	..	..	..
Total for Sector 2.2. Dairying and Milk Supply		400.00	300.41	12.00	70.00	50.56	..

9

FORESTS

9.1. The following area statistics* of forest will give an idea of the forests wealth of the State :

(i) Forests area under the control of Forest Department—

(a) Reserved	...	...	..	30,433.15	Sq. K. M.
(b) Protected	...	...	...	774.28	” ”
(c) Unclassed	...	...	..	8,110.74	” ”
Total				..	39,318.17 (13.4 per cent of Geographical area)

ii) Other Forests—

(a) Civil Forests under the control of Revenue authorities—

District

Almora	..	..	..	1,929	Sq. K. M.
Garhwal	..	..	...	1,806	” ”
Naini Tal	...	...	...	203	” * ”
Chamoli	...	...	...	1,043	” ”
Pithoragarh	..	..	...	1,284	” ”
Total				..	6,265 ” ”

(b) Panchayat Forests—

District

Almora	...	...	...	717.33	Sq. K. M.
Garhwal	...	...	...	286.10	” ”
Naini Tal	...	...	...	208.82	” ”
Chamoli	...	...	..	688.26	” ”
Pithoragarh	..	...	..	289.75	” ”
Total				..	2,190.26 ” ”

(c) Private Forests—

District

Dehra Dun	165.00	Sq. K. M.
-----------	----	-----	-----	--------	-----------

GRAND TOTAL .. 47,938.43 Sq. K. M.

It will be clear from the above statistics that the total forest area in U. P. comes to 47,938.43 sq. km. which constitutes 16.3 per cent of the geographical area as against 23.4 per cent for the country. The National Forest Policy enunciated in 1952 lays down that “India as a whole should aim at maintaining one-third of its land under forests”. With the heavy pressure of

*According to the figures supplied by the Forest Department.

population on land and heavy demand for timber and fuel, it is difficult for this State to reach the level indicated above. In order to meet the increasing requirements of wood products, this limitation makes it imperative that production from the existing forests is maximised.

9.2. In the first two plans, an expenditure of Rs.362.75 lakhs was incurred on the forest development programmes against an outlay of Rs.363.83 lakhs. An area of 31,004 hectares was brought under plantation of species of industrial and economic importance like Teak, Sissoo, *Kanju*, *Semal*, *Gutel*, *Khair*, *Mulberry* and *Sal*. 1,165 km. of forest roads were constructed and 1,431 km. telephone lines were laid. Other important activities included rehabilitation of degraded forests, afforestation, plantation of fruit and fuel trees, etc.

9.3. The Third Plan expenditure on forestry schemes amounted to Rs.601.73 lakhs against the approved outlay of Rs.537 lakhs. The important achievements in the Third Plan were: raising of plantations of species of economic and industrial importance on 18,857 hectares, plantations of 7,624 hectares and cultural operations on 15,904 hectares under the scheme of "Rehabilitation of Degraded Forests", and plantation of 14,912 hectares under the scheme of "Plantation of Fast Growing Species". Besides, 2,119 km. of new roads were constructed, 3,736 km. roads were renovated, 281 bridges and culverts were constructed and 2,203 km. of new telephone lines were laid. Timber logging operations were carried out measuring 13,930 cu. m.

9.4. The expenditure on forestry schemes during the Annual Plans 1966-69, is estimated to be Rs.308.47 lakhs. The important achievements of the Annual Plans include plantation on 22,866 hectares under the scheme of "Raising of Plantation of Economic and Industrial Importance", plantation on 5,175 hectares and cultural operations over 1,320 hectares under the scheme of "Rehabilitation of Degraded Forests", fuel plantation on 2,600 hectares and plantation of fast growing species on 26,233 hectares. Construction of 3,345 km. of new roads and 8 bridges and culverts, renovation of 33 km. roads, laying of 154 km. telephone lines and timber logging operations measuring 8,377 cu. m. are expected to be some of the other achievements by the end of 1968-69.

9.5. The exploitation and conservation of the forests under the control of the Forest Department is being done on a scientific basis for the past several decades. A working plan for each forest division is prepared for a period of ten years and forests are managed on the basis of the prescription given in the Working Plan.

9.6. A Forest Resources Survey Division was created in the State in 1961-62, with the following objectives:

- (i) Assessment of existing resources of timber and industrial species.
- (ii) Assessment of areas suitable for raising plantations for augmenting the resources of various raw materials required by industries.

(iii) Collection of data required for planning new industrial units and expansion of existing ones.

9.7. An area of 12,57,718 hectares was sampled during the Third Plan involving a cost of Rs.9.898 lakhs. During the three Annual Plans, an area of 1,59,500 hectares was surveyed at a cost of Rs.3.99 lakhs. A rapid survey of the forests, covering almost the entire State, to assess the availability of timber and other forest produce of industrial use, was carried out under the scheme. The survey has shown the availability of the following timber resources :—

Item	Unit	Total growing stock.	Annual potential availability	Remarks
1	2	3	4	5
1. Various species of timber	Lakh cu. m.	894.94	9.45	Immediately available.
2. Bamboo	Lakh Tonnes.	0.20*	1.73**	..
3. Coniferous material for industries.	..	..	..	Construction of roads is necessary for full exploitation of fir and spruce.
(a) Chir Thinnings .. ..	..	0.16		
(b) Chir Slash .. ..	..	0.09		
(c) Fir and Spruce .. ..	..	0.16		
-		<u>0.41</u>		
4. Coarse Grasses ..	Lakh Tonnes.	1.32†		With the progress of the plantation programme the yield of coarse grass will gradually go down.

9.8. The strategy for the Fourth Plan will be to give priority to (i) bringing under plantation all the plantable area under the management of Forest Department in the plains which has been estimated to be about 4.45 lakh hectares, and (ii) intensive management and development of existing forests, thereby increasing the output of forest produce per acre. The mal-treated and poorly stocked forests and waste lands that have vested in the Forest Department on the abolition Zamindari in U. P. will be

*N. B.—This entire present production, which is average of 1961-62 to 1965-66, is being utilised commercially. A substantial quantity, about 25 per cent of the commercial yield, is left unexploited which can be diverted to industrial use.

**From new plantations in 1972-73 to 1980-81.

†About half of the yield is consumed locally and the remaining half is available for pulping purposes.

rehabilitated. An effort will also be made to meet the long term requirements of forest based industries and to replace inferior forest crops of low value by crops of industrial and economic importance and plantations of fast growing species, employing better and modern techniques of logging and timber extraction, and development of forest communications by improving the existing roads and introducing a net work of new roads and bridges.

9.9. The condition of Civil and Panchayat Forests which are mainly intended to meet the local demands for firewood and timber and for other domestic requirements is generally not satisfactory. The area of Civil Forests has been estimated at 6,19,278 hectares which all lies in the hill districts of Chamoli, Garhwal, Almora, Naini Tal and Pithoragarh. The Panchayat forests with an area of 2.127 lakh hectares have so far remained neglected. For the proper management and development of Civil and Panchayat forests, the appointment of a Working Plan Officer, has been proposed in the Fourth Plan. This officer will carry out demarcation and survey of these forests and then prepare a Working Plan for their scientific management and development.

9.10. Some of the important targets proposed for the Fourth Plan are given below :

9.11. The scheme for raising of Plantations of Economic and Industrial Importance envisages plantation on 44,400 hectares. Under the scheme of Rehabilitation of Degraded Forests it is proposed to carry out cultural operations on 27,000 hectares. Fuel plantation has been proposed on 6,500 hectares. Under the scheme of the plantation of Fast Growing Species, it has been proposed to undertake plantation on 70,000 hectares. Further plantation is proposed on 4,000 km. under the scheme of the Management of Roadside Avenues.

9.12. Apart from this plantation programme, it is also proposed to construct 1,410 km. of new roads and 200 bridges and culverts; renovate 3,030 km. of existing roads and lay telephone lines over 2,022 km. Timber logging operations, during the Fourth Plan period have been proposed over 20,000 cu.m. Under the scheme for training of staff, the programme for the Fourth Plan period is to impart training to 5 Conservator of Forests/Assistant Conservator of Forests, 5 Indian Forest Service/Provincial Forest Service, 20 Forest Rangers, 275 Deputy Rangers/Foresters and 600 Forest Guards. It will be in the nature of a refresher course, as all the executive staff deputed for the execution of the forestry programme is already properly trained, either at the Forest Research Institute, Dehra Dun (for Assistant Conservator of Forests and Forest Rangers) or at the training colleges run by Forest Department (for Forests, Deputy Rangers and Forest Guards). The training of the executive staff as proposed in the Fourth Plan will further enhance the quality of performance under different programmes.

9.13. The Fourth Plan outlay proposed for the Forestry schemes is Rs.1,300 lakhs. This includes a provision of Rs.198 lakhs for the year 1969-70,

Outlays for State Plan Schemes

Head—2. ALLIED PROGRAMMES

Sector—2.3.—FORESTS

(Rupees in lakhs)

Code no.	Group / Schemes	Fourth Plan Outlay			1965-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
230101	Raising Plantation of Economic and Industrial Importance	310.00	..	..	57.00	..	..
230102	Rehabilitation of Degraded Forests	25.00	..	..	3.00	..	..
230103	Improved Logging	45.00	..	..	6.00	..	..
230104	Communications—Roads, Bridges and Telephone Lines (including provision for Jeeps).	150.00	..	..	6.00	..	..
230105	Training of Staff	38.00	..	..	6.00	..	..
230106	Buildings	15.00	..	..	1.75	..	..
230107	Forest Publicity	10.00	..	..	2.00	..	..
230108	Nature Preservation	35.00	..	..	6.25	..	..
230109	Management of Roadside Avenues to be taken over from P. W. D.	50.00	..	..	9.00	..	..
230110	Preparation and Revision of Working Plans	25.00	..	..	3.00	..	..
230111	Intensification of Research Work in Forestry	25.00	..	..	4.50	..	..
230112	Establishment of Forest Economics and Statistics Division	3.00	..	..	0.50	..	..
230113	Fuelwood Plantation-cum-Farm Forestry	32.00	..	..	6.00	..	..
230114	Plantation of Fast growing Species	537.00	..	54.00	87.00	..	12.00
Total for Sector 2.3. Forests		1300.00	..	54.00	198.00	..	12.00

Outlays for Centrally Sponsored Schemes

(Rupees in lakhs)

Sl. no.	Scheme	Fourth Plan Outlay	1969-70 Outlay
2.3. FORESTS			
1.	Forest Resources Survey	7.50	1.50

10

FISHERIES

10.1. There are 11.74 lakh hectares of water area including lakes, tanks, rivers, nalas and streams in Uttar Pradesh of which nearly 1.24 lakh hectares consist of confined waters.

10.2. Fisheries Development programme in U. P. was started in the year 1944, when it was required to supply fish to the Armed Forces. By 1950, the Fisheries Department had covered 13 districts and by the end of the First Plan the programme was extended to 31 districts. By the end of the Third Plan, 49 districts excluding Uttarakhand had been covered.

10.3. The waters in the State are managed by different departments of the State and the *Gram Samajes*. The area reported to be under fish culture under the control of various agencies is as follows :

	Confined water		Running waters length in K.M.
	Number	Area in lakh hectares	
1. Fisheries Department			
(a) Reservoirs	28	1.145	..
(b) Medium Waters	28	0.085	..
(c) Other departmental waters	389	0.034	..
Total .. .. .	..	1.264	
2. Forest Department .. .. .	..	0.012	6,779
3. Irrigation Department .. .. .	..	0.336	..
4. Gram Samajes .. .. .	..	0.425	7,007
Total .. .. .	..	2.037	13,786

10.4. The utilization of funds on fishery development in the previous plans is given in the following table :

(Rupees in lakhs)

First Plan		Second Plan		Third Plan		Annual Plan 1966-67		Annual Plan 1967-68		Annual Plan 1968-69	
Out-lay	Expenditure	Out-lay	Expenditure	Out-lay	Expenditure	Out-lay	Expenditure	Out-lay	Expenditure	Out-lay	Expenditure
3.77	3.27	70.00	27.21	101.75	58.02	30.00	15.22	24.00	15.00	20.00	20.00

10.5. There have been short-falls in this sector in the second and third plans as well as in the Annual Plans of 1966-67 and 1967-68. The utilization of funds was only 38.75 per cent in the Second Plan, 71.92 per cent in the Third Plan and 50.00 per cent in 1966-67. The main reasons for these shortfalls are (i) non-construction of works, like cold-storage, departmental tanks, fish-farms, (ii) partial implementation of schemes, like formation of Co-operative Societies, provision of nurseries, improvement of departmental tanks and training and survey.

10.6. The physical progress achieved under the main items of fisheries development during the previous plans is given below :

Item	First Plan	Second Plan	Third Plan	1966-67	1967-68	1968-69
<i>Fry collected (In lakhs)</i>						
(i) From natural sources	936.57	1,715.96	3.327	1,247.2	1,741.8	6,436.0
(ii) Induced breeding ..	..	14.76	319.55	65.63	138.19	..
<i>Fingerlings supplied and stock- ed (In lakhs)</i>						
Target	223.12	478.75	1,934.22	392.68	553.6	630.6
Achievement	149.56	416.41	827.81	146.2	173.12	N.A.
<i>Fish Production (In tonnes)</i>						
Target .. ..	..	1496.0	2265.0	1072.0	1100.0	1225.0
Achievement ..	1156.0	839.1	2,033.7	869.1	950.8	..
<i>Number of reservoirs covered</i>						
Target .. ..	..	..	16	3	3	6
Achievement ..	..	..	16	3	3	6
<i>Number of Medium Waters covered</i>						
Target .. ..	..	..	20	4	4	8
Achievement ..	..	..	12	4	4	8

10.7. The present annual fish production from 1.264 lakh hectares of water area including reservoirs, is estimated at about 1,100 tonnes. An additional water area of 0.137 lakh hectares is proposed to be brought under fish culture during the Fourth Plan period.

10.8. By the end of the Fourth Plan period, the estimated fish production from the departmental waters and reservoirs as well as from the

distribution of fingerlings to non-departmental agencies is expected to reach 21,400 tonnes, promising a revenue of over Rs.283 lakhs.

10.9. By the end of 1968-69, 1.264 lakh hectares of water area will come under departmental management, including the Rihand and 27 other Irrigation Reservoirs. The working of the reservoirs has been generally satisfactory yielding an average production of about 8.5 kg. per hectare. Main emphasis at present is on increasing the per acre yield by better augment of waters and by adopting more scientific methods of fish culture. Fish farms have been established at each of the main reservoirs and medium waters for the rearing of fish seed of major carp. To save the fingerlings from predatory elements, large sized fingerlings measuring 6" to 8" are now being stocked as stocking with matured fish has shown better performance. Also, the exploitation of the undersized fish is not being allowed. It is proposed to ultimately raise the average production to 20 kg. per hectare by the end of the Fourth Plan.

10.10. All the nine irrigation reservoirs, which have been surveyed and found suitable for pisciculture will be taken up in the Fourth Plan in a phased manner and stocked with 290 lakh fingerlings. The full production of fish from those reservoirs would, however, become available only after about 7-10 years, but from experimental fishing, an yield of about 125 metric tonnes is expected during the Fourth Plan period itself.

10.11. The activities at the Rihand reservoir will substantially be intensified during the Fourth Plan period by the end of which over 600 tonnes of fish are expected to be produced from this reservoir.

10.12. Under the Applied Nutrition programme, 15 additional A.N.P. Blocks along with the backlog of 8 blocks of the annual plans, i.e. 23 A.N.P. Blocks in all, will be taken up for fisheries development during the Fourth Plan period.

10.13. The requirement of fish seed in the State has considerably increased particularly for stocking large reservoirs and departmental waters and also for meeting the growing demand of the private sector. By the end of the Fourth Plan, the total seed requirement is estimated at 755 lakhs. Complete dependence cannot be put on natural collections. Therefore, the seed supply has to be supplemented by "induced breeding" and "*bundh breeding*". Fifteen Induced Breeding farms are proposed to be established besides the construction of 10 dry *bundhies* during the Fourth Plan.

10.14. To ameliorate the socio-economic condition of the fishermen, it is necessary to organise co-operative societies of fishermen for undertaking fishing on commercial lines. With this aim in view, 54 Societies were organised during the Second Plan period. However, the fact remains that the Societies did not function quite satisfactorily for various reasons and many of them became dormant. There can be no two opinions that for improving the

general lot of fishermen, there is no other way except to bring them within the fold of Co-operation and strengthen their co-operative societies. Therefore, during the Fourth Plan, a reorientation will be given to these societies. They will be linked to particular reservoirs for fishing purposes, and that would provide them with a stable base. It is proposed to organise 11 Fishermen Labour Co-operatives during the Fourth Plan period and to provide a loan of Rs.0.10 lakh to each Labour Co-operative Society for equipment. The minimum membership of the Society shall be 100 fishermen. A fisheries development worker, trained in Co-operatives, will be attached to two societies for the first three years for managing the affairs of the society initially and training the members to manage their own affairs subsequently. These proposed Labour Co-operatives will generally be established in the areas of the reservoirs so that they may undertake fishing in the departmental reservoirs in due course. It is expected that by these measures, the functioning of the Fisherman Co-operative Societies will be improved and these institutions will be strengthened.

10.15. The pollution of waters by factory effluents is proving a great hindrance in the programme of development of fisheries. A small unit is, therefore, proposed to be established during the Fourth Plan for studying the effects of factory effluents in the rivers on Fish development and to find remedial measures.

10.16. A total outlay of Rs.90.00 lakhs has been proposed for the Fourth Plan for fisheries. Priority has been assigned to the productive schemes relating to the optimum utilisation of large waters and reservoirs and to seed production from natural collections or from the State fish farms by adopting scientific techniques of artificial breeding.

Outlays for State Plan Schemes

Head—2. ALLIED PROGRAMMES

Secto—2.4. FISHERIES

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign exchange	Total	Capital	Foreign exchange
1	2	3	4	5	6	7	8
240101	Development and Exploitation of Reservoirs	24.84	14.51	..	4.63	2.91	..
240102	Intensification of fisheries development in Rihand Reservoir	9.66	0.30	..	1.90	0.30	..
240103	Induced breeding and cyprinus carpio culture	18.03	15.66	..	2.01	2.00	..
240104	Provision of tube-wells at Block farms	3.86	3.00	..	0.51	0.50	..
240105	Provision of additional Fish Seed Production and nursery farms	14.12	11.30	..	1.40	1.40	..
240106	Establishment of a Pollution Study Unit	0.85	..	..	0.14	..	..
240107	Organisation of Labour Co-operatives	1.67	1.10	..	0.36	0.30	..
240108	Strengthening of staff at Headquarters	1.06	..	..	0.18	..	..
240109	Fisheries Education and Research	1.67	..	..	0.31	..	..
240110	Spill-over (Works)	12.14	12.14	..	8.42	8.42	..
240111	Applied Nutrition Programme in collaboration with UNICEF	2.10	..	..	0.14	..	..
Total for Sector 2.4. Fisheries		90.00	58.01	..	20.00	15.83	..

11

CO-OPERATION

11.1. Co-operation has been assigned an important role in the planned economic development of the country. It has been recognised that co-operation should gradually become the basis of organisation in important sectors of economy, specially agriculture, minor irrigation, small-scale industries and processing, marketing, distribution, supplies, housing, etc. It is envisaged that even in medium and large industries and transport, co-operatives would play an increasingly bigger role. A rapidly growing co-operative sector can successfully mop up local resources and encourage initiative for the good of the community, social stability and economic development. Co-operation can bring about basic social and economic changes in the structure of the society, if properly organised.

11.2. The co-operatives are mostly concentrated in rural areas where they provide credit, supplies of agricultural inputs and facilities for marketing, processing and storage of agricultural produce.

11.3. The emphasis in the First Plan was to organise Multi-purpose Co-operative Societies in the rural areas for the distribution of credit to cultivators. During the Second Plan period a radical change was, however, made in the policy of credit distribution by linking it with production and marketing. Besides, emphasis was also laid on controlled credit recovery, i.e. repayment of loan in kind through the marketing societies. The objective in the Third Plan was to achieve coverage of 65 per cent of the agriculturists. This, however, could not be achieved and only 54.8 per cent of the rural population engaged in agriculture could be covered by the co-operatives by the end of the Third Plan. Emphasis was laid on the organisation of potentially viable societies out of the old primary service co-operatives, many of which had either become defunct or were not functioning quite satisfactorily. Other important programmes of this period were organisation of primary and wholesale consumer stores, expansion of processing societies as an adjunct to marketing, setting up of cold storages in the co-operative sector, and establishment of Land Development Bank, with the intention of distribution of loan for minor irrigation purposes in 20 districts of the State. This programme was further expanded during the three Annual Plans and 35 districts are now covered by the Land Development Bank through 165 branches. The progress of different programmes in the co-operative sector since 1951 is given in Statement I.

STRATEGY OF FOURTH PLAN

11.4. The emphasis during the Fourth Plan will be on the consolidation of the work already done and streamlining of the existing credit structure

so as to provide adequate support to the ambitious agricultural development programme under way in the State, specially the High Yielding Varieties Programme. The main items of work will be :—

- (1) To consolidate, revitalize and reorganise various co-operative institutions and activities.
- (2) To achieve a membership target of 75 per cent of agricultural families.
- (3) To provide facilities of credit as quickly as possible by opening more branches of the existing District/Central Co-operative Banks.
- (4) To provide medium and long-term loaning facilities to meet the requirements of members of co-operative societies for improved means of irrigation.
- (5) To create additional storage capacity to enable the societies to meet the increasing demand of agricultural inputs.
- (6) To set up a Hydrogenation Factory and a Fertilizer Granulating Unit by the Apex Marketing Federation in the Co-operative sector for the benefit of grower co-operative members.
- (7) To have a special Drug Development Programme for the hill areas of Almora, Naini Tal, Pauri-Garhwal and Tehri-Garhwal as also the hilly tracts of Mirzapur and Banda.

11.5. Some of the more important programmes proposed to be taken up in the Fourth Plan in the co-operative sector are briefly indicated below :

(1) CO-OPERATIVE CREDIT AND BANKING

(a) *Village Primaries*—It is proposed gradually to convert all the Primary Agricultural Credit Societies into viable or potentially viable societies by amalgamating smaller and weaker societies into viable economic units. For the Fourth Plan a target of organising 7,500 such societies has been fixed. The membership of these societies is expected to increase by about 17 lakhs during the Plan period. It is expected that by the end of the Fourth Plan it would be possible to cover 75 per cent of the agricultural families under the co-operative societies. It is also proposed to raise additional share capital of Rs.7 crores from members of these co-operative societies. The State Government would contribute Rs.4.25 crores to the share capital of the societies. The deposits in the societies are expected to increase by Rs.2.5 crores during the plan period. A managerial subsidy of Rs.1,800 per society would be given for a period of three years on a tapering scale.

(b) *Loaning*—The level of short-term loaning at the end of 1968-69 would be Rs.45 crores. It is proposed to raise it to Rs.80 crores by the end of the Fourth Plan. The medium term loaning is expected to rise from Rs.6 crores in 1968-69 to Rs.30 crores in 1973-74, while the long-term outstanding is expected to increase from Rs.45.96 crores in 1968-69 to Rs.140 crores in 1973-74. It may be mentioned that the co-operatives are gradually taking the entire responsibility of providing loans for private minor irrigation works except in the Hill districts and Bundelkhand.

(c) *District/Central Co-operative Banks*—At present there is one District/Central Co-operative Bank in each of the districts of the State. In order to tap rural savings and to take credit facilities nearer to the cultivators these banks are opening their branches at Tahsil Headquarters also. During the Fourth Plan 44 new branches will be opened at the Tahsil Headquarters. Managerial subsidy at Rs.10,000 per branch spread over a period of four years on a tapering scale would be provided to each new Branch. The target of raising Rs.4 crores by way of share capital from members of the Banks and Rs.10 crores as deposits from the members has been fixed for the Fourth Plan.

(d) *U. P. Co-operative Bank*—This is the apex credit organisation and is responsible for financing the entire Co-operative Movement. It is, therefore, necessary to strengthen its share base and raise its deposits. It is proposed to increase the share capital of the U. P. Co-operative Bank by Rs.1 crore and raise deposits by Rs.6 crores during the Fourth Plan period. The State Government would also purchase shares worth Rs.27.80 lakhs.

(e) *U. P. State Co-operative and Land Development Bank*—This Bank was organised for providing medium and long-term advances for agricultural purposes. During the Fourth Plan 37 new branches of the Land Development Bank would be opened in the State so as to cover each Tahsil of the State excepting those in the hills. The State Government would invest a sum of Rs.21 crores for the purchase of debentures of the Land Development Bank of the State.

(f) *State Agricultural Credit (Relief and Guarantee) Fund*—This Fund was created during 1957-58. The initial amount in the Fund was Rs.4.953 lakhs. The aim of the Fund is to write off irrecoverable debts arising out of causes beyond control such as crop failures, famine, flood, drought, etc. At present the Fund has a balance of Rs.15.453 lakhs.

(g) *Outright grant for special bad debts reserves*—This programme was initiated during the Third Plan. The grant is given to Primary Societies and District/Central Co-operative Banks to enable them to provide loan to marginal and sub-marginal farmers at 3 per cent and 1 per cent respectively of the increased lending over the previous year respectively. During the Fourth Plan it is proposed to give this grant to Village Primaries and District/Central Co-operative Banks at 12 per cent and four per cent respectively on increased lending made by them in the previous year to members belonging to weaker sections of the society.

(h) *Agricultural Credit Stabilisation Fund*—The Agricultural Credit Stabilisation Fund was created at the level of Reserve Bank of India, the State Co-operative Bank and the District/Central Co-operative Banks and is to be utilised for conversion of short-term loans into medium term loans in times

of natural calamities such as drought, floods and crop failures, etc. The Co-operative Banks are contributing 15 per cent of their profits to these funds as per directions of the Reserve Bank of India. The State Government are also contributing dividends in excess of three per cent on shares held by them in these Banks. A provision of Rs.1.56 crores has been made in the Fourth Plan in the Centrally Sponsored Scheme.

(2) CO-OPERATIVE MARKETING, PROCESSING AND STORAGE SCHEME

The Committee of Direction of the All-India Rural Credit Survey appointed by the Reserve Bank of India recommended that co-operative credit should be integrated with co-operative marketing, processing and storage. The programme was initiated during the Second Plan and has since then continued. During the Fourth Plan emphasis will be on strengthening the existing societies and on making them self-sufficient.

(a) *Marketing Societies*—At the end of 1968-69, 203 marketing societies with 43 branches and one special commodity marketing society for jute will be functioning in the State. During the Fourth Plan 10 new primary market-societies are proposed to be organised to cover new mandis which would come into existence as a result of larger surplus of agricultural production. Each new marketing society will be provided State share participation to the extent of Rs.25,000. It is also proposed to strengthen eight existing marketing societies by way of additional share participation of Rs.45,000 per society under normal programme and another eight marketing societies at a rate of Rs.80,000 on selective basis.

(b) *Price Fluctuation Fund*—The Fund is created at the level of selected individual marketing societies with contributions from Government and Societies to cover the risk of losses entailed in the disposal of agricultural produce purchased on outright basis. For the Fourth Plan a provision of Rs.30.00 lakhs is being made as Government contribution which will be given to the marketing societies on the approved pattern of 2 per cent of the outright purchases made during the preceding year.

(c) *Godowns*—During the Fourth Plan primary marketing societies will be given financial assistance at the rate of Rs.35,000 per godown including 62½ per cent as loan and 37½ per cent as subsidy. Two hundred rural godowns costing Rs.15,000 each are also proposed to be constructed. The U. P. Co-operative Federation which is expected to handle about 50 per cent of the fertilizers and other agricultural inputs during the Fourth Plan proposes to construct 10 regional godowns, 38 district godowns and 164 trade centre godowns with a total capacity of 77,000 tonnes, 1,33,000 tonnes and 1,23,000 tonnes respectively. Provision in the Plan is being made only for 37½ per cent which would be provided as subsidy for the programme. The loan portion of the assistance is proposed to be arranged from the Agricultural Refinance Corporation.

(d) *Margin money for storing and distribution of fertilizers*—To enable the co-operative societies to handle large quantities of agricultural inputs, an amount of Rs.2.00 crores has been included in the Fourth Plan which would be provided to the P. C. F. for the purpose.

(e) *Processing Societies*—By the end of 1968-69, the total number of processing units organised in the State will be 104 out of which 54 have started functioning. During the Fourth Plan the remaining units will also be commissioned and the operational efficiency of the existing units will be improved. Eight new processing units would also be organised during the Fourth Plan.

With a view to ensuring fair return of the produce to cotton growers and providing yarn at competitive rates to the weavers of the Meerut and Agra Divisions, a co-operative textile mill was registered in 1967 at Bulandshahr. The installation of the factory is at an advanced stage. The members have collected Rs.22.9 lakhs as share money and the State Government has also provided Rs.30.5 lakhs by way of share participation. A provision of Rs.15 lakhs is being made towards State share participation during the Fourth Plan.

It is proposed to set up a hydrogenation plant at Budaun to enable the cultivators to get remunerative prices for the groundnut produced locally. The project report is being finalised. A provision of Rs.20.00 lakhs as State share participation for starting this project is proposed to be made in the Fourth Plan. It is also proposed to set up a large sized mechanised manure mixing unit under the Co-operative sector. The U. P. Co-operative Federation and the State Government would provide Rs.5 lakhs each. During the Fourth Plan, four new cold storages are also proposed to be constructed in the Co-operative sector.

(3) CO-OPERATIVE FARMING

The co-operative farming schemes were taken up as Centrally Sponsored schemes during the Third Plan period with a view to demonstrating to the cultivators that by pooling their land, manpower and other resources on a co-operative pattern, agricultural production could increase. The total number of joint and collective farming societies in the State at the end of 1968-69, would be 1301 and 102 respectively, with a total membership of 37,336. The programme is still in its infancy and is yet to make a significant impact on agricultural production programmes. During the Fourth Plan 100 of the existing farming societies will be revitalised and only 40 new societies will be organised to meet the genuine needs of such cultivators who for economic reasons may voluntarily decide to organise joint farming societies.

(4) CO-OPERATIVE TRAINING, EDUCATION AND EXTENSION

The main task of the Co-operative movement at present is to build up a strong leadership of genuine co-operators and provide suitable training to

institutional personnel to raise their professional efficiency. At present, the Mehta Institute of Management at Poona caters to the training of senior personnel charged with the responsibility of direction, policy and control at the district level and above; Co-operative Training Institutes of Faizabad and Rajpur (Dehra Dun) arrange training of intermediate personnel like Inspectors, Extension Officers and key executives of the district level institutions, while the Co-operative Training Centres at Kurwar (Sultanpur) and Bilari (Moradabad), cater to the training of junior personnel like Co-operative Supervisors. At present 54 peripatetic units are also functioning in the State. During the Fourth Plan a few more junior training centres are proposed to be started. The number of peripatetic units under the member-education scheme for non-officials is also proposed to be increased 56—one unit per district for male members and two for women members.

(5) CONSUMER CO-OPERATIVE STORES

The organisation of the consumers' co-operative stores was taken up during the Third Plan period with the object of stabilising prices of essential commodities. Thirty primary stores were organised during 1961-62. During 1962 a Centrally sponsored scheme of opening whole-sale co-operative consumers' stores and their branches was also initiated. The Apex Consumers Co-operative Federation was organised during 1965 for arranging supplies to the whole-sale consumers' stores and for negotiating better terms on their behalf for various supplies. Two processing units were also installed by Consumers' Stores during 1966-67. By the end of 1968-69, 48 whole-sale stores, 1,097 Primary Stores and Branches and five Departmental Stores would be functioning in the State. The total business handled by the wholesale Stores during 1967-68 was about Rs.8.60 crores and by the Primary Stores/Branches about Rs.4.70 lakhs.

During the Fourth Plan the existing units will be consolidated and their working will be improved. It is proposed to organise 20 medium type stores in such areas of the State where consumers' activities have not yet been taken up.

(6) DRUG DEVELOPMENT

A variety of medicinal and aromatic plants grow in commercially exploitable quantities in hill districts as well as the hilly tracts of Mirzapur and Banda Districts. These areas, therefore, provide opportunities for the collection of herbs as well as the development of medicinal and aromatic plants. It is proposed to develop and intensify the collection of herbs as well as cultivation of exotic and indigenous species of medicinal and aromatic plants on scientific lines under expert technical guidance in the five hill districts of Almora, Dehra Dun, Pauri, Tehri and Naini Tal as well as the hilly tracts of Mirzapur and Banda. It is proposed to involve about 12,500 members of co-operative societies in this programme.

(7) OTHER ACTIVITIES

11.6. There is a separate audit organisation for the co-operative institutions under the Finance Department of the State. For the Fourth Plan a provision of Rs.50.00 lakhs has been made for the Audit Organisation.

11.7. At present there are four co-operative sugar factories working in the State, viz. Bazpur (Naini Tal), Baghpat (Meerut), Sarsawa (Saharanpur) and Majhola (Pilibhit). The first three factories were commissioned during the Second Plan and the last one during the Third Plan. The sugar co-operative factory at Aurai (Varanasi) is likely to be commissioned during 1971-72. It is proposed to take up three new sugar factories in the Co-operative Sector during the Fourth Plan. Sites for the factories have already been approved by the Screening Committee of the Government of India. It is proposed to set up these factories at Harduaganj (Aligarh), Kaimganj (Farrukhabad) and Rasra (Ballia). With the establishment of these sugar factories during the Fourth Plan, the sugar production capacity of the co-operative factories would increase by about 30 to 40 thousand tonnes per year.

Supplementary Plan

11.8. The outlay proposed in the Fourth Plan for 'Co-operation' is Rs.9 crores which includes Rs.0.50 crores for each for the Industries and Finance Departments and Rs.8.00 crores for the Co-operative Department. In the Supplementary Plan an additional outlay of Rs.5 crores has been set apart for contributing to the share capital of Co-operative Societies.

Warehousing

11.9. The State Warehousing Corporation started functioning in the State from the third year of the Second Plan. The main functions of the Corporation are to acquire and build godowns and warehouses for the storage of agricultural produce, seeds, manures, fertilizers, agricultural implements and other notified commodities. The Corporation also acts as an agent of the Central Warehousing Corporation for the purchase sale, storage and distribution of agricultural produce, seeds and manures, etc.

11.10. The State Warehousing Corporation has set up 87 warehouses and sub-warehouses so far. It attracted a total custom of 79.76 lakh quintals up to March, 1967. The total warehousing capacity at the end of the Third Plan was 70.551 metric tonnes. During the Fourth Plan it is proposed to construct 24 warehouses with a storage capacity of 30,000 metric tonnes at a total cost of Rs.60 lakhs, to be equally shared by the State and Central Warehousing Corporations. It is also proposed to augment the storage capacity by additional 30,000 metric tonnes by hiring private godowns. The Food and Civil Supplies Department of the State Government would also construct a number of godowns for which a provision of Rs.1 crore has been made to begin with.

STATEMENT I

Item	Unit	Position on June 30, 1951	Position at the end of First Plan	Position at the end of Second Plan	Position at the end of Third Plan	Position at the end of 1966-67	Position at the end of 1967-68	Position anti- cipat- ed at the end of 1968-69
1	2	3	4	5	6	7	8	9
1. Primary Agricultural Co-operative Credit Societies—								
(a) Multi-purpose societies	.. No.	26,390	44,006	39,143	8,044	7,662	N.A.	N.A.
(b) Large Sized societies	.. .. Do.	..	..	730	730	730	730	730
(c) Service Co-operatives	.. .. Do.	..	..	15,258	26,414	21,235	13,477	8,000
(d) Potentially viable societies*	.. .. Do.	..	..	..	8,180	9,755	10,579	14,500
2. Membership	.. .. In lakhs	8.50	14.03	29.99	51.00	54.40	56.989	58.00
3. Short term loaning	.. .. Rupees in crores	2.28	5.58	24.616	40.29	39.18	40.16	45.00
4. Medium term loaning	.. .. Do.	..	..	0.16**	6.00**	4.568	6.68	6.00
5. Long term loan outstanding	.. .. Do.	..	..	0.014	6.00	13.26	23.12	45.96
6. Number of marketing societies	.. .. No.	..	..	170	199	202	203	203
7. Number of branches of marketing societies	.. .. Do.	..	..	..	29	34	38	43
8. Processing societies	.. .. Do.	..	..	23	100	110	104	104
9. Cold storages	.. .. Do.	..	..	..	7	23	23	23
10. Manure mixing units	.. .. Do.	..	..	..	25	25	25	25

11.	Co-operative Farming societies of spontaneous growth	..	..	No.	40	216	387	725	794	819	819
12.	Pilot project societies	..	..	Do.	..	..	..	584	584	584	584
13.	Pilot projects of farming societies	..	..	Do.	..	..	..	45	45	45	45
14.	Branches of land Development Bank	..	..	Do.	..	..	25	127	130	139	165
15.	Marketing godowns	-	-	Do.	..	..	133	230	230	239	220*
16.	Rural godowns	..	..	Do.	..	..	200	1,209	1,209	1,209	1,178‡
17.	Primary Consumers stores/branches	..	..	Do.	..	..	..	519	671	712	1,097
18.	Wholesale consumers stores	..	..	Do.	..	..	..	29	48	48	48
19.	Departmental Stores	..	..	Do.	..	..	..	..	3	5	5
20.	Seed Stores	..	..	Do.	950	1,203	1,610	1,428	1,416	1,406	1,382

*These societies are actually service co-operatives which are declared potentially viable.

**Outstanding.

†Funds for 19 godowns refunded.

‡Funds for 31 godowns refunded.

Outlays for State Plan Schemes

Head—3. CO-OPERATION AND COMMUNITY DEVELOPMENT

Sector—3.1. CO-OPERATION.

(Rupees in lakhs)

Code no.	Group / Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
<i>Co-operative Department</i>							
310101	Co-operative Credit and Banking	295.82	12.25	..	24.98	..	..
310102	Co-operative Marketing, Processing and Storage	334.99	150.17	..	6.64	3.90	..
310103	Co-operative Farming	19.63	17.53	..	1.00	0.59	..
310104	Co-operative Training, Education and Extension	59.11	..	..	5.05	..	..
310105	Co-operative Printing Press	1.12	1.00	..	..	..	..
310106	Special Scheme of Co-operative Consumers Stores	47.33	39.00	..	3.73	1.74	..
310107	Drug Development Scheme	12.00	5.00	..	..	..	..
310108	Additional Departmental staff	30.00	..	..	1.60	..	..
	Total	800.00	224.95	..	43.00	6.23	..
<i>Industries Department</i>							
310201	Co-operative Sugar Factories	50.00	50.00	..	10.00	10.00	..
<i>Finance Department</i>							
310301	Increase in the staff of Co-operative Audit Organisation at various levels,	50.00	..	..	4.00	..	..
	Total for Sector 3.1, Co-operation	900.00	274.95	..	57.00	16.23	..

Outlays for State Plan Schemes

Head—2. ALLIED PROGRAMMES

Sector—2.5. WAREHOUSING.

(Rupees in lakhs)

Code no.	Group / Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Tot. 1	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
<i>Co-operative Department</i>							
250101	State participation in the share capital of State Warehousing Corporation.	30.00	30.00	..	..	..	..
<i>Food and Civil Supplies Department</i>							
250201	Construction of Godowns for storage of foodgrains ..	..	100.00	100.00	..	..	..
Total for Sector 2.5. Warehousing		..	130.00	130.00	...	..	..

Outlays for Centrally Sponsored Schemes

(Rupees in lakhs)

Serial no.	Schemes	Fourth Plan Outlay	1969-70 Outlay
3.1. CO-OPERATION			
1	Agricultural Credit Stabilisation Fund	.. .. 156.00	32.00
2	Margin money to P. C. F. for fertilizer business	.. .. 200.00	50.00
Total 3.1. Co-operation		.. .. 356.00	82.00

COMMUNITY DEVELOPMENT AND PANCHAYATI RAJ

1. COMMUNITY DEVELOPMENT

12.1. The Community Development and National Extension Service Programme was launched on October 2, 1952, to initiate a process of integrated development of the rural areas. It was felt that there should be an integrated approach to solve the rural problems which were inter-related and could not be tackled in isolation. The knowhow, credit and supplies had to be synchronised to produce fruitful results. This organisation aimed at conveying the message from the research stations and the laboratories to the cultivators' farm. It also aimed at arousing community consciousness among the rural people so that their energies could be channelled for common good in an integrated manner. The extension service is in the nature of a common service centre where field workers of the development departments function as a team. It was soon realised that without an active involvement of the people and initiative from them, the rural development programme could not make any real impact. On the basis of Balwant Rai Mehta Committee report, the three-tier Panchayat Raj institutions at the district, Block and village levels were created to enable the people's representatives to participate in the formulation and execution of development programmes of the area. The Kshettra Samitis and Zila Parishads Adhiniyam, 1961 clearly defines the role of Panchayati Raj institutions in the various development sectors at the district and Block levels.

12.2. The whole State was covered by 875 Blocks by October, 1963 completing the process of covering the entire State including Uttarakhand with N. E. S. Blocks. During 1967-68 through a process of rationalisation, 198 Blocks were abolished and one new Block was opened by delineating the boundaries of the Blocks. At the end of 1968-69 there would be no Stage-I Blocks in the State. There would be only 495 Stage-II Blocks. All the other Blocks would have entered the Post-Stage-II phase.

12.3. The expenditure during the three Five Year Plans and the three Annual Plans has been as below (excluding Uttarakhand):

Plan Period	Expenditure (Rs. in lakhs)
First Plan	856.92
Second Plan	2,765.87
Third Plan	4,754.98
1966-67	569.82
1967-68	288.20
1968-69	296.05 (anticipated)

12.4. A critical review of the programme has been made by the State Working Group on Community Development. The broad conclusion reached was that the community development programme had made appreciable impact on programmes relating to agriculture, minor irrigation, construction of community works like schools, and general awareness among the people about the new methods of development in the various sectors.

12.5. For the Fourth Plan an outlay of Rs.1,000.00 lakhs has been proposed which includes Rs.280.00 lakhs for the Annual Plan 1969-70. The Plan expenditure under this sector will gradually decrease because of progressive conversion of Stage II Blocks into Post-Stage-II Blocks. During the Fourth Plan, the emphasis will continue on programmes relating to agricultural production, minor irrigation, animal husbandry, fisheries and allied subjects. Certain amenities programmes like social education, rural arts crafts etc. have been curtailed.

12.6. Recognising the fact that there are pockets as well as sections of population which have not benefited much from the rural development programmes, several steps have been taken to correct the disparity. Rules have been revised or are being revised to ensure that Government assistance is available mainly to smaller cultivators. The field agencies have been asked to ensure that the backward pockets within a Block or within a district get priority in the provision of services during the Fourth Plan. It is expected that such backward pockets and sections of the people within each Block and district will be identified and steps taken during the Fourth Plan itself to ensure that the backward pockets or weaker sections of the people get their due through the Plan efforts.

Training

12.7. The importance of training in development programmes, specially programmes, where large sections of the people are to be actively involved is too obvious to be stressed. Unless the extension worker has been trained to put across new ideas and programmes to the people concerned, the programme cannot make much headway. The extension training programme in this State has been accorded due priority during the various plans. An increasing number of courses have been organised for improving the functional skill of non-officials, particularly youth leaders and young farmers.

In the beginning, the training centres concentrated on the pre-service training of the Village Level Workers and other functionaries. With the passage of time the training programme also underwent changes in conformity with the changing field requirements. Extension workers are now assigned mainly agriculture extension work. Several new programmes like the High Yielding Varieties have been introduced. There is constant endeavour to keep

the workers in proper trim through in-service courses. At present 20 Training Centres are imparting the following courses of training in the State :

- (1) Pre-service, in-service and higher training to Gramsewaks ;
- (2) In-service training to A. D. Os. and B. D. Os. ;
- (3) Artisan's training ;
- (4) Training of Gram Sahayaks and progressive farmers ;
- (5) Orientation and refresher training of subject-matter specialists and administrative officers ;
- (6) Miscellaneous courses, e.g. Applied Nutrition Programme and Youth leaders.

The following table would show the number of persons trained so far :

(i) Pre-service training of V.L.W.'s (2 year's course)	..	12,187
(ii) In-service training of V.L.W.'s (2 months course)	..	8,787
(iii) Higher training of V.L.W.'s (One year course)	..	243
(iv) Gramsewaks (12 days' course)	..	4,939
(v) Village artisans (One year course)	..	1,308
(vi) Youth Club leaders and members (12 days to one month)	..	5,260
(vii) In-service training of Assistant Development Officers/Senior Instructors, etc. (One month)	..	3,364
(viii) Publicity Assistants (3 months)	..	357
(ix) I.A.S./P.C.S. Probationers	..	193
(x) Training under Applied Nutrition Programme	..	18,739

12.8. During the Fourth Plan the quality of training is proposed to be raised further. Along with other programmes, intensive training of farmers both in the package of practices and specialised fields will be undertaken. The deficiencies of equipment, instructors and supporting programmes would be made good. A provision of Rs.200 lakhs has been made for training programmes in the agriculture sector and Rs.15 lakhs for training reserves for B. D. Os. and A. D. Os. in the Community Development sector. Another amount of Rs.36.696 lakhs has been provided under the Centrally Sponsored schemes for farmers' training and education. For the Fourth Plan, some of the important physical targets are :

(1) Training of Gram Sahayaks	..	20,000
(2) Training of village artisans	..	1,500
(3) Refresher training to V.L.Ws. B.D.O.s and A.D.O.s	..	7,500
(4) Higher training of V.L.Ws.	..	2,360
(5) Training to farmers	..	12,600

2. PANCHAYATI RAJ

12.9. Gaon Panchayats were established throughout the State in 1949. Their present number is 72,292. A Gaon Panchayat has been established for each village or group of villages with a population of 250 or more. Kshettra Samities were established in May, 1962. Their initial number was 854. As a consequence of reorganization of development blocks, their number has

now been reduced to 657. Zila Parishads were established in June, 1963. The whole State is thus covered by the three-tier Panchayati Raj institutions except the three border districts of Chamoli, Uttar Kashi and Pithoragarh, where Gaon Panchayats are functioning with Antarim Zila Parishads at the district level, the powers of Antarim Zila Parishads being exercised by the Collectors of the respective districts. There are no Kshettra Samities in these districts and development works at the block level are being looked after by the community development agency.

12.10. There were no plan schemes for Panchayati Raj as such during the First and Second Five Year Plan periods. However, Gaon Panchayats prepared their own Annual Five Year Plans, as an integral part of district plans. During the Third Five Year Plan an outlay of Rs.344.450 lakhs was provided in this sector including schemes of Loans to Gaon Sabhas for development and creation of productive assets, training of Panchayat Secretaries and assistance to Gaon Sabhas. The actual expenditure, however, was only Rs.84.423 lakhs. The scheme relating to the establishment of an Accounts and Audit Organization for Zila Parishads and Kshettra Samitis could not be implemented in full and provision under other schemes was either reduced in the wake of 1962 National Emergency or could not be utilized. In 1966-67, an amount of Rs.18.21 lakhs could be utilized. During 1967-68, the estimated expenditure is Rs.11.88 lakhs. During this year two schemes viz., loan to Gaon Sabhas for revenue yielding projects and loan to Zila Parishads and Kshettra Samitis for a similar purpose were given up. The anticipated expenditure for 1968-69 is Rs.14.26 lakhs.

12.11. Almost all the Panchayat Secretaries of the State have been trained for three months covering recent developments and trends in Panchayati Raj. The scheme of loans to Gaon Sabhas for the execution of revenue yielding projects proved popular. It is, however, difficult to assess the exact impact of the scheme on the resources of the Gaon Sabhas.

12.12. During the Fourth Plan period efforts will continue to strengthen the three-tier Panchayati Raj institutions to enable them to play their role more effectively as agencies responsible for all-round development of the area. For the Fourth Plan a total provision of Rs.100.00 lakhs has been made for this sector including an amount of Rs.51.612 lakhs proposed to be utilized in the backward areas of the State. The scheme-wise outlays of this sector are indicated below :

		(In lakh rupees)
Scheme		Outlay
1. Loan to Gaon Sabhas to develop their productive assets	..	28.56
2. Training of Panchayat Secretaries	..	5.36
3. Strengthening of Panchayat Administration	..	8.48
4. Strengthening of Panchayat institutions	..	57.59
5. Incentive to Panchayats (Token grant only)	..	0.01
6. Establishment of Panchayati Raj Financial Corporation	..	0.001
(Token grant only)		

12.13. It is felt that Panchayat functionaries and Panchayat organizations should be provided adequate incentives to improve the conditions of the Panchayats specifically in the matter of resources. The Panchayati Raj institutions are expected to mobilise additional resources. The question whether certain enlarged powers of taxation should be given to them, will be considered in due course of time. When the details have been worked out, a provision may have to be made for incentives to Panchayati Raj institutions. During the Fourth Plan 540 Gaon Sabhas will be provided loan for increasing their productive assets as against 688 Gaon Sabhas which have been given loans so far. One thousand Panchayat Secretaries will be trained at three of the National Extension Training Centres, which will be suitably strengthened for this purpose.

3. RURAL MAN POWER

12.14. The rural manpower programme aimed at providing employment to the agriculturists during the slack season. The underlying idea was to involve the Panchayati Raj Institutions in the formulation and implementation of the programme with a view to building up remunerative community assets although in some cases development departments were also entrusted with certain projects under the programme. The schemes under this sector should be highly labour intensive and should benefit the community at large.

The programme was introduced in this State in the year 1961-62, as a Centrally sponsored scheme with 100 per cent central assistance on the basis of 50 per cent grant and 50 per cent loan to the State Government.

12.15. At present it covers 169 development blocks of 23 districts including 151 blocks in eastern districts, three blocks of Bundelkhand and 11 blocks in Trans-Jamuna area of Agra, Mathura and Etawah Districts. These blocks represent a very high percentage of unemployment/under employment. A total amount of Rs.438.65 lakhs was utilised during the Third Plan period. During three annual plans an amount of Rs.373.17 lakhs was utilised on the programme of this sector.

12.16. During the period 1961-69 the following works were taken up under this programme :

Items	Unit	Targets	Achievement
1. Small Village Roads	K.M.	1,530	1,283
2. Small Canals and Guls .. .. .	..	2,182	1,765
3. Village Bundies .. .. .	..	1,770	804
4. Tanks for Irrigation and Fisheries	(Nos.)	982	305
5. Afforestation	Hectares	5,492.3	3,313.1
6. Small drains	K.M.	3,222	1,723
7. Village raising	(Nos.)	1,272	568

12.17. The policy during the Fourth Plan is to integrate the schemes aimed at reducing unemployment with the normal development programmes. Some works which are already in hand have, however, to be completed as part of the State Plan. An outlay of Rs.168.00 lakhs has been provided for such works in the Fourth Plan including an outlay of Rs.89.50 lakhs for the Annual Plan 1969-70. (Out of this outlay of Rs.168.00 lakhs, an amount of about Rs.67.00 lakhs has been earmarked for the completion of the continuing works of the drought affected areas of the districts of Allahabad, Varanasi, Mirzapur, Jaunpur, Ghazipur, Azamgarh and Pratapgarh. Since work is undertaken on small but important projects under this scheme, it is proposed to start some new projects in Fourth Plan.

Supplementary Plan

12.18. An additional outlay of Rs.300.00 lakhs has been proposed under the Supplementary Plan. Thus the total outlay of this scheme would increase to Rs.468.00 lakhs from Rs.168.00 lakhs. New works will, however, be undertaken only if additional resources become available.

The physical programme for the year 1969-70 and 1970-71 is given in the statement below :

Name of work	Unit	Year-wise phasing	
		1969-70	1970-71
1. Small Village market Road	K.M.	100	100
2. Village Bundhies	K.M.	120	80
3. Tanks for Irrigation and Fisheries	Nos.	100	100
4. Small drains and other Soil Conservation works	K.M.	55	..
5. Other Misc. Schemes	(Nos.)	100	..

4. APPLIED NUTRITION PROGRAMME

12.19. Applied Nutrition Programme was launched in 29 blocks of the State in the year 1963-64. The need for the programme was realized when the syndromes caused by nutritional deficiencies manifested themselves in clinical cases and were further high-lighted in dietary surveys. The result of dietary surveys showed that the average Indian diet was below the adequacy level — much less at the level of balanced diet. The efforts of Applied Nutrition Programme mainly relate to reducing the consumption of cereals and correspondingly increasing consumption of pulses, green leafy and other vegetables, fruits, milk and milk products, sugar, oils and fats, fish, meat and eggs.

12.20. Till the end of the Third Plan the Applied Nutrition Programme was limited to the 29 blocks taken up in 1963-64. Twenty-six blocks were taken up during the year 1966-67, 27 blocks during 1967-68 and another 48

blocks during the year 1968-69. Thus by the end of the year 1968-69, 130 blocks had been covered by the Programme, out of which work will be completed in 29 blocks and the remaining 101 blocks would be carried over to the Fourth Plan.

The special characteristics of the programme are—

(1) Education and training of non-officials and officials in improved methods of production of balanced food and preservation and consumption of nutritive foods.

(2) Mobilising individuals and institutions in rural areas for increasing production of foods rich in proteins, vitamins and minerals.

(3) Developing village resources with community effort and to focus attention on the special needs of the vulnerable groups, i.e. children, pregnant women and nursing mothers.

12.21. From 1963-64 to 1968-69, the expenditure under the Community Development Sector on this programme is indicated below :

Year.	(Rs. in lakhs)	
	Community Development	
	Budget provision	Expenditure
1	3	3
	Rs.	Rs.
1963-64	7,00,000	1,82,000
1964-65	7,00,000	4,06,400
1965-66	1,95,000	2,05,600
1966-67	6,48,700	3,60,300
1967-68	10,58,000	8,16,000
1968-69	19,38,000	19,38,000 (Anticipated)

12.22. In addition to this expenditure, a sizeable expenditure has been incurred on this programme under the various sectoral programmes like those of Agriculture, Poultry and Fisheries. Programmes relating to school gardens, establishment of poultry units, provision of equipment, Mahila Mandals, training of poultry breeders, distribution of chicks and birds, pisciculture and horticulture have been the main stay of the scheme. It is proposed to extend Applied Nutrition Programme to 200 additional blocks during the Fourth Plan period, for which a total provision of Rs.300.90 lakhs is being made in the Plan under the Centrally Sponsored Scheme. In addition to this amount

provision has been made in the State Plan also for implementing constituent programmes. The main targets of the programme during the Fourth Plan are given below :

	Numbers
(1) Establishment of school gardens	3,612
(2) Establishment of Poultry Units by Associate Organization or Institutions	5,413
(3) Assistance to Associate Organisation for purchase of equipment	2,408
(4) Training in Nutrition to officials and non-officials ..	20,000
(5) Assistance by UNICEF—	
(a) Mahila Mandals	1,240
(b) Yuvak Mangal Dals	620

Outlays for State Plan Schemes

Head—3. CO-OPERATION AND COMMUNITY DEVELOPMENT

Sector—3.2. COMMUNITY DEVELOPMENT

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
	<i>(1) Community Development</i>						
320101	Community Development Schemes	1000.00	81.95	..	280.00	28.20	..
	<i>(2) Others (Training Schemes)</i>						
320201	Training Reserve	15.00	..	..	3.00	..	..
	Total for Sector 3.2. Community Development	1015.00	81.95	..	283.00	28.20	..

Outlays for State Plan Schemes

Head—3. CO-OPERATION AND COMMUNITY DEVELOPMENT

Sector—3.3. PANCHAYATS.

		(Rupees in lakhs)					
Code no.	Group/ Schemes	Fourth Plan			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
330101	Loans to Gaon Sabhas for development and creation of their productive assets	28.56	26.92	..	14.23	13.96	..
330102	Training of Panchayat Secretaries	5.36	..	..	1.07	..	..
330103	Strengthening of Panchayat Administration at district level	8.48	..	..	1.58	..	..
330104	Strengthening of Panchayat Institutions	57.59	..	..	3.12	..	..
330105	Incentive to Panchayati Raj Institutions	0.01	..	..	..	..	..
330106	Establishment of Panchayati Raj Financial Corporation	0.001	..	..	..	..	..
Total for Sector 3.3. Panchayats		100.00	26.92	..	20.00	13.96	..

13

IRRIGATION

(1) IRRIGATION

13.1. Uttar Pradesh with the exception of the Hill region and some portions of Bundelkhand, is fortunate in the matter of irrigation resources. It is estimated that out of the total water resources of about 3,500 lakh acre-feet in the Ganga basin, 2,500 lakh acre-feet pass through Uttar Pradesh. At present about 50 lakh-acre feet are drawn from the sub-soil strata through tube-wells and masonry wells. As regards the hills even minor irrigation works like small lift schemes, wells, channels, bundhis and tanks have only a limited scope. Wherever feasible *hauz*, tanks and *guls* are taken up. In Bundelkhand also, particularly in the rocky portions of Jhansi, Banda and Hamirpur, minor irrigation works are not very successful except bundhis and tanks.

13.2. Irrigation has been the main plank of the agricultural production programme in the State from the very beginning. The gross irrigated area normally fluctuated between 50 and 53 lakh hectares till 1961-62. The increase in the gross irrigated area between 1950-51 and 1966-67, will be clear from the following table :

Year						Total gross irrigated area (in hectares)
1950-51	..	..	..	..	..	51,78,836
1955-56	..	..	..	..	..	50,05,183
1960-61	..	..	..	..	..	55,28,380
1965-66	..	..	..	..	..	65,76,569
1966-67	..	..	..	..	..	71,21,501

13.3. It would be seen that the gross irrigated area showed a significant rise during the Third Plan as well as in the years of the three Annual Plans (1966-69). The area irrigated more than once increased from 3,69,553 hectares in 1950-51 to 7,32,144 hectares in 1965-66 and to 8,96,897 hectares in 1966-67. At present the net area under cultivation is about 174.00 lakh hectares while the gross area of sown crops is about 222.60 lakh hectares. In view of large irrigation potential available to the State, it should be possible to bring most of the cultivated area under multiple cropping during the next 20-30 years. It would, however, be realistic to aim at 200 per cent intensity of cultivation

during the next 15–20 years, which would give a gross hectarage of 348.00 lakhs. It would not be possible to provide irrigation facilities to those areas which are in the close vicinity of rivers or are undulating ; but assuming irrigable areas constituting 25 per cent of the total cultivable area in Hills, 50 per cent in Bundelkhand and other rocky portions and 80 per cent in the rest of the State, the total irrigable area would roughly come to 127.50 lakh hectares. At 200 per cent intensity of cultivation, irrigation facilities can be planned during the next 15–20 years for a gross area of 255 lakh hectares.

13.4. *State Irrigation Works*—At the beginning of the First Plan the total potential of Major, Medium and Minor State Irrigation works was 30.35 lakh hectares. The actual utilization was 29.29 lakh hectares. By 1967-68 the total potential created by State works was 53.37 lakh hectares, while the utilization was 51.19 lakh hectares. During 1968-69, it is proposed to create an additional irrigation potential of 0.40 lakh hectares from Major and Medium Irrigation schemes and 0.69 lakh hectares from State Minor Irrigation Schemes. The total potential of State irrigation works at the end of 1968-69 would, therefore, be 54.46 lakh hectares. The figures relating to the creation of additional irrigation potential, utilization of potential and actual area irrigated by State irrigation works are given in Table I.

13.5. The figures shown in Table I would show that 97 per cent of the total irrigation potential is already being utilized. The percentage is as high as 98 per cent in the case of Major and Medium Irrigation works, but a little over 96 per cent in the case of a tube-well and Lift Irrigation Schemes. The scheme-wise position has been assessed in respect of Major and Medium Irrigation schemes, which is briefly summarised below :

(i) Full utilisation of the potential of the schemes completed during the First Plan period has already been achieved.

(ii) Full utilization of the potential of the schemes completed during the Second Plan period has been achieved in all except the following schemes :

- (a) Naraini Gandak Canal
- (b) Belan and Tons Canals
- (c) Lalitpur Dam

The utilization of Naraini Gandak Canal potential has not been fully achieved so far on account of the fact that feeding arrangements at the head of the canal are not satisfactory. The situation will be remedied after the completion of Gandak Canal Project and full utilization is expected to be achieved by 1973-74. The shortfall in utilization in respect of Belan and Tons Canals is insignificant and is expected to be made up during the Plan period. The same is true of the shortfall in respect of Lalitpur Dam.

TABLE I

(In lakh hectares)

Period	Potential			Utilisation			Actual Area Irrigated
	Major Medium Schemes	State Minor Schemes	Total	Major Medium Schemes	State Minor Schemes	Total	
1	2	3	4	5	6	7	8
Pre-Plan	25.53	4.82	30.35	25.18	4.11	29.29	27.24
During First Plan	3.30	3.92	7.22	1.39	1.63	3.02	
By the end of First Plan	28.83	8.74	37.57	26.57	5.74	32.31	25.83
During Second Plan	2.71	4.34	7.05	3.19	5.33	8.52	
By the end of Second Plan	31.54	13.08	44.62	29.76	11.07	40.83	32.64
During Third Plan	3.57	3.48	7.05	3.65	3.20	6.85	
By the end of Third Plan	35.11	16.56	51.67	33.41	14.27	47.68	44.00
During 1966-67	0.32	0.50	0.82	1.23	1.82	3.05	
By the end of 1966-67	35.43	17.06	52.49	34.64	16.09	50.73	48.05
During 1967-68	0.26	0.62	0.88	0.26	0.20	0.46	
By the end of 1967-68	35.69	17.68	53.37	34.90	16.29	51.19	N.A.
Anticipated during 1968-69	0.40	0.69	1.09	0.50	0.40	0.90	
Anticipated by the end of 1968-69	36.09	18.37	54.46	35.40	16.69	52.09	N.A.

N. A. = Not available.

(iii) Full potential has been utilized in respect of all the schemes completed during the Third Plan period except the following :

- (a) Tanda Pumped Canal
- (b) Dohrighat Pumped Canal
- (c) Kwano Pumped Canal
- (d) Jirgo Reservoir and Upper Khajuri Reservoir
- (e) Tumaria Reservoir and Balmiki Reservoir.

13.6. Necessary action is being taken to utilize fully the potential from these works during the Fourth Plan period.

13.7. The schemes completed during the Annual Plans 1966-69 would create a total potential of 2,45,515 hectares, out of which the utilization by the end of 1968-69 is expected to be 1,99,835 hectares (81 per cent). The latter is expected to go up to 84 per cent by the end of 1969-70. It is expected that the potential from these schemes will also be totally utilized by 1973-74.

13.8. During the Fourth Plan additional irrigation potential of 18.37 lakh hectares is proposed to be created through the State Irrigation works. The distribution between Major, Medium and Minor Irrigation works is given below :

	In lakh hectares.
(1) Major and Medium Irrigation Works	12.82
(2) Minor Irrigation Works	5.55
Total	18.37

13.9. Thus, at the end of the Fourth Plan the total irrigation potential from the State Irrigation Works would be 72.83 lakh hectares.

13.10. As the irrigation facilities created so far covered only a small area, it was not considered necessary to undertake a scientific assessment of the water potential of the State. It, however, led to an unco-ordinated development of the State and private irrigation works. A stage has been reached when it can not longer be left to drift. Accordingly a beginning has now been made for a scientific survey of the water resources by creating a ground-water cell in the Minor Irrigation Department. Appropriate machinery will have to be set up to suggest the best means of irrigation for different irrigable areas.

Proposals for 1969-74

13.11. While formulating the plan proposals, the following factors have been kept in view :-

- (i) Top priority to continuing schemes to ensure their early completion.
- (ii) Preference to new schemes with lower capital cost per hectare of area irrigated.
- (iii) Supplementing of water in selected existing canal systems to provide intensive irrigation required for intensive cultivation programmes like High-Yielding Varieties.

(iv) Multi-purpose projects primarily in the interest of power development. They will also provide intensive irrigation in some areas and additional new irrigation in others.

(v) Wherever suitable strata is available 3-5 cusecs capacity tube-wells to be installed (against the present 1.5 cusecs) to reduce the cost of ground-water schemes.

(vi) As far as possible balanced development of irrigation in all the regions of the State.

13.12. The Major Irrigation Schemes to continue in the Fourth Plan are Ramganga River Project, Gandak Canal Project and Project Assist. Ramganga Project, which was started in 1961-62, is likely to be completed by 1973-74. An amount of Rs.45.23 crores is likely to be spent by the end of 1968-69 and the remaining amount of Rs.22.77 crores is being provided in the Fourth Plan. The Project, when completed, will create an additional irrigation potential of 7.45 lakh hectares. The Gandak Project is being executed jointly by Bihar and U. P. The scheme was taken up in 1961-62 and is likely to be completed by 1972-73. By the end of 1968-69, an amount of Rs.20.73 crores would have been utilized on this scheme. The remaining amount of Rs.12.62 crores is being provided in the Fourth Plan. This will create an additional irrigation potential of 2.64 lakh hectares. The work on Project Assist was originally initiated in the Third Plan. An amount of Rs.29.50 crores is being provided in the Fourth Plan for this project which, when completed, will create an irrigation potential of 11.74 lakh hectares.

13.13. In the plan of Rs.951 crores, only a nominal provision of Rs.99 lakhs could be made for new Major Irrigation works. In the Supplementary Plan, however, an outlay of Rs.10 crores has been set apart for the purpose.

13.14. The following continuing medium irrigation schemes have been included in the Fourth Plan proposals and are estimated to cost Rs.9.30 crores :

- (1) Jamni Dam
- (2) Chandrawal Dam
- (3) Haripura Reservoir
- (4) Kosi Irrigation Scheme
- (5) Dalmau Pumped Canal
- (6) Bhopauli Pumped Canal
- (7) Zamania Pumped Canal
- (8) Repair of Nanak Sagar Dam.

13.15. A number of new medium irrigation schemes mainly relating to pumped canals, remodelling of headworks and increasing of capacity of certain works will be taken up. The total cost of these schemes would be Rs.16.71 crores, out of which Rs.13.33 crores are proposed to be spent during the Fourth Plan.

NEW MEDIUM IRRIGATION SCHEMES

1. Ren Pumped Canal (River Yamuna—Fatehpur)
2. Ora Pumped Canal (River Badhain—Banda)
3. Tons Pumped Canal (River Tons—Allahabad)
4. Augasi Pumped Canal (River Yamuna—Banda)
5. Sahurapur Pumped Canal (River Betwa—Hamirpur)
6. Remodelling Bhimgoda Head Works
7. Remodelling Hindan Dam
8. Adwa Dam Scheme (River Adwa—Mirzapur)
9. Increasing capacity of Ghagra Pumped Canal.
10. Increasing capacity of Dohrighat Pumped Canal
11. Increasing capacity of Shahjahanpur Branch
12. Remodelling of Ken Canal
13. Works at head of Eastern Yamuna Canal
14. Kishanpur Pumped Canal
15. Bhitaura Pumped Canal

13.16. There are a number of other schemes included in the Fourth Plan which are equally important like extension of workshops, extension of research programme, training facilities for engineers and investigation of new schemes. These schemes, involving an outlay of Rs.1.483 crores, are necessary to support the main irrigation programme.

13.17. *State Minor Irrigation Works*—During the Fourth Plan 1,000 tube-wells of 1.5 cusecs, 200 tube-wells of 3 cusecs and 100 tube-wells of 5 cusecs are proposed to be constructed at a total cost of Rs.22.08 crores. The larger tube-wells of 3 cusecs and 5 cusecs have been found to be more economic and are expected to meet the demand of assured irrigation for high-yielding crops. It is proposed to complete the construction of these tube-wells by 1973-74 thereby creating an additional irrigation potential of 2.75 lakh hectares. Other programmes proposed in the State Minor Irrigation Sector include :

- (1) Renovation of derelict guls, construction of feeder channels ;
- (2) Drainage Improvement ;
- (3) Small lift irrigation schemes, and
- (4) Other surface flow schemes like hill channels, construction of bundhis, remodelling of channels, etc.

These schemes will provide an additional irrigation potential of 2.80 lakh hectares.

OUTLAYS

13.18. The total outlays for State irrigation works in the Fourth Plan have been kept at Rs.130 crores. The broad sub-heads along with their outlays are indicated below :

				(Rs. in crores)
1.	Major Irrigation—Continuing schemes	..	..	64.892
2.	New Major Irrigation schemes	..	..	0.990
3.	Continuing Medium Irrigation schemes	..	..	10.588
4.	New Medium Irrigation schemes	..	..	13.530
Total, Major and Medium Irrigation schemes				90.000
5.	Tube-wells schemes	..	..	23.780
6.	Small lift Irrigation schemes	..	..	13.255
7.	Drainage Improvement schemes	..	..	0.566
8.	Other Minor Irrigation schemes	..	..	2.399
Total, State Minor Irrigation schemes				40.000
Grand Total for all State Irrigation schemes				130.000

SUPPLEMENTARY PLAN

Under the Supplementary Plan of Rs.127.50 crores, additional outlays have been sanctioned for the following projects which will be implemented when additional resources become available :

				(Rs. in crores)
1.	Gandak Project	..	..	7.00
2.	Project Assist	..	..	18.50
3.	New Major Irrigation schemes	..	..	10.00
Total				35.50

13.19. *Financial aspect of irrigation works*—Whereas the maintenance of the private minor irrigation works is the responsibility of their owners, the State works have to be maintained by the Government. According to the figures compiled by the Planning Commission for the years 1965-66, 1966-67 and 1967-68 (tables VII, VIII & IX), the gross receipts from irrigation works in 1965-66 in U. P. were Rs.14.41 crores, while the working expenses amounted to Rs.18.10 crores. Taking normal interest charges on the capital outlay for the year amounting to Rs.7.62 crores, there was a net loss of Rs.6.31 crores from irrigation works in that year. In 1966-67, the revised estimates showed a net loss of Rs.10.13 crores. For 1967-68, the anticipated losses are expected to be Rs.8.75 crores. It would be seen from the statements that none of the States in India is running irrigation works on profit. The question of irrigation losses has been agitating the State and Central Governments from time to time. It is recognised that irrigation works constructed in the recent years and those under construction at present are more expensive than the works built in the past, partly on account of higher costs of material and labour and partly on account of more difficult and more expensive means of making supplies available. For this reason and also on account of the increased cost of maintenance and operation, adequate returns are not being secured and irrigation

systems in all the States of the country are at present working at a loss. The Planning Commission has been of the view that the water rates should ordinarily cover working expenses and debt charges, and outside the scarcity areas, irrigation schemes should not involve loss to general revenues. Unlike other welfare measures, irrigation facilities are available only to people whose areas are served by an irrigation system. It is, therefore, but fair that the people who avail of the facility should adequately pay for it and not impose a burden on the rest of the community. To bring about substantial improvements in financial returns from irrigation projects, the following steps were recommended in the country's Third Plan document :

1. Speeding up of utilization of irrigation facilities created by irrigation projects ;
2. Revision of water rates and introduction of compulsory water cess ;
3. Recovery of betterment levy ; and
4. Economy in the use of irrigation supplies.

13.20. The working of irrigation projects in relation to their financial returns was discussed at the Conference of Irrigation and Power Ministers held in January, 1964. A committee headed by Sri S. Nijalingappa, the then Chief Minister of Mysore, was set up in April, 1964, to examine the whole question and to suggest ways and means of improving financial returns from irrigation projects. The Committee *inter alia* made the following recommendations :

- (i) Water rates should be on the basis of a suitable percentage of the additional net benefit to the farmers ;
- (ii) In States where irrigation charges are optional, there should be a charge to cover at least maintenance and operation charges, whether the facility is actually made use of or not ;
- (iii) A betterment capital levy should be charged on irrigation projects ;
- (iv) Economic benefit criterion should be adopted for sanctioning irrigation project instead of the present financial criterion.

13.21. In U. P. the irrigation rates were last fixed in 1953. The agriculture price index has risen by about 123 per cent since then, but irrigation rates have remained constant. Two-part tariff has, however, been introduced on State tube-wells and lift irrigation schemes. These measures are, however, not likely to wipe of the losses.

13.22. It may, in brief, be explained that there is usually a gap between the potential created and utilization. The reasons would differ from project to project, but would mainly relate to absence of a pre-planned cropping pattern, which would encourage cultivators to utilize irrigation potential as soon as it is created. Other reasons include absence of proper field channels and delay in acquisition of land. The figures of utilization of potential also differ from the area actually irrigated in a particular year. The utilization

of a project would mean the highest level of irrigation reached on that project in any year, while the actual area irrigated would mean the area irrigated in different years from particular project.

13.23. During the Fourth Plan, efforts will be made to narrow the gaps between the potential created, utilization of potential and the actual area irrigated. The Co-ordination Committees at the various levels, the farmers' training programme, the proposed orientation courses for Irrigation Department officers and a more intensive cropping pattern for irrigated areas are among the steps proposed for achieving this objective. A very effective extension programme to prepare the cultivators to take up the desired cropping pattern in the irrigated areas will have to be implemented with the active participation of the Irrigation and Agriculture Departments and the Community Development Organisation.

Private Minor Irrigation

13.24. Private Minor Irrigation works have always played an important part in the irrigation programmes of this State, where the holdings are small and the rains are, quite often, not timely. These works provide the cultivator assured and timely irrigation entirely under his personal control. The exotic and other high-yielding varieties require more intensive irrigation and much higher level of inputs like fertilizers. The cultivator can be expected to make heavy investment required for modern agriculture only if he has assured irrigation. Higher prices of agriculture commodities, coupled with the all-out efforts to increase food production have given a new orientation to Agricultural Production Programmes. It is a matter of some satisfaction that the programme of construction of private tube-wells/pump sets has made a significant progress during the last few years.

13.25. The potential created through minor irrigation works is not fully reflected in the reported area of irrigation as in many cases new works either replace old works or intensify irrigation in the areas commanded by the State works. Though there is a multiplicity of factors, this seems to be the most apparent cause of difference in the figures of area of additional irrigation potential and the actual area under irrigation. The question has, however, been engaging the attention of the State Government and 50 blocks have been selected to study the problem in all its aspects.

13.26. Since the beginning of the First Plan, finances have been made available in the shape of loan to the cultivators for private minor irrigation works. The amount of loan which was only Rs.2.226 crores in the First Plan rose to Rs.7.582 crores during the Second Plan and Rs.42.576 crores in the Third Plan. The loan assistance was further increased during the three following

Annual Plans. The financial and physical progress of the private minor irrigation works during the last 18 years are indicated in tables II and III below :

TABLE II

Financial

(Rs. in lakhs)

Period	G.M.F.		C.D. and NES loan	Institutional loaning	Total
	Total	Loan			
First Plan	203.09	199.15	23.46	..	226.55
Second Plan	409.66	394.71	363.50	..	773.16
Third Plan	3189.54	2921.32	1089.65	246.61	4525.80
1966-67	2135.67	1825.56	76.35	732.83	2944.85
1967-68	2141.63	1381.76	6.00	1076.51	3224.14
1968-69 (Programme) ..	1620.00	485.80	..	3250.00	4870.00

TABLE III

Physical

Period	Masonry Wells	Borings	Persian Wheels	Pumping Sets	Private Tubewells
First Plan	35,904	17,346	6,787	135	416
Second Plan	36,853	23,594	21,742	2,648	1,837
Third Plan	2,20,724	1,06,106	1,39,541	19,677	21,545
1966-67	84,340	68,469	61,185	23,190	24,996
1967-68	71,144	75,226	40,511	24,825	30,784
1968-69 (Programme) ..	80,000	90,000	50,000	25,000	28,000

13.27. The potential created from the above works during the various Plan periods is given in the following table.

TABLE IV

(In lakh hectares)

Period	Additional irrigation potential created	Total Irrigation potential
Pre-Plan .. ..	..	14.44
First Plan	0.76	15.20
Second Plan	1.45	16.65
Third Plan	8.48	25.13
1966-67	5.16	30.29
1967-68	4.98	35.27
1968-69 (Target) ..	5.57	40.84

During the Fourth Plan, an additional irrigation potential of 30.29 lakh hectares will be created through private minor irrigation works. The details are given below :

TABLE V

Item	No. of works to be completed	Additional irrig. potential in lakh hectares
Masonry wells	3,28,000	3.98
Boring	5,00,000	4.05
Deepening of wells	4,500	0.02
Persian wheels	2,00,000	..
Pumping sets :		
Electric	70,000	2.26
Diesel	85,000	2.76
Private tubewells	2,00,000	16.19
Private and Gaon Sabha Bundhis (hectares)	93,000	0.93
Guls and tanks in hills (hectares)	10,000	0.10
	Total	30.29

13.28. It has been estimated that the above programme will cost about Rs.399.19 crores. In addition to this Rs.15 crores are proposed to be secured from financial institutions for the energisation of private tube-wells and pumping sets. The total investment of Rs.414.19 crores is expected from the following agencies :

TABLE VI

	(Rs. in crores)
A. Public Sector	
Loaning under G.M.F.	20.00
B. Institutions	
Land Development Bank	95.00
Agricultural Refinance Corporation	40.00
Agro-Industries Corporation	30.00
Central Cooperative Bank	25.00
Commercial Banks	15.00
	Total
	205.00
C—Private Sector	
Amount to be invested by individuals, who construct works after taking loans	61.88
Amount to be invested by individuals who construct works without taking loans	127.31
	Total
	189.19
	Grand Total
	414.19

13.29. To enable the Land Development Bank and the Agricultural Refinance Corporation to take up a programme of the dimensions indicated above, a provision of Rs.20.25 crores has been made in the Fourth Plan for the purchase of debentures of these institutions. A provision of Rs.1.50 crores has also been made for contribution towards the share capital of Agro-Industries Corporation. Apart from the expenditure on staff, training and tools a provision of Rs.7.50 crores has been made for subsidy on private minor irrigation works to small cultivators.

13.30. Thus, while the State and the financial institutions will provide an amount of Rs.205 crores for private minor irrigation works during the Fourth Plan, the beneficiaries own contribution would be of an order of about Rs.190 crores.

Irrigation in Drought Areas

13.31. The contiguous belt comprising almost the whole of Mirzapur district, Meja and Karchhana tahsils of Allahabad district, Patha area of Banda district and Naugarh area of Varanasi district are subject to chronic droughts and the resultant severe scarcity conditions. There are a number of other eastern districts also which are quite occasionally affected by severe conditions. The districts of Jaunpur, Ghazipur, Azamgarh and Pratapgarh are presently (1968-69) facing severe drought conditions. The drought affected areas have been given due consideration while drawing up the Irrigation Plan. Though no new major irrigation work has yet been included in the Fourth Plan yet the continuing Ram Ganga Project will benefit an area of 17,644 hectares in the drought affected areas of Allahabad district in the Fourth Plan. The following medium irrigation schemes on completion will benefit the drought affected area—

- | | |
|---------------------------|----------------------------|
| 1. Dalmau Pumped Canal. | 7. Augasi Pumped Canal. |
| 2. Bhopauli Pumped Canal. | 8. Sahurapur Pumped Canal. |
| 3. Zamania Pumped Canal. | 9. Kishanpur Pumped Canal. |
| 4. Ren Pumped Canal. | 10. Bithaura Pumped Canal. |
| 5. Tons Pumped Canal. | 11. Barwa Dam. |
| 6. Ora Pumped Canal. | |

13.32. These medium irrigation schemes will together create an additional irrigation potential of 2.17 lakh hectares in the drought affected districts. A number of small lift irrigation schemes are proposed to be taken up in the Fourth Plan in the affected districts, which will create an irrigation potential of 76,606 hectares. Five hundred and twenty State tube-wells of 1.5 cusecs have also been proposed for the drought affected areas except Banda and an irrigation potential of 82,670 hectares will be created from these tube-wells. Apart from these measures, 4 Bundhis, viz. Raghunathpur Bundhi, Barkacha Bundhi, Jharokhis Bundhi and Rampur Pindaraya Bundhi will be constructed in Mirzapur district and will create an additional irrigation potential of 1,101 hectares. A Bundhi, namely, Chatampur Bundhi will also be taken up in Varanasi district with an irrigation potential of 385 hectares.

13.33. In the Private Minor Irrigation Sector also, it is proposed to take up as many works in the drought affected areas as possible. The proposed target for these areas include 75,000 masonry wells, 74,600 borings in wells, 20,000 Persian wheels, 36,700 pumping sets, 17,045 private tube-wells and bundhis covering an area of 21,124 hectares. Together, these works will create an additional irrigation potential of 4.09 lakh hectares.

TABLE VII

Financial Return from Irrigation Works—Commercial—1965-66 (Actuals)

(Rupees in lakhs)

Serial number	Name of State	Gross receipt	Working expenses	Net revenue (+) or (—)	Interest charges on capital outlay	Net loss (—)
1	2	3	4	5	6	7
1	Andhra Pradesh	19	243	(—)224	489	(—)713
2	Bihar	191	163	28	47	(—)19
3	Gujarat	63	67	(—)4	377	(—)381
4	Kerala	9	17	(—)8	110	(—)118
5	Madras	141	130	11	382	(—)371
6	Maharashtra	188	99	89	497	(—)408
7	Mysore	44	93	(—)49	555	(—)608
8	Orissa	40	24	16	102	(—)86
9	Punjab and Haryana ..	549	292	257	357	(—)100
10	Rajasthan	52	23	29	435	(—)406
11	Uttar Pradesh	1,441	1,310	131	762	(—)631
12	West Bengal	32	34	(—)2	32	(—)34
Total		2,769	2,495	274	4,149	(—) 3,875

N. B.—(1) There are no commercial irrigation works in Assam and Jammu and Kashmir.

(2) Madhya Pradesh Government is not maintaining commercial account for irrigation works.

TABLE VIII

Financial Return from Irrigation Works—Commercial—1966-67
(Revised estimates)

(Rupees in lakhs)

Serial number	Name of State	Gross receipts	Working expenses	Net revenue (+) or (-)	Interest charges on capital outlay	Net loss (-)
1	2	3	4	5	6	7
1	Andhra Pradesh	369	222	147	535	(-)388
2	Bihar	92	150	(-)58	47	(-)105
3	Gujrat	89	71	18	400	(-)382
4	Kerala	13	16	(-)3	117	(-)120
5	Madras	170	137	33	419	(-)386
6	Maharashtra	207	92	115	602	(-)487
7	Mysore	38	120	(-)82	651	(-)733
8	Orissa	23	44	(-)21	273	(-)294
9	Punjab and Haryana	497*	270*	227	378*	(-)151
10	Rajasthan	51	34	17	58	(-)41
11	Uttar Pradesh	1,372	1,528	(-)156	857	(-)1,013
12	West Bengal	17	30	(-)13	40	(-)53
	Total	2,938	2,714	224	4,377	(-)4,153

*Budget estimates.

N. B.—(1) There are no commercial irrigation works in Assam and Jammu and Kashmir.
(2) Madhya Pradesh Government is not maintaining commercial account for irrigation works.

TABLE IX

Financial Return from Irrigation Works—Commercial—1967-68
(Anticipated)

(Rupees in lakhs)

Serial no.	Name of State	Gross receipts	Working expenses	Net revenue (+) or (-)	Interest charges on capital outlay	Net loss (-)
1	2	3	4	5	6	7
1	Andhra Pradesh	19	189	(-)170	584	(-)754
2	Bihar	125	163	(-)38	47	(-)85
3	Gujrat	95	77	18	419	(-)401
4	Kerala	16	17	(-)1	121	(-)122
5	Madras	172	150	22	435	(-)413
6	Maharashtra	230	100	130	705	(-)575
7	Mysore	133	132	1	700	(-)699
8	Orissa	89	47	42	336	(-)294
9	Punjab and Haryana	460	363	97	420	(-)323
10	Rajasthan	62	26	36	60	(-)24
11	Uttar Pradesh	1,573	1,520	53	928	(-)875
12	West Bengal	17	33	(-)16	44	(-)60
	Total	2,991	2,817	174	4,799	(-)4,625

N. B.—(1) There are no commercial irrigation works in Assam and Jammu and Kashmir.
(2) Madhya Pradesh Government is not maintaining commercial account for irrigation works.

2. FLOOD CONTROL

13.34. Floods are a regular feature in Uttar Pradesh. Vast areas are inundated causing damage to crops, cattle and human life. It has been assessed after a study of the damage caused by floods during the period 1951-61 that the area affected by floods in this State varies from 9.30 lakh hectares during a year of low flood to 40.00 lakh hectares during a year of high flood. The average area affected during floods of medium intensity is about 33.60 lakh hectares. In 1953, it was estimated that 19 per cent of the population in the State was affected by floods and a loss of about Rs.40 crores was caused.

13.35. The problem of flood has aggravated with natural waterways being obstructed by the construction of new roads, railway lines, canals and similar other projects. The impact of flood is not uniform in all the areas of the State. A study of the average area affected by medium floods during the last 15 years shows that out of 33.60 lakh hectares damaged by medium floods in the State, about 15 lakh hectares are in the eastern region followed by about 13 lakh hectares in the western region and about 5 lakh hectares in the central region. An analysis of the areas most affected by floods shows that Bulandshahr in the western region and Basti and Bahraich in the eastern region are the worst affected districts.

13.36. The rivers which generally cause floods are the Ganga, Yamuna, Ghaghara, Rapti, Ramganga and Sharda. Other rivers also cause damage in certain years. The river Ganga is responsible for floods in 11 western districts, four central districts and five eastern districts, while Yamuna causes floods in nine western districts, two central districts and one eastern district. Rapti and Ghaghara cause serious floods in five and eight eastern districts respectively. The floods in the State are ascribed to inadequate drainage in intensive irrigated areas, inadequate drainage capacity in long rivers, change of river courses and inadequate facilities for flood warnings. The nature of the problem, however, varies from region to region. In the western region the problem of flood is of a rather recent origin. Rivers like the Kali, Neem, Sirsa, Sengar, Arind, Kak, Karwan, Isan, which originate in the plains have started inundating their banks causing considerable damage to the thickly populated and rich cultivated areas. In the western area the flood problem has also partly resulted from the increase in depression pockets due to the construction of canals and railways etc. The main rivers flowing in the western areas, viz., the Ganga, Yamuna and Ramganga also cause floods.

13.37. In the Central region, the main rivers serving the area are the Ganga, Yamuna, Sharda and Ghaghara with their tributaries like the Gomti, Sai and Kalyani, which swell during the rainy season and overflow their banks. It has been observed that in this area the problem of drainage congestion has increased only recently mainly due to heavy cloud bursts and rains at short intervals.

13.38. The Joint Study Team, popularly known as the Patel Committee, while studying problems of the eastern districts, observed that the main causes

of the floods in the eastern districts of U. P. were: (1) occasional high intensity of rainfall, (2) poor country slopes, (3) high sub-soil water level, (4) accumulation in river beds of considerable quantity of detritus brought down by the rivers from the hills causing gradual rise of their beds, and (5) existence of a number of depressions which are difficult to be drained off.

13.39. In 1964, an attempt was made to assess the magnitude of the problem. The Government of India asked the States to prepare master plans for flood control and drainage improvement. Uttar Pradesh also prepared a master plan involving a cost of Rs.228.00 crores. It was estimated that with this expenditure the flood problem would be met to the extent of about 83 per cent. The cost of flood control measures would now be appreciably higher than that estimated five years back. Within the limited resources of the State, it has not been possible to make substantial investments in this sector and during the Fourth Plan also the total investments on flood control measures would be only Rs.8.00 crores. It is, therefore, clear that this State would not be in a position to implement the master plan for many years to come.

13.40. Since the beginning of the planning, an amount of Rs.21.09 crores has been utilised on flood protection works benefiting an area of 5.17 lakh hectares. During the first two Plan period, an amount of Rs.10.75 crores was utilised benefiting an area of about 4.34 lakh hectares. During the Third Plan, an amount of Rs.6.79 crores was utilised benefiting an area of 56,000 hectares. During the three Annual Plans, the amount utilised on the flood sector would be Rs.3.55 crores benefiting an area of 27,000 hectares. The group-wise expenditure is indicated below :

(Rupees in crores)

Group	Expenditure during					1968-69 (Anticipated)
	First and Second Plan	Third Plan	1966-67	1967-68		
1	2	3	4	5	6	
Marginal embankments ..	3.11	1.78	0.08	0.34	0.99	
Flood detention reservoir ..	..	..	0.39	0.32	0.10	
Raising of marooned villages ..	4.29	0.30	..	..	..
Protection of towns ..	1.19	2.01	0.34	0.30	0.03	
Extension of water—ways ..	0.19	0.04	0.01	..	0.02	
River improvement and anti-erosion works ..	0.26	0.29	0.02	0.06	..	
Survey, investigation and flood forecasting ..	0.13	0.07	..	0.01	0.01	
Drainage improvement works ..	0.59	1.35	0.15	0.10	..	
Emergent unforeseen works ..	..	..	..	..	0.10	
Overhead, tools and plan's charges ..	0.99	0.95	0.17	0.01	..	
Total ..	10.75	6.79	1.16	1.14	1.25	

13.41. Out of the total expenditure of Rs.21.20 crores for flood protection since 1950-51, the expenditure on works proper was Rs.18.68 crores. The expenditure on flood control works in the eastern districts was Rs.8.572 crores, while in the western region this was Rs.4.257 crores. The region-wise expenditure on works executed in each Plan period is given in Statement I.

13.42. As indicated earlier, the problem of flood control and drainage improvement, which is very serious in this State, cannot be adequately met within the limited resources of the State. The Fourth Five-Year Plan would, therefore, cater only to some of the immediate needs. The group-wise apportionment of the proposed outlay of Rs.8.00 crores is indicated below :

<i>Group</i>	<i>(Rupees in crores)</i>
1. Marginal embankments	1.07
2. Protection of towns	2.05
3. Extension of water-ways	0.71
4. River Improvement and anti-erosion works	0.01
5. Survey, investigation and flood forecasting	0.73
6. Drainage improvement works	3.03
7. Emergent unforeseen works	0.40
Total ..	8.00

13.43. Out of the proposed allocation of Rs.8.00 crores, Rs.3.71 crores are proposed to be utilised in the western region including Rs.2.409 crores on drainage improvement, Rs.1.69 crores in the eastern region including Rs.74.99 lakhs on marginal embankment and Rs.56.6 lakhs on protection of towns. The region-wise break-up of the outlay of the Fourth Plan is given in Statement II.

13.44. During the Fourth Plan the flood protection and drainage improvement schemes would benefit an area of about 1.47 lakh hectares. Some of the important projects included in the Fourth Plan are as below :

- (1) Retirement of Chitauni Bund from Western Gandak Canal Railway Crossing to village Katai, Bhatpurwa (Outlay of Rs.17.57 lakhs).
- (2) Alipur Bund (Outlay of Rs.14.75 lakhs).
- (3) Protection of Malony and Hobert Bund at Gorakhpur (Outlay of Rs.26.81 lakhs).
- (4) Protection of Lucknow town (Outlay of Rs.125.0 lakhs).
- (5) Protection of Varanasi town-Appron launching in front of undermined ghats in Varanasi district (Outlay of Rs.51.40 lakhs).
- (6) Extension of water-ways on Kali, Kak, Isan, Arind, Sengar, Sirsa, Sai and Loni Nadi (Outlay of Rs.46.73 lakhs).
- (7) Drains in four eastern districts (Outlay of Rs.17.40 lakhs).
- (8) Falls on Western Depression Drain (Outlay of Rs.28.55 lakhs).
- (9) Masonry works on Harnad Drain (Outlay of Rs.76.19 lakhs).
- (10) Bhatain Drain (Outlay of Rs.9.87 lakhs).
- (11) Masonry works on Kakua Drain (Outlay of Rs.25.87 lakhs).
- (12) Bharail Drain (Outlay of Rs.10.04 lakhs).
- (13) Remodelling and extension of Hathaura Drain (Outlay of Rs.18.12 lakhs).
- (14) Remodelling of Aligarh Drain (Outlay of Rs.35.00 lakhs).

STATEMENT I

*Zone-wise expenditure on works executed in
each Plan period*

(Rupees in lakhs)

Period	Hill zone	Western zone	Central zone	Eastern zone	Bundelkhand zone	Common to various zones	Total
First Five Year Plan	14.563	85.766	0.900	528.04	8.617	338.427	976.314
Second Five Year Plan							
Third Five Year Plan	14.985	204.957	124.986	217.880	1.458	19.864	584.130
1966-67	2.697	56.307	22.218	17.992	..	..	99.214
1967-68	1.050	49.622	22.351	39.222	0.479	..	112.724
1968-69 (Anticipated)	0.565	28.994	6.581	54.090	0.870	4.180	95.280

STATEMENT II

*Zone-wise break-up of Fourth Five Year Plan
outlay of Rs.800 lakhs*

(Rupees in lakhs)

Scheme	Hill zone	Western zone	Central zone	Eastern zone	Bundelkhand zone	Total
1. Marginal Embankment	..	32.254	..	74.990	..	107.244
2. Protection of Towns	9.000	14.612	125.000	56.600	0.070	205.282
3. River improvement and anti-erosion work	..	1.088	..	..	..	1.088
4. Drainage	0.700	240.917	37.574	17.404	6.060	302.655
5. Extension of waterways	..	62.061	9.210	..	..	71.271
6. Survey, Investigation and Food Forecasting	7.230	20.000	15.000	20.000	10.230	72.460
7. Emergent unforeseen works	..	..	..	..	..	40.000
Total	16.930	370.932	186.784	168.994	16.360	800.000

Outlays for State Plan Schemes

Head—1. AGRICULTURAL PROGRAMMES

Sector—1.2. MINOR IRRIGATION

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan			1969-70		
		Total Outlay	Capital	Foreign Exchange	Total Outlay	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
1. Private Minor Irrigation							
120101	Loaning for—						
	(1) Masonry wells						
	(2) Boring in wells						
	(3) Deepening of wells						
	(4) Persian wheels	2000.00	2000.00	..	275.30	275.30	..
	(5) Pumping Sets						
	(6) Private tube-wells						
	(7) Private Bundhis						
	(8) Guls and Tanks in Hills						
120102	Subsidy	750.00	..	..	200.00	..	..
120103	Staff, tools and contingencies	666.00	..	..	140.00	..	..
120104	Construction of Boring Godowns	3.00	3.00	..	3.00	3.00	..
120105	Training in Minor Irrigation and Water Use	6.00	..	..	1.20	..	..
120106	Investment in—						
	(1) Debentures of Land Development Bank	1425.00	1425.00	..	300.00	300.00	..
	(2) Debentures of Agricultural Refinance Corporation	600.00	600.00	..	100.50	100.50	..
	(3) Share Capital for Agro-Industries Corporation	150.00	150.00	..	30.00	30.00	..
	Total for (1)	5600.00	4178.00	..	1050.00	708.80	..

State Minor Irrigation

2. Tube-well Schemes—

120201	Construction of tube-wells of 1.5, 3.0 and 5.0 cusecs	..	..	..
120202	Renovation of derelict guls	..	..	..
120203	Improving discharge of Tube-wells	..	..	..
120204	Ground Water Survey	..	..	..
			Total (2)	..

3. Lift Irrigation Schemes—

120301	Spill-over Schemes	..	..	..
120302	New Schemes	..	..	..
			Total (3)	..

4. Drainage Improvement Works

120401	Spill-over Schemes	..	..	..
120402	New Schemes	..	..	..
			Total (4)	..

5. Other Minor Irrigation Schemes

CONTINUING SCHEMES—

120501	Remodelling Channels of Raipura Tank System	..	..	..
120502	Constructing Feeder Channel from Kalyan Sagar to Vijay Nagar Tank.	..	..	..
120503	Increasing Capacity of Kulphar Tank	..	..	..
120504	Lining Hill Channels in Pauri-Garhwal	..	..	..
120505	Lining G. B. G. E. Canal	..	..	..

2208.00	2208.00	95.00	444.00	444.00	25.00
70.00	70.00	..	15.00	15.00	..
40.00	40.00	..	8.00	8.00	..
60.00	60.00	15.00	20.00	20.00	7.00
2378.00	2378.00	110.00	487.00	487.00	32.00
30.00	30.00	..	30.00	30.00	..
1295.50	1295.50	..	210.00	210.00	..
1325.50	1325.50	..	240.00	240.00	..
6.64	6.64	..	6.64	6.64	..
50.00	50.00	..	10.84	10.84	..
56.64	56.64	..	17.48	17.48	..
0.15	0.15	..	0.15	0.15	..
0.24	0.24	..	0.24	0.24	..
0.54	0.54	..	0.15	0.15	..
0.93	0.93	..	0.93	0.93	..
1.22	1.22	..	1.22	1.22	..

Head—1. AGRICULTURAL PROGRAMMES

Sector—1.2. MINOR IRRIGATION—(concd.)

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan			1969-70		
		Total Outlay	Capital	Foreign Exchange	Total Outlay	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
120506	Hariawala Canal	1.93	1.93	..	1.93	1.93	..
120507	Constructing 27.36 km. hill channels in Pauri-Garhwal	13.42	13.42	..	2.00	2.00	..
120508	Constructing 41.84 km. hill channels in Tehri-Garhwal	18.64	18.64	..	3.00	3.00	..
120509	Constructing 61.15 km. hill channels in Almora and Naini Tal.	24.11	24.11	..	3.70	3.70	..
	Total ..	61.18	61.18	..	13.32	13.32	..
<i>New Schemes—</i>							
120510	Lining and increasing capacity of Gaulawar Canal	8.00	8.00	..	..	..	..
120511	Lining and increasing capacity of Gaulapur Canal	10.00	10.00	..	..	..	..
120512	Lining Canal in Doon Valley	31.35	31.35	..	..	..	..
120513	Constructing small channels in Doon Valley	28.33	28.33	..	..	..	..
120514	Constructing small channels in Bazpur Block	3.18	3.18	..	..	..	..
120515	Lining guls in Garhwal Bhabar	6.54	6.54	..	..	..	..
120516	Revival of Motipur Sarovar	1.40	1.40	..	..	..	..
120517	Gauchai Nala Tank	1.46	1.46	—	..	..	..
120518	Bamori Tank	5.50	5.50	—	..	..	..

120519	Increasing Capacity of Bunt Tank	..	..
120520	Extension of Barwar Canal	..	..
120521	64.37 km. Channels in Hill Areas	..	..
120522	Laldhong Irrigation Scheme	..	..
120523	Chitampur Bundhi	..	..
120524	Raghunathpur Bundhi	..	..
120525	Jharokhas Bundhi	..	..
120526	Barkacha Bundhi	-	-
120527	Rampur Pindaraya Bundhi	-	-
	Total		-
	Total (5)		-
	Total, State Minor Irrigation Schemes	..	..
	Total for Sector 1.2. Minor Irrigation	..	..

0.77	0.77	..	..	..	1
0.45	0.45	..	..	..	..
30.00	30.00	..	2.20	2.20	..
9.49	9.49	..	..	..	..
7.46	7.46	..	..	..	..
8.18	8.18	..	..	..	..
10.41	10.41	..	..	..	..
10.37	10.37	..	..	..	..
5.79	5.79	..	..	..	..
178.68	178.68	..	2.20	2.20	..
239.86	239.86	..	15.52	15.52	..
4000.00	4000.00	110.00	760.00	760.00	32.00
9600.00	8178.00	110.00	1810.00	1468.80	32.00

Outlays for State Plan Schemes

Head—4. IRRIGATION AND POWER

Sector—4.1. IRRIGATION

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan			1969-70		
		Total Outlay	Capital	Foreign Exchange	Total Outlay	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
<i>(1) Continuing Schemes—</i>							
1. Major Irrigation Schemes—							
410101	Ramganga River Project	2277.34	2277.34	610.00	600.00	600.00	300.00
410102	Gandak Canal Project	1261.82	1261.82	..	400.00	400.00	..
410103	Project Assist	2950.00	2950.00	250.00	300.00	300.00	..
	Total	6489.16	6489.16	860.00	1300.00	1300.00	300.00
2. Medium Irrigation Schemes—							
410201	Nanak Sagar Dam (Repairing)	100.00	100.00	..	35.00	35.00	..
410202	Jamni Dam	190.64	190.64	..	60.00	60.00	..
410203	Chandrawal Dam	29.44	29.44	..	12.00	12.00	..
410204	Haripura Reservoir	181.83	181.83	6.00	35.00	35.00	3.80
410205	Kosi Irrigation Scheme	280.50	280.50	3.00	30.00	30.00	..
410206	Dalmau Pumped Canal	64.00	64.00	..	60.00	60.00	..
410207	Bhopauli Pumped Canal	31.00	31.00	..	26.00	26.00	..
410208	Zamania Pumped Canal	43.00	43.00	..	38.00	38.00	..
410209	Extension of Workshops	12.30	12.30	..	6.00	6.00	..
410210	Extension of Research Programme	16.00	16.00	2.00	3.00	3.00	1.00
410211	Investigation of new projects	100.00	100.00	..	16.00	16.00	..
410212	Adjustment against other continuing Schemes	10.13	10.13	..	4.00	4.00	..
	Total	1058.84	1058.84	11.00	325.00	325.00	4.80
	Total for Continuing Schemes	7548.00	7548.00	871.00	1625.00	1625.00	304.80

(2) *New Schemes—*

3. Major Schemes

4. Medium Schemes—

410401	Kishanpur Pumped Canal	..	..
410402	Ren Pumped Canal	..	..
410403	Remodelling Ken Canal	..	..
410404	Work at Head of Eastern Yamuna Canal	..	..
410405	Training facilities for Engineers	..	..
410406	Tons Pumped Canal	..	..
410407	Remodelling of Bhimgoda Head Works	..	..
410408	Remodelling of Hindan Dam	..	..
410409	Increasing capacity of Dohrighat Pumped Canal	..	..
410410	Increasing Capacity of Ghaghra Pumped Canal	..	..
410411	Remodelling of Shahjahanpur Branch	..	..
410412	Adwa Dam	..	..
410413	Sahurapur Pumped Canal	..	..
410414	Bhitaura Pumped Canal	..	..
410415	Augasi Pumped Canal	..	..
410416	Ora Pumped Canal	..	..
	Total	..	..
	Total for New Schemes	..	..
	Total for Sector 4.1. Irrigation	..	..

99.00	99.00	..	..	..	..
91.00	91.00	..	7.00	7.00	..
152.00	152.00	..	..	..	..
48.00	48.00	..	8.00	8.00	..
30.00	30.00	..	5.00	5.00	..
20.00	20.00	..	5.00	5.00	..
175.00	175.00	..	50.00	50.00	..
85.00	85.00	..	..	..	..
110.00	110.00	..	..	..	..
80.00	80.00	..	..	..	..
80.00	80.00	..	..	..	..
36.00	36.00	..	..	..	..
50.00	50.00	..	..	..	..
100.00	100.00	..	..	..	..
170.00	170.00	..	..	..	..
73.00	73.00	..	..	..	..
53.00	53.00	..	..	..	..
1353.00	1353.00	..	75.00	75.00	..
1452.00	1452.00	..	75.00	75.00	..
9000.00	9000.00	871.00	1700.00	1700.00	304.80

Head. -- 4. IRRIGATION AND POWER

Sector—4. 2. FLOOD CONTROL

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan			1969-70		
		Total Outlay	Capital	Foreign Exchange	Total Outlay	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
420101	Marginal Embankments	107.24	107.24	..	42.30	42.30	..
420102	Protection of Towns	205.28	205.28	..	38.60	38.60	..
420103	Extension of Water-ways	71.27	71.27	..	6.00	6.00	..
420104	Survey, Investigation and Flood Forecasting	72.46	72.46	..	5.46	5.46	..
420105	Drainage Improvement Works	302.66	302.66	..	30.30	30.30	..
420106	River Improvement and Anti-erosion Works	1.09	1.09	..	1.09	1.09	..
420107	Ad hoc provision for emergent unforeseen Schemes	40.00	40.00	..	6.25	6.25	..
Total for Sector-4.2. Flood Control		800.00	800.00	..	130.00	130.00	..

POWER

14.1. Power has been among the more significant fields of development since the planning era. The development of power is a pre-requisite for the development of industries and agriculture on progressive lines. The total installed generating capacity in the State at the beginning of the First Plan was 178.54 MW., which increased to 370.17 MW at the end of the Second Five-Year Plan (excluding the non-utility undertakings). While framing the Third Plan, it was realised that the State economy would remain stagnant unless power development programme was substantially accelerated. An amount of Rs.107.60 crores was allocated to the Power Sector for the Third Plan but the actual expenditure was Rs.157.01 crores. This reflected the determination of the State Government to accelerate power development programmes.

14.2. During the three Annual Plans also high priority was given to power programme in the interest of the agricultural and industrial development of the State. The progress in installed capacity, transmission, distribution and electrification during the various plan periods will be clear from the following table :

Item	Unit	At the end of Second Plan	At the end of Third Plan	At the end of 1968-69 (Anticipated)
1. Installed capacity	M.W.	370.17	910.14	1310.04*
2. Electricity generated	M. kWh.	1,213	3,022	5,302
3. Electricity sold	Do.	930	2,588	4,140
4. 66 kV. and above lines	Circuit km.	2,000	4,267	8,379
5. 44/37.5/33 kV. lines	Do.	3,462	6,736	89,28
6. Below 33 kV. (excluding L. T.) lines	Do.	18,111	34,902	54,745
7. L. T. Lines	Do.	2,285	9,869	17,499
8. Energisation of private tube-wells	Nos.	1,130	9, ..	65,513
9. Energisation of State Tube-wells	Do.	6,070	7,675	8,828
10. Localities electrified	Do.	211	4,692	4,852

*Excludes 39.10 MW. on account of retirement of old sets.

14.3. The maximum system demand at the end of 1968-69 was 990 MW against 772 MW in 1967-68, 663 MW in 1966-67 and 490 MW in 1965-66. This gives an average annual growth of more than 30 per cent since 1965-66. The firm capacity at the end of 1968-69 is expected to be about 870 MW resulting in a shortage of 120 MW in the base year of the Fourth Five-Year Plan.

14.4. It has been assessed that whereas the use of electricity for domestic purposes will be only 2.3 per cent of the total electricity utilised in 1973-74 as against 3.3 per cent in 1968-69 and eight per cent in 1965-66, the respective percentages for industry being 70.9 in 1973-74, 68.2 in 1968-69 and 69.1 in 1965-66. 13.3 per cent of electricity was being utilised for irrigation in 1965-66 which will increase to 18 per cent by the end of 1968-69 and 19.3 per cent by 1973-74.

According to the detailed load survey carried out by the State Electricity Board, the simultaneous maximum demand in the U. P. power system by the end of the Fourth Plan was assessed at 2,683 MW. The break-up is given below :

Simultaneous maximum demand by the end of Fourth Plan in Uttar Pradesh

Serial number	Class of Load	Anticipated by end of 1968-69	Visualised during Fourth Plan	By end of Fourth Plan
1	2	3	4	5
		MW	MW	MW
1	Domestic and Commercial	21.30	18.60	39.90
2	Water Works	14.00	9.50	23.50
3	Small and Medium Industries	217.00	220.00	437.00
4	Irrigation—			
	(a) State Tube-wells	42.14	11.46	53.60
	(b) Private Tube-wells	149.00	265.00	414.00
5	Licensees contracted demand	69.00	27.00	96.00
6	Licensees contracted demand from licensees generation	1.76	..	1.76
7	Major Loads—			
	(a) Below 20 MW	332.00	738.00	1,070.00
	(b) 10 per cent of Aluminium Factory load	11.50	9.70	21.20
	(c) 20 MW and above	30.60	143.40	174.00
	(d) 90 per cent of Aluminium Factory load	135.00	114.30	249.30
	Sub-total (7)	509.10	1,005.40	1,514.50
8.	Four per cent additions in peak load to account for unforeseen loads	41.00	62.00	103.00
	Total	1064.30	1618.96	2683.26

14.5. The State Electricity Board is quite capable of achieving the above targets. However, due to tight financial position, the Central Water and Power Commission reduced this forecast to 2,050 MW by the end of the Fourth Plan. The following statement would show the year-wise forecast demand as worked out by the Central Water and Power Commission, export to neighbouring States and firm capacity from existing and spill-over schemes of the State.

Year	State's demand as forecast by C.W. & P.C.	Export to neighbouring States	Total demand on U.P. Power System	Installed capacity	Firm capacity from existing spill-over schemes	Surplus (+) and Deficit (-)
1969-70	1,230	67	1,297	1,507	980	(-) 317
1970-71	1,500	67	1,567	1,587	1,130	(-) 437
1971-72	1,670	67	1,737	1,867	1,260	(-) 477
1972-73	1,860	67	1,927	2,277	1,525	(-) 402
1973-74	2,050	67	2,117	2,480	1,750	(-) 367

14.6. While the State has adopted the load forecasts of the Central Water and Power Commission, it may be mentioned that these forecasts are extremely conservative as they have been worked out on the basis of an annual rate of rise of only 15 per cent whereas during the last 3-4 years it has actually risen by 27 per cent in this State. The Government of India have so far made an investment of Rs.373 crores on generation schemes in the Central Sector, but none of these schemes was located in U. P. The State Government has requested the Government of India and the Planning Commission to agree to locate a nuclear-power station at Narora in Bulandshahr District. It is an accepted fact that in future nuclear plants would supply adequate power at comparatively cheaper cost. There is a large agricultural and industrial potential in U. P. which is not being utilised at present. If adequate power supply is ensured much progress can be made under Agriculture and Industries. In U. P. Narora fulfills all the requirements for a nuclear power station. It has low population density, ample cooling water is available, bearing strength of the soil is good and the site is close to the main load centres. It is hoped that the Centre will accede to the legitimate demand of the State to locate a nuclear power station of 1,000 MW capacity so that power shortage could be removed during the Fifth and Sixth Plans.

14.7. *Transmission and Distribution*—Due to chronic power shortage in the State, augmentation of generation capacity always received greater attention in the past. As a result, the Transmission and Distribution system did not develop in consonance with the increase of power load and the lines had to be overloaded causing heavy system losses. In order to improve the voltage conditions, security of supply and to reduce system power losses, the State's transmission and distribution network requires greater attention than it has received in the past.

14.8. At the end of the Second Plan there were only 2,000 Ckt. km. of main transmission lines of 66 kV and above. During the Third Plan additional 2,267 Ckt. km. were constructed raising the total length to 4,267 Ckt. km. The additions in 44/37.5/33 kV lines were 3,274 Ckt. km. from 3,462 Ckt. km. at the end of Second Plan to 6,736 Ckt. km. at the end of the Third Plan. The highest operating voltage in the State was 132 kV. These figures show only doubling of transmission and distribution system in the Third Plan while the generation increased more than 2.6 times from 370.17 MW at the end of Second Plan to 910.14 at the end of Third Plan.

14.9. In the Annual Plans following the Third Plan, efforts have been made to strengthen the transmission and distribution system. Lines of 220 kV were completed for the first time in the State during this period and the three isolated grids of the State were integrated enabling bulk transfers of power from one part of the State to the other so as to make optimum and most economical use of the energy available in the system. Earlier, there was only one 132 kV inter-State link from Rihand to Sone Nagar for power exchange between U. P. and D. V. C. system. During 1966-69, 220 kV line was constructed between Delhi and Muradnagar for power exchange between U. P. and Delhi/Punjab. Another 132 kV inter-State link was constructed between Rihand and Madhya Pradesh to export 15 per cent of energy from Rihand to Madhya Pradesh. U. P.'s share of this link from Rihand (U. P.) to Madhya Pradesh border has already been completed.

14.10. The 220 kV lines completed during the three Annual Plans were operated at 132 kV pending completion of 220 kV sub-stations. All the work on the sub-stations will be completed and lines operated at rated voltage in the earlier part of the Fourth Plan. It will be for the first time that 400 kV line will be constructed in the State. This line will be necessary for the bulk power transfers towards the western part of the State from Obra (Thermal) which by the end of the Fourth Plan will be a large store house of thermal power (about 1,150 MW). This line will also permit the best utilization of energy storage facility at Rihand enabling appreciable improvement in the annual load factor. This line will run between Obra (Thermal) to Lucknow, via Sultanpur. Obra-Sultanpur section has been approved by the Central Water and Power Commission and work will be taken up during the Plan period.

14.11. The extreme north of the State is rich in hydro-power potential and with the completion of spillover and new hydel schemes of the Fourth Plan, about 1,000 MW of hydro power potential will become available in this region. For transfer of this huge bulk of power towards the load centres, a 400 kV line from Rishikesh to Muradnagar is also considered necessary. A proposal for this line is already being examined by the Central Water and Power Commission.

14.12. Detailed net-work studies were made in September, 1967, to assess the requirements of 220 kV, 132 kV, 66 kV and secondary and low tension lines during the Fourth Plan after detailed discussions with the Central Water and Power Commission. In view of constraint on resources, only such lines are being taken up in the Fourth Plan which are immediately necessary. Apart from the main lines, an extensive net-work of secondary transmission and distribution lines will be laid during the Fourth Plan. At the end of 1968-69, there would be 3,979 Ckt. km. lines of 132 kV, 2,611 Ckt. km. of 66 kV and 9,828 Ckt. km. of 44/37.5/33 kV lines. There would also be 72,244 Ckt. km. of below 33 kV lines.

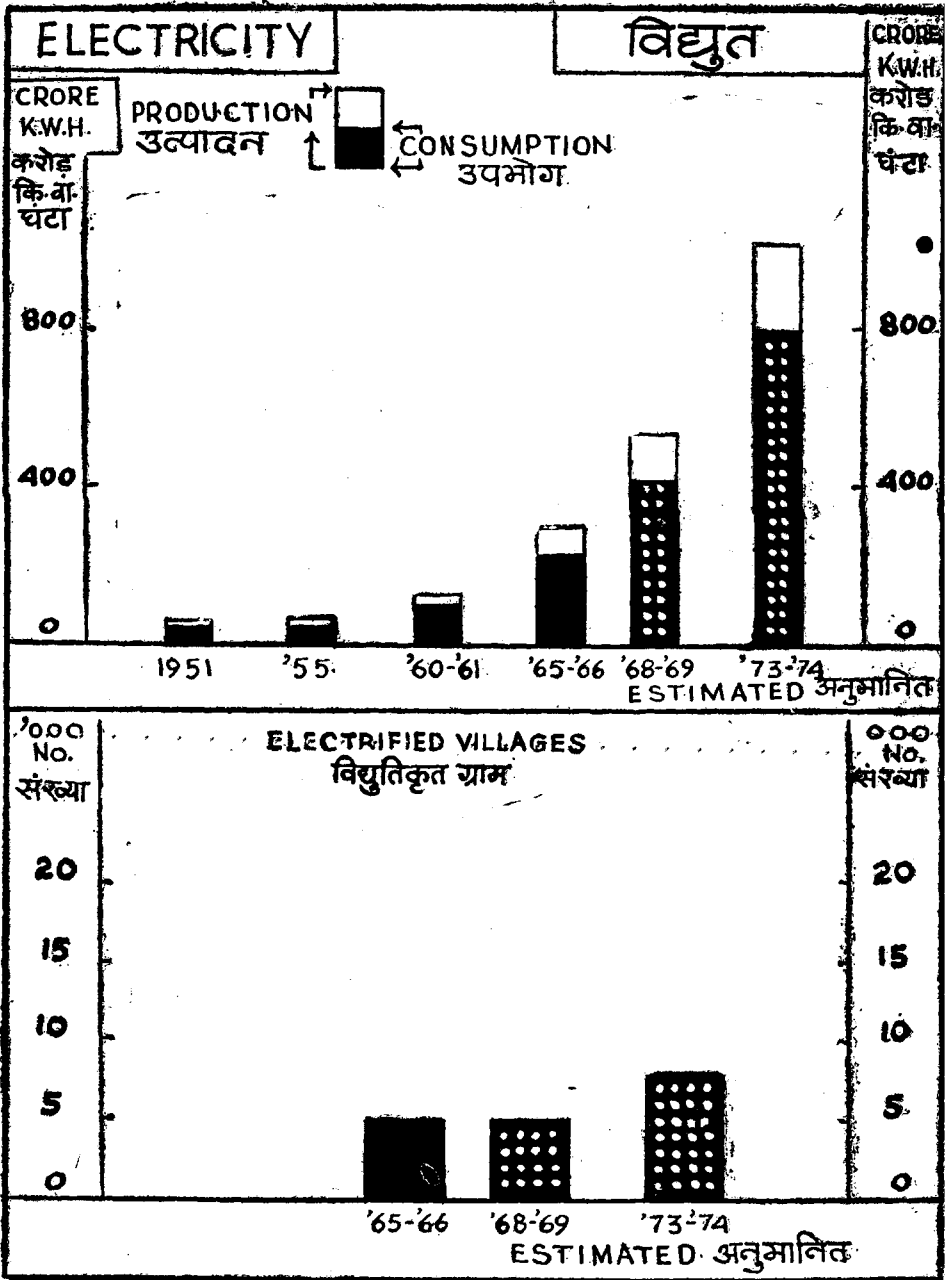
14.13. It may be specifically mentioned that during the Third Plan and the three Annual Plans there was considerable expansion of transmission lines. Against an original target of construction of transmission lines of 1,580 Ckt. km. of 33 kV and above, during Third Plan, the achievement was 5,541 Ckt. km. In the case of transmission lines below 33 kV, the achievement was 24,375 Ckt. km. against a target of 10,040. During 1966-69 also, priority was given to transmission and distribution lines to bring them to an efficiency level, the achievement being as below :

			(Ckt. km.)				
			Position at the end of Third Plan	Achieve- ment 1966-67	Achieve- ment 1967-68	Achieve- ment 1968-69	Achieve- ment at the end of 1968-69
66 kV. and above	..	..	4,267	1,920	1,065	1,127	8,379
44|37.5|33 kV.	..	..	6,736	1,271	773	1,048	9,828
11|6.6|3, 3 kV.	..	..	34,902	5,343	6,500	8,000	54,745
L. T. Lines	..	..	9,869	2,630	2,500	2,500	17,499
Total	..	..	55,774	11,164	10,838	12,675	90,451

Rural Electrification and Other Schemes

14.14. The other important activities of this sector include electrification of towns and villages, energisation of private tube-wells/pump sets and energisation of State tube-wells. The progress under these items is indicated in the table below :

			(Nos.)			
			Towns and villages electri- fied	Energi- sation of private tube-wells/ pump sets	Energi- sation of State tube- wells	
Position at the end of—						
(a) Second Plan	211	1,130	6,070
(b) Third Plan	4,692	9,283	7,675
(c) 1966-67	4,802	21,007	8,107
(d) 1967-68	4,812	43,356	8,428
(e) 1968-69	4,852	65,513	8,828



14.15. It was assessed that the minimum financial requirement of the Power Sector in the Fourth Plan would be Rs.522 crores and the Central Working Group had also recommended an outlay of Rs.450 crores for this sector. It could not be possible to provide more than Rs.375.00 crores for power schemes in the Fourth Plan due to constraint on resources. During the Fourth Plan emphasis will be on completing the works which are already in progress, strengthening of transmission and distribution lines, providing inter-State and inter-power system grids, meeting the requirements of irrigation and industrial projects to the maximum possible extent and to augment the resources of the State Electricity Board by raising funds from the private and corporate sectors as well as by reducing losses.

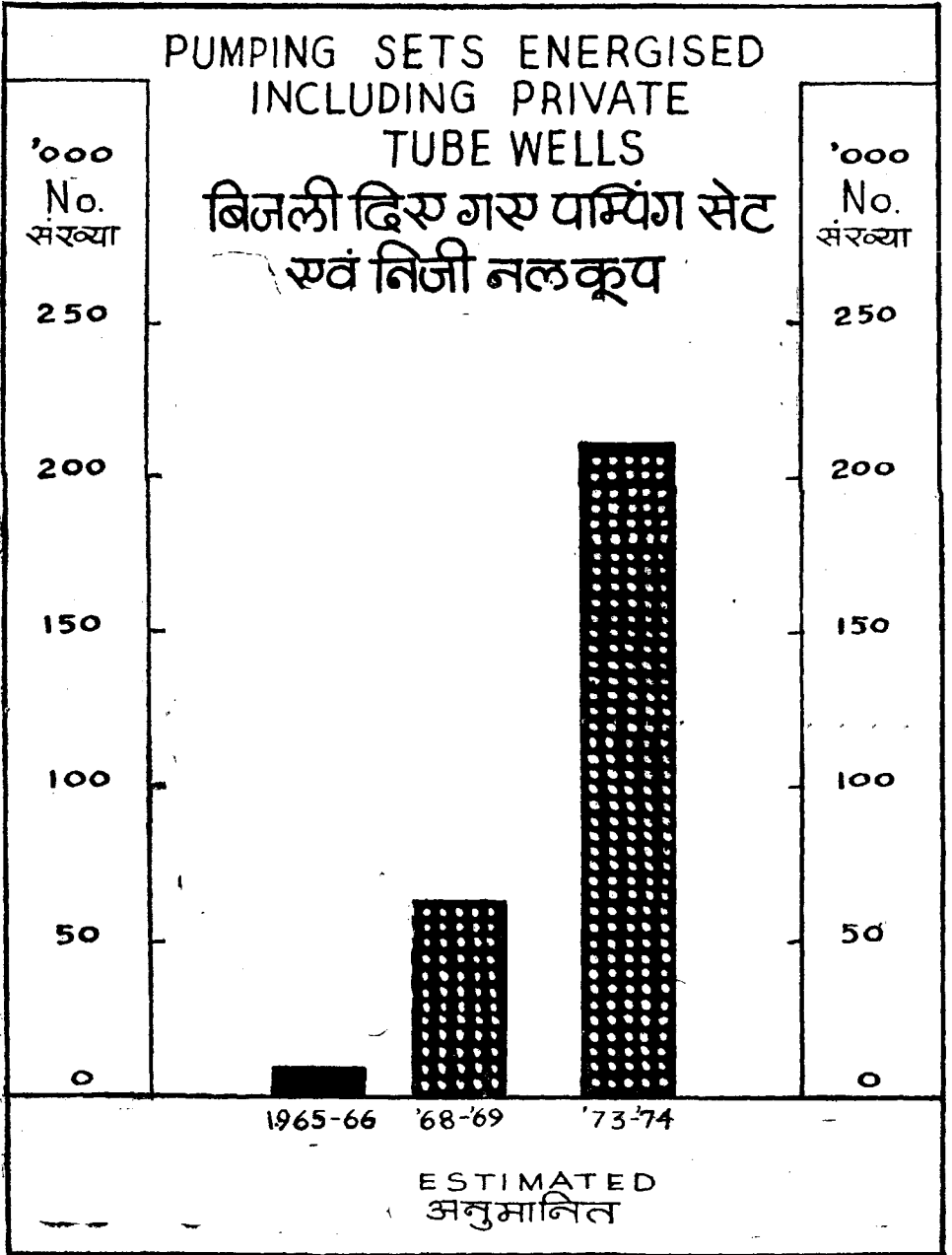
14.16. The group-wise distribution of the proposed outlay of Rs.375.00 crores is indicated below :

						(Rupees in crores)
1. <i>Generation—</i>						
(a) Spill-over schemes	..	..	..	..	..	150.68
(b) New Schemes	..	..	..	..	..	27.05
Total Generation Schemes						177.73
2. <i>Transmission and Distribution—</i>						
(a) Spill-over schemes	..	..	..	..	..	59.23
(b) New schemes	..	..	..	..	..	66.04
Total, Transmission and Distribution .. .						125.27
3. <i>Rural Electrification—</i>						
(a) Energisation of private minor irrigation works and strengthening of low tension lines	..	..	..	..	..	54.00
(b) Electrification of new localities and giving supply to new rural consumers	..	..	..	..	..	14.00
Total, Rural Electrification						68.00
4. Small hill schemes	..	..	..	..	..	2.00
5. Survey and Investigation	..	..	..	..	..	2.00
GRAND TOTAL .. .						375.00

Supplementary Plan

In the supplementary plan of Rs.127.5 crores an outlay of Rs.30 crores has been set apart for the following new power projects :

1. Lakhwar Hydél Project.
2. Maneri Bhali Hydél Project Part II.
3. Eastern Yamuna Canal.
4. Kanpur Thermal Extension or Gorakhpur New Thermal project.
5. Biyasi Hydél Project.
6. Tehri/Pancheshwar Dam.



14.17. Year-wise and group-wise phasing of power programme is given in Statement I.

14.18. The important physical targets proposed to be achieved during the Fourth Plan period are indicated below :

I. PHYSICAL TARGETS

4. Power availability and Demand—

1. Addition in installed capacity from spill-over schemes ..	1,230
2. Addition in installed capacity from new schemes ..	..
Total, Additions ..	1,230
3. Deduction on account of retirement of old and obsolete plants ..	60
Net Additions ..	1,170
4. Installed capacity by end of 1968-69	1,310
5. Total installed capacity by end of Fourth Plan	2,480
6. Firm capacity against (5) above at the end of Fourth Plan	1,750
7. System Demand at the end of Fourth Plan as forecast by C. W. and P. C.	2,117
8. Net shortage of power	367

B. Addition to Transmission and Distribution system—(Circuit kms.)

1. Main lines—66 kV. and above-and allied sub-stations ..	4,500
2. Secondary Transmission lines 44/37.5/33 kV. and associated sub-stations	13,000
3. Distribution Lines	40,000

C. Rural Electrification—

1. Electrification of new localities	2,100
2. Private Tube-wells and Pump Sets—	
(i) Under Normal Programme	1,00,000
(ii) Under Consumers' Deposit Scheme	43,000
3. New Rural Consumers	7,000

D. Annual Electricity generation by end of Plan (M. KV H) 10,130

E. Annual Electricity sale by end of Plan (M. KWH) 7,900

14.19. It is expected that by the end of the Fourth Plan the annual revenue from sale of energy would be Rs.120.00 crores while the per capita consumption would increase to 88 kwh. The year-wise phasing of the anticipated achievements during the Fourth Plan is given in Statement II.

14.20. Some of the important schemes/programmes under this sector are briefly discussed below :

1. *Yamuna Hydrel Project Stage I and II*—Under the stage I project, three units of 11.25 MW each at Dhakrani and three units of 17 MW each at Dhali-pur are under construction. Two units at each of the stations have been completed and put into commercial operation in 1965-66. The remaining units will be completed in 1969-70.

The Yamuna Hydel Stage II, visualises construction of two power stations—an underground power station at Chhibro with four machines of 60 MW each and an over-ground power station at Khodri with four machines of 30 MW each. The manufacture of electrical plant is going according to schedule and the design and planning work is proceeding satisfactorily. Work on the excavation of the power house pit is also proceeding satisfactorily and the progress on the tunneling, which was a bit slow initially, is now picking up. Three machines of Chhibro power station are expected to be put into commission in 1971-72 and the fourth in 1972-73. The Khodri Power Station is also expected to be commissioned in 1973-74.

2. *Obra Hydel Project*—The project envisages construction of an earth and rockfill dam on the river Rihand about 32 km. down stream of Rihand Dam. The power station with three machines of 33 MW each will be located at the toe of the Dam. The first unit has already been received at site and erection of the under-water parts is in progress. All the three units are expected to be commissioned during 1969-70.

3. *Ramganga Hydel Project*—This is a multi-purpose project. The power station is in design and planning stage. The basic layout of the power station switch-yard has been finalised. It is proposed to construct a 125.6 metre high earth dam across the river Ramganga, near Kalagarh in District Pauri Garhwal, along with a power station at the toe of the Dam on the right flank of the river. The reservoir area will be about 31.6 square miles. Three units of 60 MW each are proposed to be installed at the power station. This will be the second storage scheme on the Ganga Grid. About 16 miles down stream of the main reservoir a pondage of about 5,000 acre-feet will be provided which will enable the Ramganga Power Station to work as peaking station. Two units are to be commissioned in 1972-73 and the third unit in 1973-74.

4. *Maneri Bhali Hydel Scheme Stage I*—It is proposed to construct a 135 feet high concrete diversion dam across the river Bhagirathi near Maneri about 16 km. from Uttarkashi. At the Dam site, a live storage of 450-acre feet will be taken through a 4.78 metre dia., and 7.8 km. long concrete tunnel to Uttarkashi, where a surface power station will be located utilising a gross head of 175 metres for generation of power. The power station will have three machines of 35 MW each. The work is expected to be completed in Fifth Plan.

5. *Harduaganj Stage IV*—Two machines of 55 MW are to be installed under this project as an extension to Harduaganj Stage III project. The main plant is being supplied by the Bharat Heavy Electricals Ltd., Hardwar. Both the machines are expected to be commissioned in 1970-71.

6. *Obra Thermal Project*—Under this project a thermal power station of 250 MW capacity with 5 units of 50 MW each is being set up at Obra. The process of the erection of the plant is in an advanced stage. Unit number I was commissioned in August, 1957, Unit number II rolled on 25th January,

1968; Unit No. 3 was commissioned in October, 1968. The work on Units 4 and 5, boiler and turbo-generator No. 4 is in hand. Efforts are being made to complete the work on remaining fourth and fifth unit during the year 1969-70

7. *Obra Thermal Extension*—Under this scheme, three machines of 100 MW each shall be installed. The plant shall be supplied by the Bharat Heavy Electricals Ltd., Hardwar and Tiruchirapalli Consultants for the project have been appointed. Parts of the plant have started arriving. One unit is to be completed in 1971-72 and two units in 1972-73.

8. *Yamuna Hydel Project Stage IV (Part I)*—This is a run of the river scheme and envisages power generation by utilising a head of about 134 feet which is available from the tail race of Dhalipur power station under Yamuna Stage I up to village Dhaula Tapper on Yamuna river about 1.5 miles upstream of Konch. Under this scheme 4 km. long lined power channel of 159 cusecs will take off at Ahsan Barrage and will run along the left bank of the river Yamuna. The water conductor system will have a 1.05 km. tunnel in its alignment. A power station with three machines of 10 MW each will be constructed at Kulhal. The project which is to cost Rs.6.51 crores has already been approved by the Technical Advisory Committee. The project is expected to be completed in 1972-73.

Financial Working

14.21. Power development is capital intensive and investments in this sector have been substantially increasing from year to year. Planning Commission had emphasized in the Third Plan document that electricity undertakings in the public sector should earn reasonable surpluses and provide resources for future development and to this end they should re-adjust their tariffs and electricity duties. This matter was discussed at the conference of Irrigation and Power Ministers in January, 1964. The Conference noted that the financial position of most of the State Electricity Boards in the country was unsatisfactory and that in the interest of promoting healthy power development, immediate steps should be taken to put them on a sound financial footing. In pursuance of the decision taken at the Conference, the Government of India in April, 1964, appointed the Venkatraman Committee to look into the financial position of the State Electricity Boards and to suggest (1) ways and means of improving the revenues of the various State Electricity Boards and also the income from electricity duty; and (2) the pattern of relationship between the tariff and electricity duty.

The Committee, *inter alia*, recommended:

(a) That the first phase of the objective for all the State Electricity Boards should be to aim at higher revenues sufficient to cover operation and maintenance charges, contributions to the general and depreciation reserves and interest charges on loan capital;

(b) That in the second phase the Boards should aim at achieving a balance of revenue after meeting all the charges indicated in the first phase and giving a net return of 3 per cent on the capital base.

14.22. Statements number III, IV and V show the percentage return on capital base from 1964-65 onwards. In the statement the interest has been calculated at a uniform rate of 6 per cent for all the States irrespective of the rate of interest actually payable by the individual Electricity Boards to State Government/L.I.C. and other financing institutions/individuals. It would be seen that the Electricity Board of Uttar Pradesh is one of the Boards which had achieved better financial returns. The other such Boards were Madhya Pradesh, Madras, Mysore and Punjab. These Boards are now required to achieve 11 per cent return comprising 6 per cent interest, 3 per cent net profit, 1/2 per cent general reserve and 1½ per cent Electricity Duty on the capital base including the cost of works in progress. However, in spite of a good showing, the U. P. State Electricity Board sustained heavy losses, both in 1966-67 and 1967-68. The State Government and the State Electricity Board have been making constant efforts to run the undertaking on commercial lines and earn adequate returns.

14.23. The U. P. State Electricity Board constituted a Committee to go into the question of revising the retail rates as also to make them uniform throughout the State as all the power grids were in process of being inter-connected. As an interim measure, a surcharge of 20 per cent was levied with effect from September 1, 1967. The uniform tariffs were, in the meanwhile evolved and surcharge was abolished in a manner that the surcharge became a part of the tariff itself. Thus the tariffs, which were different in six major power grid systems, became uniform throughout the State except that the lighting and domestic power rates in Lucknow, Allahabad and Kanpur are still lower than those in the rest of U. P. The new tariff rates will reduce, to some extent, the losses to the Board on private tube-wells/pump sets. It is also proposed to offset a part of the loss by increase in the volume of business in other categories.

14.24. With the inter-connection of the five major grid systems namely Ganga-Sarda, KESA, Rihand-Obra, Matatila and Mau-Gorakhpur-Sohawal it is possible to generate and transfer power at the most economical rates. This integrated operation has utilised the seasonal generation of 110 million units of Ganga-Sarda grid during monsoon months and saved about Rs.55.00 lakhs per year. It has further utilised the night time surplus during summer and winter months amounting to 40 million units accounting for a further saving of Rs.20.00 lakhs annually. It is also now possible to avoid load shedding in the State during peak demand period to the extent of 20 MW for five hours a day for about 100 days annually meaning a revenue increase of about Rs.10.00 lakhs annually.

14.25. The coal consumption on smaller old thermal stations is higher than the new sets at large thermal stations at Obra, Harduaganj and Panki. By meeting the power need from the new sets, an economy of about Rs.15.00 lakhs

a year in fuel is possible. Efforts are also being made to purchase cheaper power from outside the State, which would save another Rs.45.00 lakhs during 1968-69.

14.26. In U. P. power system, there is a large number of small and very old thermal and diesel sets on which the generation cost is very high. It is proposed to retire and dispose off gradually all such sets in the Fourth Plan.

14.27. During the last three years a very large number of private tube-wells and pump sets have been electrified and 33 kV and 11 kV distribution net work has been considerably extended. Special measures such as installation of about 1,20,000 KVAR capacitors at a number of sub-stations and other points in the system, realigning of 11 kV feeders and construction of new secondary sub-stations have been taken up to reduce the system losses. Arrangements of evaluating circle-wise system losses have also been completed so that the circles and the areas where the system losses may be higher are easily located and remedial measures taken.

14.28. The U. P. Power Grid is equipped with the latest protection schemes obtaining in the present times and the system layout is such that affords taking of equipments out of service for maintenance and overhaul without disruption of power supply to the consumers. Even during fault conditions as a result of interference by external agencies, the line is taken out of service automatically in a time not exceeding 0.5 second.

14.29. The U. P. power system has met a peak of 990 MW on 6th December, 1968, as against the installed capacity of about 1,200 MW. The system has a large peaking capacity owing to reservoir backed Rihand power station of 300 MW which acts as a stand-by against power station outages.

14.30. To boost up generation at the newly built thermal power stations the U. P. State Electricity Board has announced incentive to the operating personnel which has already resulted in extra generation of 150 million units in three months.

14.31. The operational and maintenance instructions for each complicated equipments like circuit breakers, generating machines, transformers, etc. have been prepared in collaboration with the equipment manufacturers, and are followed in practice to keep the equipment in best possible service.

STATEMENT I
Outlays for State Plan Schemes

Head—1. IRRIGATION AND POWER

Sector—4.3. POWER

(Rupees in lakhs)

Code no.	Group Schemes	Fourth Plan			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
I. Generation							
(1) <i>Continuing Schemes—</i>							
430101	Yamuna Hydrl Scheme Stage I and II	4410.00	4410.00	85.00	806.00	806.00	40.00
430102	Obra Hydrl	596.00	596.00	8.00	350.00	350.00	5.00
430103	Ramganga	2040.00	2040.00	2.00	500.00	500.00	2.00
430104	Matatila Hydrl	2.00	2.00	..	2.00	2.00	..
430105	Harduaganj Stage II	87.00	87.00	..	35.00	35.00	..
430106	Harduaganj Stage III	106.00	106.00	..	100.00	100.00	..
430107	Obra Thermal	(—)52.00	(—)52.00	..	20.00	20.00	..
430108	Harduaganj Stage IV	931.00	931.00	..	500.00	500.00	..
430109	Obra Thermal Extension Stage I	4414.00	4414.00	60.00	1117.00	1117.00	30.00
430110	Yamuna Hydrl Scheme Stage IV (Part I)	592.00	592.00	40.00	40.00	40.00	5.00
430111	Maneri Bhali Hydrl (Part I)	1700.00	1700.00	190.00	20.00	20.00	..
430112	Dhukwan Hydrl	390.00	390.00	..	..	..	..

430113	Sixth Machine at Rihand	..	..
430114	Panki Thermal	..	..
	Total	..	..

(2) *New Schemes—*

430115	Obra Thermal Extension Stage II	..	..
	Total, Generation	..	..

II. Transmission and Distribution

430201	Continuing Scheme	..	..
430202	New Schemes	..	..
	Total, Transmission and Distribution	..	..

430301	Rural Electrification
--------	-----------------------	----	----

IV Miscellaneous and Investigations

430401	Small Hill schemes	..	..
430402	Survey and Investigation	..	..

	Total, Miscellaneous and Investigation
--	--	----	----

	Total for Sector 4.3—Power
--	----------------------------	----	----

6.00	6.00	..	..	..	..
(—)154.00	(—)154.00	..	..	..	..
15068.00	15068.00	385.00	3490.00	3490.00	82.00
2705.00	2705.00	50.00	..	..	..
17773.00	17773.00	435.00	3490.00	3490.00	82.00
5923.00	5923.00	500.00	1675.00	1675.00	250.00
6604.00	6604.00	1500.00	300.00	300.00	50.00
12527.00	12527.00	2000.00	1975.00	1975.00	300.00
6800.00	6800.00	20.00	1300.00	1300.00	4.00
200.00	200.00	..	20.00	20.00	..
200.00	200.00	..	15.00	15.00	..
400.00	400.00	..	35.00	35.00	..
37500.00	37500.00	2455.00	6800.00	6800.00	386.00

STATEMENT I-A

Outlays for Centrally Sponsored Schemes

Serial no.	Scheme	Fourth Plan	1969-70 Outlay
1	2	3	4
4. IRRIGATION AND POWER			
4.3. POWER			
1	Inter-State Grids	175.00	25.00

STATEMENT II

Physical Targets and Achievements

Serial no.	Item	Unit	Anticipated achievement during the year					Achievement during Fourth Plan
			1969-70	1970-71	1971-72	1972-73	1973-74	
1	2	3	4	5	6	7	8	9
1	Installed capacity (After retirement of old and obsolete sets)	.. 000KW	197.08	79.87	280.0	410.0	202.50	1169.45
2	Electricity generated	.. .. Million KWH.	5952	6665	7305	8780	10130	10130
3	Electricity sold ..	.. .. "	4700	5260	5750	6940	7900	7900
4	<i>Rural Electrification</i>							
	(i) Villages to be electrified...	.. .. No.	420	420	420	420	420	2100
	(ii) Private tubewells/pump sets to be energised---							
	(a) Under normal programme	.. .. "	16000	16000	18000	25000	25000	1,00,000
	(b) Under Consumers' Deposit Scheme	.. .. "	8000	8000	9000	9000	9000	43,000
	(c) Total ..	.. .. "	24000	24000	27000	34000	34000	1,43,000

STATEMENT III

Statement showing the Percentage return on Capital Base for the year 1964-65 to 1970-71

Serial no.	Name of State Electricity Board	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71	Remarks
1	2	3	4	5	6	7	8	9	10
1	Andhra	2.3	3.0	7.9	12.3	10.1	12.0	10.7	..
2	Assam*	..	..	2.81	3.39	3.8	5.5	5.7	Beyond 1970-71
3	Bihar	..	..	1.97	6.48	6.69	8.31	10.54	please see below**.
4	Gujrat	2.07	2.63	4.7	6.5	6.6	8.2	9.67	..
5	Kerala*	2.86	2.75	6.7	7.0	9.5	9.75	11.02	..
6	Madhya Pradesh	4.12	4.31	5.5	7.27	9.56	9.56	9.82	..
7	Madras	4.3	4.9	6.40	5.3	9.9	11.2	13.6	..
8	Maharashtra* including Koyna.	5.32	5.6	7.85	7.47	9.1	9.98	11.29	..
9	Mysore including Sharavati	2.51	5.34	8.50	9.10	9.51	10.55	11.25	..
10	Orissa including Hirakud, Talcher, etc...	4.84	4.3	5.2	6.5	7.2	9.5	12.4	..
11	Punjab	6.7	7.3	8.4	9.2	10.1	11.3	12.2	Excludes works in progress at Beas.
12	Rajasthan	2.8	2.2	4.3	7.9	8.2	8.8	9.6	..
13	U. P.*	5.4	5.3	7.7	8.5	11.0	11.0	11.0	..
14	W. Bengal* including Durgapur.	1.95	2.7	8.6	7.8	10.3	10.6	12.8	..
15	DESU	..	3.0	5.0	6.6	7.28	8.67	9.58	..

*NOTE : The figures shown in column 7, 8 and 9 in respect of Assam, Kerala, Maharashtra, U. P. and West Bengal only include Electricity Duty.

	1971-72	1972-73	1973-74	1974-75	1975-76
**11 Assam continued	6.1	6.83	9.8	10.0	11.3

STATEMENT IV

Statement of Financial Returns of Electricity Undertakings in States—1966-67

Serial no.	Name of State Electricity Board			Excluding works in progress			Including works in progress			Amount at 6% interest	Loss (—) or gain (+) after paying interest
				Capital Base	Net Income	Percentage return	Capital Base	Net Income	Percentage return		
1	2	3	4	5	6	7	8	9	10		
1	Andhra Pradesh	..	..	123.11	2.44	1.98	187.11	2.44	1.30	11.22	(—)8.78
2	Assam	..	..	38.07	(—)0.96	(—)2.50	56.07	(—)0.96	(—)2.07	2.76	(—)3.72
3	Bihar	..	..	89.33	1.18	1.21	138.35	1.18	0.84	8.30	(—)7.12
4	Gujrat	..	..	91.26	4.68	5.13	100.52	4.68	4.63	6.03	(—)1.35
5	Kerala	..	..	80.06	2.82	3.53	103.72	2.82	2.73	6.22	(—)3.40
6	Madhya Pradesh	..	..	114.50	9.25	8.07	[173.00	| 9.25	| 5.34	10.38	(—)1.13
7	Madras	..	..	190.27	11.56	6.10	224.73	11.56	5.10	13.48	(—)1.92
8	Maharashtra	..	..	165.00	9.75	5.90	185.67	9.75	5.22	11.14	(—)1.39
9	Mysore	..	..	142.48	11.25	7.90	168.83	11.25	6.70	10.13	(+)1.12
10	Orissa	..	..	66.42	1.93	2.91	█ 118.32	█ 1.93	█ 1.63	█ 7.10	(—)5.17
11	Punjab	..	..	162.50	12.50	7.70	212.00	12.50	5.90	12.72	(—)0.22
12	Rajasthan	..	..	50.34	(—)0.16	(—)0.32	77.74	(—)0.16	(—)0.20	4.67	(—)4.83
13	Uttar Pradesh	..	..	196.71	10.51	{ 5.33	310.70	10.51	3.38	18.64	(—)8.13
14	West Bengal	..	..	72.00	5.27	7.31	11.50	5.27	5.20	6.69	(—)1.42
15	DESU	..	..	25.09	1.48	5.91	42.72	1.48	3.47	2.56	(—)1.08
	TOTAL	..	..	1607.14	83.50		2200.98	83.50		132.04	(—)48.54

NOTE: 1. Figures as obtained from Central Water and Power Commission.

2. Net income represents amount remaining after meeting working expenses, i.e. operation and maintenance charges and depreciation reserve.

STATEMENT V

Statement of Financial Returns of Electricity Undertakings in States—1967-68

Serial no.	Name of State Electricity Board	Excluding works in progress			Including works in progress			Amount at 6% interest	Loss (—) or gain (+) after paying interest
		Capital Base	Net Income	Percentage return	Capital Base	Net income	Percentage return		
1	2	3	4	5	6	7	8	9	10
1	Andhra Pradesh ..	168.83	11.38	6.74	211.61	11.38	5.4	12.70	(—)1.32
2	Assam ..	43.00	(—)0.89	(—)2.07	55.00	(—)0.89	(—)1.62	3.30	(—)4.19
3	Bihar ..	106.77	1.28	1.20	157.63	1.28	0.81	9.46	(—)8.18
4	Gujrat ..	94.78	6.05	6.39	114.07	6.05	5.31	6.84	(—)0.79
5	Kerala ..	89.87	4.62	5.14	117.93	4.62	3.92	7.08	(—)2.46
6	Madhya Pradesh ..	131.00	8.49	6.49	176.00	8.49	4.81	10.56	(—)2.07
7	Madras ..	193.46	12.02	6.02	243.38	12.02	4.90	14.60	(—)2.58
8	Maharashtra ..	180.00	13.00	7.30	203.78	13.00	6.39	12.23	(—)0.77
9	Mysore ..	164.16	12.65	7.70	186.87	12.65	6.90	11.21	(+)1.4
10	Orissa ..	68.43	4.85	7.10	132.02	4.85	3.67	7.92	(—)3.07
11	Punjab ..	210.00	14.30	6.80	252.00	14.30	5.90	15.12	(—)0.82
12	Rajasthan ..	51.03	0.39	0.76	88.64	0.39	0.50	5.32	(—)4.93
13	Uttar Pradesh ..	232.69	9.93	4.27	361.92	9.93	2.74	21.72	(—)11.79
14	West Bengal ..	132.50	6.03	4.55	149.50	6.03	4.03	8.97	(—)2.94
15	DESU ..	45.05	1.58	3.50	52.78	5.58	2.98	3.17	(—)1.59
	Total	1911.57	105.68		2503.13	105.68		150.20	(—)44.52

NOTE—1. Figures are as obtained from Central Water and Power Commission.

2. Net income represents the amount remaining after meeting working expenses, that is operation and maintenance charges and depreciation reserve.

15

INDUSTRIES AND MINERAL DEVELOPMENT

I. LARGE AND MEDIUM INDUSTRIES

15.1. Before the commencement of Planning in 1951, the main large industries in U. P. were sugar, textile and oil.

15.2. There were only 73 units in 1951, in the large scale sector with an investment of Rs.26.37 crores. The progress achieved during the successive plan periods, through whatever facilities could be provided by way of financial assistance and other infra-structural incentives is reflected in the following statement :

Plan period	(Rupees in crores)	
	Number of licences implemented	Investment involved
First Plan	51	13.94
Second Plan	163	78.90
Third Plan	66	90.74
Total	280	183.58

15.3. In the year 1965, there were 321 large and medium scale industries functioning in the State, which provided direct employment to 2,00,084 persons. The production figures rose from Rs.175.97 crores at the end of the First Plan to Rs.254.41 crores at the end of the Second Plan and eventually to Rs.346.12 crores in the year 1965.

15.4. During the three Plans and from 1966-67 to 1968-69, allocations for heavy industries in the State Sector were as below :

	(Rupees in crores)	
	Plan Outlay	Outlay
First Plan	3.27	3.45
Second Plan	3.35	3.75
Third Plan	3.68	7.14
1966-67	4.20	4.03
1967-68	5.00	4.86
1968-69	5.00	4.25

15.5. With such meagre investments only three units could be established in the State Sector — Government Precision Instruments Factory in Lucknow, Government Cement Factory, Churk, and the Dalla Cement Factory. The GPIF was started in 1950, for the manufacture of water metres, microscopes and pressure gauges. The investment on the factory is Rs.59 lakhs. The Government Cement Factory at Churk was initially established with a capacity of 700 metric ton per day with a capital investment of Rs.4.68 crores. This capacity was expanded to 1,400 metric ton per day during the Second Plan at a cost of Rs.2.98 crores. Dalla Cement Factory is expected to go into production by the middle of 1969, with a capacity of about 4 lakh metric ton per year. The estimated capital cost is Rs.11.40 crores out of which the spill-over expenditure of Rs.2 crores will be reflected in the Fourth Plan.

15.6. U. P. has several favourable factors for industrial growth. Oil seeds, sugarcane and jute — to mention a few important items in the agricultural sectors provided a good industrial raw material base; abundant forest resources exist in the shape of resin, bamboo, timber, herbs and grass; widely scattered, but rich deposits of magnesite, fire-clay, lime-stone, gypsum, quartz, dolomite, felspar, etc., occur within the State; the coal-fields at Singrauli in Mirzapur district and the gushing torrents coming down from the Himalayan heights offer fantastic potential for cheap electric power; there is almost unlimited scope for food processing industries; and apart from established industrial townships like Kanpur, Ghaziabad, Meerut and Varanasi, the State Government are developing several other large centres to provide the necessary infrastructure to encourage the location of new industries.

15.7. A brief glance at the projected programme of industrial development in the central public sector in U. P. in the Fourth Plan would reveal that the following projects would materialise :

- (1) Tractor Factory, Ramnagar,
- (2) Heavy Duty Pumps and Compressors' Factory, Naini,
- (3) Foundry Forge, Hardwar,
- (4) Mechanised Footwear Factory, Kanpur,
- (5) Mechanised Bakery, Kanpur,
- (6) Deep Freeze Meat Plant, Tundla,
- (7) Triveni Structural, Allahabad,
- (8) Expansion of the Fertilizer Factory, Gorakhpur.

15.8. The State Government are also actively negotiating the location of units in U. P. by Bharat Electronics, Indian Telephone Industry and Hindustan Aeronautics, Ltd.

15.9. The investment on all of these projects would be of the order of Rs.120 crores. Besides, the State Government propose to invest Rs.9 crores on various State public sector projects, such as the Dalla Cement Factory, the Dead Burnt Magnesite Factory in Almora, a Power Tiller Project and an Optical Instruments Factory. The establishment of these projects would help in the development of ancillaries and small scale industries.

15.10. The State Government have lately given several concessions to facilitate the setting of industries in U. P. in the private sector. Industrial areas have been developed at Ghaziabad, Bareilly and Lucknow and more such areas are being developed at Hardwar, Kanpur, Gorakhpur and Naini. Industrial plots in such areas ranging from half acre to 5 acres are given to industrialists on "no-profit-no-loss" basis, and the payment is recovered in suitable instalments. Industrial Estates have been set up at a number of places where sheds have been categorised according to area. These sheds are available for outright purchase or on "hire-purchase" basis. If an industrialist is not in a position to acquire ownership of the shed, it can also be allotted on payment of monthly rent.

15.11. As no industry can come up without adequate finance, U. P. Financial Corporation has been set up to render financial assistance for the establishment of units and/or renovation, expansion or modernisation of existing units. The Corporation gives priorities to industries which engender import substitution or are export or defence oriented or agro-based. The lending rate is 3 per cent above the bank rate with a rebate of 1 per cent for prompt payment and special terms are offered to medium and small scale units. The Corporation also administers the Loans and Grants Schemes of the State Government under which loans are sanctioned to small scale units up to an amount of Rs.15,000 — at the rate of 5½ per cent interest. The U. P. State Industrial Corporation renders financial assistance in the form of underwriting of share capital to any joint stock company in the private sector which is incorporated in the country as a public limited undertaking, provided the location of the project is within the State and the Company makes a public issue of its proposed share capital. The normal limit of underwriting of shares is 20 per cent of share capital.

15.12. The requirement of controlled raw material is met by the U. P. Small Industries Corporation through its five sale depots at Kanpur, Naini (Allahabad), Varanasi, Meerut and Agra. The Corporation also acts as an importer on behalf of holders of licences for import of small quantities of raw materials by bulking the licences and obtaining the material at the lowest possible cost. Price preference of 15 per cent is offered to the small units over competitive quotations in the matter of Government purchases. The large scale unit of the State can be given a price preference of up to 5 per cent over their counterparts in other States.

15.13. In order to boost up exports, the U. P. Export Corporation has been set up, which also advances money against documents. The Development Wing of the Directorate of Industries of U. P. offers technical assistance in electrical, mechanical, chemical, glass and ceramic fields to entrepreneurs. A number of feasibility studies on several selected industries have been carried out.

15.14. The State Government are alive to the vital need for keeping the incidence of sales tax and power tariff on industry as low as possible. The State Electricity Board has a uniform tariff of power rates throughout the State which compares favourably with the rates prevailing in most of the States. A 15 per cent rebate is given to the new industries for the first three years. Power subsidy up to 9 paise per unit is given to certain categories of small scale units not having a connected load of more than 20 hp. The procedure for the grant of power subsidy has now been simplified and the Electric Supply Undertakings will bill the consumer units only to the extent of the amount directly payable by them, and bill the rest to the District Industries Officer. It has been decided to allow a sales tax holiday for three years to such new industries as are not on the banned list of the Government of India and are registered under the Factories Act. Apart from this, the raw materials consumed in the manufacture of variety of consumer goods have been exempted from sales tax provided the goods so manufactured are sold within U. P. Industrial equipment and raw materials are exempt from octroi duty.

15.15. It has been decided to set up sample rooms at Agra, Kanpur, Ghaziabad and Varanasi to acquaint small scale industries with the requirements of ancillaries and spare parts of big industrial units and to enable them to develop new lines of manufacture. The posts of Zonal Officers of Industries have been revived and the District Industries Officers have been directed to visit industrial units and remove their difficulties instead of sitting in their offices and administering the industrial programmes from the office desk. At the divisional level, Divisional Advisory Committees for Industries have been set up to promote industrialisation. To avoid delays and remove bottlenecks a Co-ordination Committee of the Secretaries to Government in all the development departments has been set up whose sole function is to achieve results and afford instant satisfaction to industrialists.

15.16. As a result of these measures, a climate for industrialisation has been created. The following units have either been set up or are under instant implementation in the private sector :

Indian Explosives, Kanpur ; expansion of Hindalco, Renukoot ; Rayon Grade Pulp Factory ; J. K. Electronics, Kanpur, for the manufacture of TV Sets; Hindustan Rubber Tyre Co. Ltd., Hathras ; Messrs. Triveni Engineering Works Ltd., Naini ; Messrs. Geep Flashlight Industries, Allahabad ; Messrs. Somaiya Organics, Bara Banki, and Messrs. Hind Lamps, Shikohabad, among a host of others.

15.17. The State Government have been actively following up each and every case of an application for industrial licence. It can safely be said that these measures would remove the obstacles that can stem the tide of large industry flowing into U. P.

15.18. The Fourth Plan Outlay on Large and Medium Industries is broadly as below :

Name of Scheme	(Rupees in Lakhs)	
	Fourth Plan Outlay	Outlay for 1969-70
1. Government Cement Factory, Dalla	200.00	100.00
2. Expansion of Government Cement Factory, Dalla	600.00	..
3. Dead Burnt Magnesite	102.00	50.00
4. Government Optical Instruments Factory	1.00	0.20
5. Modernisation of Government Precision Instruments Factory	10.00	5.00
6. Power Tiller Scheme	1.00	..
7. U. P. Financial Corporation	300.00	40.00
8. U. P. State Industrial Corporation Underwriting of shares	500.00	80.00
9. Industrial Area Scheme	300.00	60.00
10. Land Acquisition for public sector projects	50.00	38.50
11. Revitalization and Modernization of Textile and Sugar Industry	301.00	80.00
12. Management Training Institute	1.00	..
13. Manufacture of Rubber Emulsifiers	6.50	6.50
Total	2372.50	460.20

15.19. It may be stated in explanation of some of the more important schemes stated above that the production of the Dalla Cement Factory will be doubled after the proposed expansion at a cost of Rs.6 crores. With this expansion the profitability of this factory will increase from over 9 per cent in the initial phase to 12 per cent finally.

15.20. The Power Tiller Project is proposed to be implemented through the U. P. State Industrial Corporation Ltd., and the Corporation has already obtained an industrial licence for the manufacture of 15,000 power tillers, per annum. A feasibility report of the project is being prepared. A proposal for collaboration with Messrs. J. K. is also under consideration. Pending finalization of the scheme a token provision of Rs.1 lakh has been made for the Fourth Plan.

15.21. The project of manufacturing of Dead Burnt Magnesite is also proposed to be implemented through the U. P. State Industrial Corporation, Ltd. It has been decided that a new Company would be floated in which the Corporation would have 51 per cent shares and Messrs. Tatas would have 49 per cent shares. Total cost of this project is estimated to be Rs.3.85

crores. Work on this project is estimated to start towards the end of 1969-70 and a year thereafter it will reach its full capacity of production. The total share capital of the Company would be around Rs.2 crores and the Corporation's share would be Rs.1.02 crores. An outlay of Rs.102 lakhs has, accordingly, been made for the Fourth Plan.

15.22. The Government Optical Instrument Factory, Lucknow, could not be established so far, as the proposed collaborators, Messrs. Carl Zeiss Jena, have withdrawn their offer. Efforts are, however, being made to find some other suitable technical collaborator. It has now been decided that a small Committee be set up consisting of the representatives of the Ministry of Industry, Directorate General of Technical Development and the State Government, to go into the details of this project afresh. A token Fourth Plan outlay of Rs.1 lakh has been provided.

15.23. Under the scheme for modernization of the Government Precision Instruments Factory, it is proposed to switch over to plastic components in the water meters which will modernize the production technique and also reduce the cost of manufacture. A Fourth Plan outlay of Rs.10 lakhs has been made for developing necessary know-how, experimentation, training of officers, manufacture of initial jigs and tools, etc.

15.24. With 8 to 10 per cent rate of growth targeted during the Fourth Plan, investment in the private sector would be of the order of Rs.300 crores. A substantial portion of this money will have to be made available by the U. P. Financial Corporation. A Fourth Plan outlay of Rs.3 crores has, accordingly, been made.

15.25. The scheme of Industrial Area is being implemented through the U. P. S. I. C. The Corporation has to pay Rs.1.2 crores as compensation in respect of land acquired at Bareilly, Lucknow, Hardwar, Kanpur, Ghaziabad and Gorakhpur. A provision of Rs.3 crores has accordingly been made in the Fourth Plan.

15.26. The Industrial Development Programme of the State envisages an investment of Rs.200 crores in the Large and Medium Industries Sector during the Fourth Plan. The U. P. State Industrial Corporation along with other financial institutions and underwriters will play its role in promoting the corporate industrial sector. A provision of Rs.3 crores has been made for the purpose.

15.27. Under the scheme for the revitalization and modernization of textile industry, a provision of Rs.3 crores has been made. It has also been agreed in principle that a State Textile Corporation be set up. Further details are being worked out.

15.28. As regards the revitalization and modernization of sugar industry, the Ministry of Food and Agriculture, Government of India, are already working out a scheme for the modernization programme of the sugar industry

on an all-India basis. Sugar being a vital industry of the State, the Government is keenly interested in the outcome of these efforts. For the present, an outlay of Rs.1 lakh has been made in the Plan.

15.29. The Indian Turpentine and Rosin Co. Ltd., Bareilly, proposes to set up a plant at Clutterbuckganj, to undertake manufacture of rubber emulsifier in collaboration with Messrs. Arakawa Forest Chemical Industries, Ltd., Asaka, Japan. The proposed plant will be capable of producing 2,000 metric tons of the product per year. For this scheme a provision of Rs.6.50 lakhs has been made and the entire amount will be utilized within the first year of the Fourth Plan, *viz.* 1969-70.

PROGRAMME FOR 1969-70

15.30. An amount of Rs.1 crore will be spent on the spill-over project of Dalla Cement Factory. The first kiln of this factory is likely to be commissioned for trial runs in July, 1969 and the second kiln in September, 1969, and it is expected that 1,50,000 tons of cement will be manufactured by this factory during 1969-70. For the Dead Burnt Magnesite Project an amount of Rs.50 lakhs is provided, and the project is likely to be commissioned during the course of the year. The programme further includes a provision of Rs.5 lakhs for modernization of Government Precision Instruments Factory, Rs.40 lakhs for U. P. Financial Corporation and Rs.38.50 lakhs for acquisition of land for Public Sector Projects. An amount of Rs.60 lakhs has been provided for the U. P. S. I. C. for its Industrial Area Scheme and Rs.80 lakhs for underwriting of shares. The outlay for revitalization of textile industry is Rs.80 lakhs, and it is proposed to utilise the entire provision of Rs.6.5 lakhs for the project of Rubber Emulsifier, during 1969-70 itself.

2. MINERAL DEVELOPMENT

15.31. The Directorate of Geology and Mining, U. P., came into existence in the year 1955. It was created to supplement the work being done by the Geological Survey of India and to undertake detailed investigations on the mineral deposits in the State. Apart from survey, the Directorate is also looking after mineral administration in the State. It also suggests geological programmes to be taken up by the Geological Survey of India in U. P. The mineral investigations in the State are carried out in close collaboration with the Central organization.

15.32. As a result of the efforts by the Directorate it was possible to discover a 400 lakh ton lime-stone deposit in Dehra Dun area. Consequently, the Cement Corporation of India is considering to set up a cement factory there. The Dalla Cement Factory at Mirzapur, is the result of the efforts made by the Directorate in this direction. The Directorate has also discovered magnesite deposits in Almora as a result of which a Dead Burnt Magnesite Factory is proposed to be set up in the Fourth Plan with the collaboration of Tatas.

15.33. For the continuance of its present activities and for carrying out the programmes envisaged during the Fourth Plan, a sum of Rs.95 lakhs has been provided. The programmes during Fourth Plan include spill-over schemes which relate to work in hand on lime-stone, dolomite, magnesite, phosphorite, gypsum, talc, asbestos and iron formations in parts of South and North U. P. Detailed work will be commenced on metallic mineral deposits discovered earlier. (The deposits are iron formations in Mirzapur and Jhansi, copper-lead-zinc in Jhansi and Almora and bauxite in Banda District. Another aspect of the programme is of a more general nature and on a larger scale in terms of areas to be investigated. Both metallic and non-metallic mineral bearing areas have been selected on the basis of regional data for preliminary prospecting operations. These operations will cover geological terrains of importance, like the metamorphic unit of Himalayas for the search of graphite, arsenic, and antimony deposits, asbestos, radio-active minerals and base metals.

15.34. For implementing the above programmes an amount of Rs.12 lakhs has been provided in the Annual Plan for 1969-70.

3. VILLAGE AND SMALL INDUSTRIES

15.35. The village and small industries compel attention and deserve priority for a variety of reasons. They offer vast employment potential at relatively low per unit investment, they are quick maturing, and employ simple techniques of production. They have possibilities of wide dispersal, thus ensuring homogeneous development of the State and reduction in regional disparities. The machinery and equipment required for them is easily available and the demand for their products is rising because of the growing needs of sectors like Agriculture, Transport, Power and Irrigation. There is vast potential of mobilization of entrepreneurship in the growing number of towns for setting up small scale industries.

15.36. Various plan schemes included in different groups, *viz.* Handloom, small scale industries, industrial estates, handicrafts and sericulture, etc., under village and small industries sector are essentially promotional in nature. The objective of Handloom Schemes is the strengthening of weavers' co-operative societies so that they may serve their members and produce more goods of standard quality and be by themselves economically more viable units. Many promotional schemes of small scale industries are for sponsoring and encouraging new lines of production, providing extensive assistance both for working capital as well as for the extension and modernization of plant and equipments providing marketing facilities, imparting technical know-how, and arranging common service facilities, etc. The promotional schemes are largely helpful in the establishment of small scale industries in numerous lines of manufacture, besides affecting substantial expansion in production capacity of existing small scale units. They are useful in resolving to a certain extent the technical problems faced by the small scale units. Under Industrial Estates Schemes, developed estates and ready-made sheds are provided to entre-

preneurs. In order to popularise handicrafts products various schemes are included in the Plan to set up emporia and training-cum-production units at different places, to organise handicrafts co-operative societies and to increase export of handicrafts goods, etc. Similarly, schemes are included in the Plan for the promotion of sericulture and village industries. The Plan schemes included in Village and Small Industries sector are not means for earning revenue for the State, but they are to help the industrial growth of the State, thereby indirectly adding to the State revenue. Besides, village and small industries schemes are largely helpful to weaker sections of the society.

Review of Progress

15.37. A brief review of the progress made during the last three five-year plans and in the two annual plans, along with the position by the end of 1968-69 and the programmes envisaged for the Fourth Plan in each group of the Village and Small Industries is as follows :

15.38. *Handloom*—Handloom is the largest cottage industry of the State. It provides employment to more than one million persons and produces nearly one-third of the requirement of cloth in the State. There are at present 2.884 lakh registered looms in the State, of which 2.256 lakhs are cotton handlooms; 0.227 lakh silk handlooms, 0.094 lakh art silk, 0.063 lakh wool, and 0.244 lakh others. Though mainly concentrated in a few pockets of the State in the east and west, the industry generally covers the entire State. Production of handloom cloth was 607.77 lakh metres, during the First Plan, 3561.88 lakh metres in the Second Plan, and 5819.29 lakh metres in the Third Plan. During the period 1966—69 (up to February, 1968), the production has been 2451.21 lakh metres. Besides, increasing production the schemes launched helped the production of quality and standard goods, expansion of marketing facilities and establishment of a weavers' colony, apart from improving the techniques of production.

15.39. *Small Scale Industries*—Some of the important small scale industries of the State which largely contribute to the value of production and factory employment in the small scale sector are leather and leather goods, machinery parts and agricultural implements, non-ferrous metal products, miscellaneous engineering items including iron rolling and foundries, cycle and cycle parts, glass and glass bangles, perfumery, dyeing and printing, etc. In the year 1966, 3,119 small scale units produced goods worth Rs.128.55 crores and provided employment to 1,07,539 persons as against 1,060 such units in 1956, which produced goods worth Rs.24.46 crores and provided employment to 27,550 persons. The small scale units contributed 29 per cent of the total value of production and 39 per cent of the total factory employment in all registered factories of the State during 1966. Attempts have been directed towards minimising the production cost of the units by progressive production through modern and improved processes of manufacture. Loans and grants to the extent of Rs.8.35 crores were granted from 1951-52 to 1966-67. A sum of Rs.9.98 lakhs was disbursed as subsidy on power consumption to small scale

units from 1961-62 to 1967-68. During the second and third plan periods 7,592 persons were trained under training-cum-extension programme. To accelerate the programme of rural industrialization further, five rural industrial projects have also been set up. The share capital of U. P. Small Industries Corporation was raised from Rs.12.50 lakhs in 1960-61 to Rs.65 lakhs in 1967-68. The Corporation supplied machinery valuing Rs.15.35 lakhs to 65 small scale units. Under quality marking scheme goods worth Rs.55.38 lakhs, Rs.64.76 lakhs, and Rs.68.74 lakhs were "Q" marked in the first, second and third plan, respectively.

15.40. *Industrial Estates*—So far sixty-one industrial estates of various types have been constructed. In these estates at the end of 1967-68, 848 sheds were allotted to small scale entrepreneurs. Of these, 588, had been occupied and 427 were working providing employment to about 9,000 persons and producing goods worth Rs.4.50 crores annually.

15.41. *Handicrafts*—Uttar Pradesh is well-known for its traditional handicrafts which have attained a unique distinction of exquisite master craftsmanship. In the last three plans the total expenditure on various promotional schemes of this group amounted to Rs.1.78 crores. While during the Second Plan, 41 handicrafts co-operative societies were organised, in the Third Plan, 102 societies were organized. Value of handicrafts goods quality marked was Rs.20.85 lakhs and Rs.22.89 lakhs in the second and third plan.

15.42. *Sericulture*—Sericulture activities, during the first plan remained confined to the district of Dehra Dun. The number of silk worm rearers and production of cocoons was stepped up from 27 rearers and 274 kgs. in 1951-52 to 414 rearers and 16,136 kgs. in 1955-56. In the Second Plan, it went up to 1,562 rearers and 1.10 lakh kgs. and the programme was extended to five more districts. During the Third Plan period the number of rearers went up to 3,000 and the production of cocoons was raised to 2.03 lakh kgs. Besides, 290 persons were trained in the Second Plan and 396 in the Third Plan. During 1966-69, the work was systematically extended and it gained momentum. The work in mulberry nurseries was intensified and 1.90 lakh mulberry saplings were distributed free of cost to the rearers. The quality of seed greatly improved and it gave practically the same yield as was available from imported seed. During 1967-68, Dehra Dun Seed Organization, came to the assistance of Jammu and Kashmir State. A significant programme of acid treatment of Polyhybrid seed was successfully carried out recently. During the period 1,29,512 plants were distributed, 45,640 kgs. of cocoons were produced and sixty persons were trained.

PROPOSAL FOR FOURTH PLAN

15.43. An amount of Rs.20.10 crores has been proposed for the schemes of this sector. Against this amount Rs.2 crores have been provided for the establishment of multi-purpose workshops in the districts to help in the maintenance of agricultural and other machinery of different types. This scheme

would be implemented by the Agro-Industries Corporation under the aegis of State Agriculture Department. Sub-headwise break-ups of the above outlays and the targets proposed to be achieved are as under :

Serial no.	Sub-head	Proposed outlay (Rs. in lakhs)	
		Fourth Plan	Annual Plan 1969-70
1	2	3	4
1	Handloom	381.00	30.49
2	Powerloom	10.25	3.00
3	Small Scale Industries	1223.75	136.70
4	Industrial Estates	50.00	14.70
5	Handicrafts	70.00	9.41
6	Sericulture	50.00	6.20
7	Khadi and Village Industries	25.00	4.50
8	Establishment of multi-purpose workshops for agricultural machinery (to be included under Small Scale Industries).	200.00	..
Total ..		2010.00	205.00

15.44. *Handloom*—The handloom development programme proposed for the Fourth Plan period envisages that the production of handloom cloth in co-operative societies in the State shall increase from about 1,340 lakh metres at the commencement of the Plan to 1,750 lakh metres by the end of the Fourth Plan giving an average of 5.6 metres per loom per day. In order to achieve this, it is proposed to strengthen the industry by bringing more and more looms into cooperative fold providing whole-time work for all the looms and improving the quality handloom cloth by standardising its production. Provision has, therefore, been made for organising more and more co-operatives, expansion of training programmes, and improving the production of handloom cloth, both qualitatively and quantitatively. This would be done by arranging the supply of raw material of good quality, by the expansion of U. P. Co-operative Spinning Mills, Etawah, and also by arranging supply of improved tools, appliances, accessories, etc. Besides, provision has also been made for financial assistance for marketing of handloom products, facilities for dyeing and quality marking. Working capital financing is to be done under the Reserve Bank of India Scheme through the Central Co-operative Banks.

15.45. The Fourth Plan outlay for the scheme of this group is Rs.3.81 crores. It is proposed to bring 2,500 looms into co-operative fold and to produce a total quantity of 7,950 lakh metres of handloom cloth. Share capital loan worth Rs.50 lakhs is proposed to be provided during the plan period. One hundred and sixty co-operative societies would be provided with managerial assistance. One hundred and sixty seminars, each training 50 persons, are proposed to be organised during the Fourth Plan under the co-operative education programme to weavers. For storing the production done

during the slack season 10 co-operative societies are proposed to be assisted to the extent of 75 per cent of the cost of construction of warehouses. Work on the establishment of a workshop for improved appliances with a total outlay of Rs.8 lakhs will be started. Improved appliances worth Rs.20 lakhs will be arranged for weavers during the Fourth Plan period. Four design centres will be established which are expected to evolve 500 designs. Ten dye houses would be constructed during the plan. An outlay of Rs.9.15 lakhs has been provided for quality marking of handloom cloth and with this 413 lakh metres of handloom cloth will be quality marked during the plan period. Rupees 104 lakhs would be disbursed as rebate on sale of handloom cloth. Besides, provisions of Rs.12.50 lakhs for assistance to weavers' co-operative societies for participation in exhibitions, Rs.7 lakhs for publicity and propaganda and Rs.6.32 lakhs for survey and evaluation work has been made for the plan period.

15.46. During 1969-70, a sum of Rs.30.49 lakhs has been proposed for the schemes of handloom group. It is envisaged that 532 looms will be commissioned during the year and with this the production of handloom cloth will go up to 1,594 lakh metres. Rs.8 lakhs would be provided for share capital loan. Thirty co-operative societies will be given managerial assistance. Under co-operative education programme, 40 seminars will be organised during 1969-70. Two co-operative societies are proposed to be assisted to the extent of 75 per cent of the cost of construction of warehouses for storing the production done during slack season. Improved appliances worth Rs.2 lakhs will be arranged for weavers in the first year of the plan. One hundred designs would be evolved, Rs.1.44 lakhs have been provided for quality marking of handloom cloth and 76 lakh metres of handloom cloth will be quality-marked. Rs.12 lakhs are provided for disbursement as rebate on sale of handloom cloth. Besides, provision of Rs.2.25 lakhs for assistance to weavers' co-operative societies for participation in exhibitions has been made for the year 1969-70.

15.47. *Power-loom*—A provision of Rs.10.25 lakhs has been made for development of power-loom industry in the co-operative sector. Financial assistance for the establishment of the new power-looms and additional finance for the looms installed during Third Plan will be provided through the financial institutions of the State. While the loan for acquisition of land, construction of building and purchase of machinery would be provided through U. P. Financial Corporation and the hire purchase of machinery through U. P. Small Industries Corporation, the working capital loan is proposed to be given by way of cash credit limit through U. P. State Co-operative Bank. Besides, Rs.69.75 lakhs have been kept under loans scheme of small industries group specially to provide assistance to power-loom industry outside the co-operative fold during the Fourth Plan period. It is proposed to utilise Rs.3.00 lakhs in the year 1969-70.

15.48. *Small Scale Industries*—For the development of small scale engineering industries, promotional and assistance programmes with a total outlay of Rs.14.24 crores for the Fourth Plan period have been prepared. These programmes include financial assistance through loans, subsidy in consumption of power and modernization expenditure, sectional information and assistance, upgrading of rural skills and promotion of rural industries, quality marking, tool room-cum-testing laboratory at Agra, expansion of pottery development centre at Chunar, opening of sample display centres and establishment of a trade centre at Ghaziabad.

15.49. An amount of Rs.4.41 crores has been provided for disbursement of loans. Out of this amount it is proposed to ear-mark Rs.69.75 lakhs for the development of power-loom industry outside the co-operative fold, share capital participation to the extent of Rs.85 lakhs during the Fourth Plan in the U. P. Small Industries Co-operation is proposed. Similarly, Rs.2.50 crores have been allocated for hire purchase scheme. The provision for subsidy on power consumption is Rs.125 lakhs during the Plan period. A provision of Rs.40 lakhs has been made for opening of 80 centres and training of 5,060 persons during the Fourth Plan under the scheme of technical assistance programme.

15.50. The programme for 1969-70, includes Rs.64 lakhs for loans, Rs.15.00 lakhs for hire-purchase scheme, Rs.25 lakhs for power subsidy and Rs.5 lakhs for share capital participation.

15.51. *Industrial Estates*—A total outlay of Rs.50 lakhs has been proposed for Industrial Estate programmes during the Fourth Plan. Out of this Rs.20.50 lakhs would be for completion of the estates under construction, Rs.10.50 lakhs for the construction of new estates, and Rs.19 lakhs for the expansion of the existing Estates.

15.52. During the Annual Plan 1969-70, Rs.5.95 lakhs would be spent on spill-over schemes, Rs.3.75 lakhs on development of site in Kanpur and construction of the administrative block at Rania and Rs.5 lakhs on development of sites at Agra, Lucknow, Varanasi, Meerut, Roorkee and Bareilly.

15.53. *Handicrafts*—Programmes for the development of handicrafts industries in the State during the Fourth Plan period envisages a total outlay of Rs.70 lakhs. Efforts for the development of this industry consist of Promotion of Internal Marketing of handicrafts products ; Setting up of two Common Facility-cum-Research Centres, Establishment of Production Centres for Papri Wood Products at Srinagar (Garhwal), Ladies Woollen Shawls at Pauri, Artistic Glazed Potteries at Daliganj, Lucknow, Wooden Cigar Boxes with Tarkashi Inlay Work at Kannauj, Papier Machie Articles at Gorakhpur and Textile Hand Prints at Central Design Centre, Lucknow.

15.54. For the promotion of internal marketing of handicraft goods a provision of Rs.26.69 lakhs has been proposed during the Fourth Plan period. Value of sales during the plan period through show rooms is expected to be Rs.42 lakhs. Common Facility-cum-Research Centres for Copper Lacquering at Varanasi and for soft stone at Gaurahari (Hamirpur), are proposed to be opened during the Fourth Plan with a total outlay of Rs.4.06 lakhs. These centres would assist about 250 persons in the two trades during the Plan. The six training-cum-production units mentioned in the foregoing para would produce goods worth Rs.16.49 lakhs. Fifty handicrafts co-operative societies are proposed to be organised. A Pilot Project Centre would be opened at Agra for organising, re-organising and assisting handicrafts co-operative societies to bring about an improvement in the general economic condition of small and poor handicrafts workers and artisans. It has also been proposed to spread 250 designs amongst the societies and render benefit to 3,510 persons during the entire plan period. With this an increase of Rs.40 lakhs in the production of co-operative societies is expected during the Fourth Plan.

15.55. During the year 1969-70, Rs.1.81 lakhs has been proposed for promotion of internal marketing of handicrafts goods and Rs.0.58 lakh would be utilised under the scheme of Common Facility-cum-Research Centres for Copper Lacquering at Varanasi and for soft stone at Gaurahari. Forty persons would be assisted at the Varanasi Centre. The six training-cum-production centres would produce goods worth Rs.1.73 lakhs during the year, 10 handicrafts societies would be organised in the first year. Fifty designs would be spread amongst the societies which will benefit 710 persons during the year. The production of co-operative societies is expected to increase by Rs.8 lakhs during 1969-70.

15.56. *Sericulture*—During the Fourth Plan period 12 nurseries with an area of 48 hectares and 18 farms with an area of 36 hectares will be established. During the plan period, 4.50 lakh plants will be distributed, 2.25 lakh grafts and improved saplings will be prepared and 33,000 kilograms of cocoons and 2.85 lakh Disease Free Layings will be produced. Under Tusser Rearing Scheme, Government Seed Farms totalling 15 hectares will be established and 100 trainees will be benefited. Seven thousand kilograms of cocoons would be produced.

15.57. In 1969-70, one nursery of four hectares and three farms in a total area of six hectares will be established. Fifty thousand plants would be distributed, 5,000 kgs. of cocoons and 25,000 Disease Free Layings would be established and 20 trainees would be benefited. Besides, 1,000 kgs. of cocoons would also be produced.

15.58. *Khadi and Village Industries*—A sum of Rs.25 lakhs has been provided as the State's contribution to the Khadi and Village Industries Board for continuance of its activities. The outlay proposed for the year 1969-70 amounts to Rs.4.50 lakhs.

Outlays for State Plan Schemes

Head—5. INDUSTRY AND MINING

Sector—5.1. LARGE AND MEDIUM INDUSTRIES.

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
510101	Government Cement Factory, Dalla	200.00	200.00	115.00	100.00	100.00	23.00
510102	Expansion of Government Cement Factory	600.00	600.00	100.00	..	..	..
510103	Dead Burnt Magnesite	102.00	102.00	..	50.00	50.00	..
510104	Government Optical Instruments Factory	1.00	1.00	..	0.20	0.20	..
510105	Modernization of G. P. I. F.	10.00	10.00	..	5.00	5.00	..
510106	Power Tiller scheme	1.00	1.00	..	..	..	..
510107	U. P. Financial Corporation	300.00	300.00	..	40.00	40.00	..
510108	U. P. State Industrial Corporation—underwriting of Shares	500.00	500.00	..	80.00	80.00	..
510109	Industrial Area Scheme	300.00	300.00	..	60.00	60.00	..
510110	Land Acquisition for Public Sector Projects	50.00	50.00	..	38.50	38.50	..
510111	Revitalization and Modernization of Textile and Sugar Industries	301.00	301.00	..	80.00	80.00	..
510112	Management Training Institute	1.00	1.00	..	..	..	..
510113	Manufacture of Rubber Emulsifier	6.50	6.50	..	6.50	6.50	..
Total for Sector 5.1. Large and Medium Industries		2372.50	2372.50	215.00	460.20	460.20	23.00

Outlays for State Plan Schemes

Head—5. INDUSTRY AND MINING

Sector—5.2. MINERAL DEVELOPMENT

(Rupees in lakhs)

Code no.	Group/Scheme	Fourth Plan outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
520101	Expansion of the Directorate of Geology and Mining	95.00	6.00	3.83	12.00	..	0.75

Outlays for State Plan Schemes

Head—5. INDUSTRY AND MINING

Sector—5.3. VILLAGE AND SMALL SCALE INDUSTRIES

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
	(1) Handloom						
530101	Loan for share capital to Weavers Co-operative Societies ..	50.00	50.00	..	8.00	8.00	..
530102	Managerial Assistance to 160 Weavers Co-operative Societies ..	11.16	..	..	1.08	..	..
530103	Training of employees of Apex and Primary Weavers Co-operative Societies	4.00	..	..	0.80	..	..
530104	Co-operative education programme to weavers through seminars ..	4.76	..	..	1.09	..	..
530105	Arrangement for raw material for establishment of new Co-operative Spinning Mills.	100.00	100.00	..	..	..	..
530106	Establishment of ware houses	1.88	1.88	..	0.37	0.37	..
530107	Arrangement of Improved Appliances	20.00	5.00	..	2.00	0.50	..
530108	Establishment of Improved Appliances Workshop	8.00	1.10	..	..	..	..
530109	Establishment of four design centres	8.00	0.40	..	1.84	0.40	..
530110	Establishment of dye houses	2.70	0.60	..	0.30	..	..
530111	Purchase of Sample	0.56	..	..	0.10	..	..
530112	Award of prizes	0.25	..	..	0.05	..	..
530113	Quality Marking scheme	9.15	0.02	..	1.44	..	..
530114	Opening of Sales depot	6.23	..	..	0.85	..	..
530115	Celebration of All-India Handloom-Week	0.60	..	..	0.12	..	..

Head—5. INDUSTRY AND MINING

Sector—5.3. VILLAGE AND SMALL SCALE INDUSTRIES—(contd.)

(Rupees in lakhs)

Code	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
530116	Sales Promotion and Marketing Scheme	85.00	..	..	12.00	..	..
530117	State guarantee under R. B. I. scheme for Working Capital ..	10.00	..	..	..	..	..
530118	Subsidy towards interest on loans	10.00	..	..	..	..	..
530119	Subsidy on expenditure on staff by Central Co-operative Banks ..	7.70	..	..	..	..	..
530120	Renovation and enlargement of existing warehouses	13.00	13.00	..	..	..	..
530121	Assistance to weavers of Co-operative Societies for participation in exhibitions,	12.50	..	..	..	..	..
530122	Publicity and propaganda	7.00	0.02	..	..	..	..
530123	Marketing and organisational staff	2.25	0.12	..	0.45	..	..
530124	Survey and Evaluation scheme	6.32	..	..	..	..	..
		381.00	172.14	..	30.49	8.87	..
530201	(2) Powerloom schemes (3) Small Scale Industries	10.25	10.25	..	3.00	3.00	..
530301	Loans schemes	441.38	441.38	..	64.00	64.00	..
530302	Share Capital participation in U. P. S. I. C.	85.00	85.00	..	5.00	5.00	..
530303	Hire Purchase Scheme	250.00	250.00	..	15.00	15.00	..
530304	Power Subsidy scheme	125.00	..	..	25.00	..	..

530305	Assistance to Co-operatives	..	..	..
530306	Expansion of Industrial Co-operatives (N. T.)	..	..	..
530307	Technical Assistance Programme including Technical staff			..
530308	Scheme for the upgrading of rural skills and promotion of rural Industries.			
530309	Quality Marking Scheme	-	-	..
530310	Modernization subsidy scheme	..	-	..
530311	Technical Information scheme	-	-	..
530312	Completion of Tool Room-cum-Testing laboratory at Ghaziabad			..
530313	Forged Heat Treatment Plant at Meerut			..
530314	Tool Room-cum-Testing laboratory at Agra			..
530315	Expansion of Glass Technologist Section, Kanpur			..
530316	Training-cum-Common Facility Centre for Chunar at Mirzapur			..
530317	Expansion of Government Pottery Development Centre, Khurja			..
530318	Sample display centres	..	-	..
530319	Establishment of Trade Centre at Ghaziabad	..		..
530320	Exhibitions	..	..	..
530321	Share Capital participation in U. P. Export Corporation		-	..
530322	Multi-purpose Mechanical Workshop	..		..
530323	Leather Research Institute, Kanpur		-	..
530324	Wood Seasoning plant	..	..	..
530325	Techno-Economic Survey of hill districts by the National Industrial Development Corporation.			..

2.00	..	..	..	..	..
24.00	6.00	..	1.96	0.75	..
40.00	..	..	5.51	..	..
40.00	..	..	..	..	..
20.39	1.10	..	2.56	..	..
18.00	..	..	..	..	..
3.00	..	..	..	..	..
22.00	1.50	..	4.45	1.50	..
60.00	52.00	..	3.00	..	..
23.00	2.50	..	..	..	..
2.00	0.35	..	0.30	..	..
6.25	2.00	..	..	..	..
4.00	1.00	..	0.30	..	..
4.48	..	..	1.18	..	..
10.00	6.00	..	1.00	1.00	..
10.00	..	..	2.00	..	..
12.00	12.00	..	..	..	..
11.77	..	..	0.25	..	..
1.29	..	..	..	..	..
0.03	0.03	..	0.03	0.03	..
0.16	..	..	0.16	..	..

Head—5. INDUSTRY AND MINING

Sector—5.3. VILLAGE AND SMALL SCALE INDUSTRIES—(contd.)

(Rupees in lakhs)

Code no.	Group / Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
530326	Pilot Project on Small Scale Cement Manufactures	10.00	..	..	5.00	..	..
530327	Multi-purpose workshops in districts for agriculture machinery	200.00	200.00	..	..	..	..
	Total	1423.75	1060.86	..	136.70	87.28	..
	<i>(4) Industrial Estate</i>						
530401	Spill-over Scheme	20.50	15.00	..	5.95	5.00	..
530402	New Industrial Estates	10.50	10.50	..	3.75	3.75	..
530403	Expansion of existing Industrial Estates	19.00	19.00	..	5.00	5.00	..
	Total	50.00	44.50	..	14.70	13.75	..
	<i>(5) Handicrafts</i>						
530501	Scheme for promotion of internal marketing of handicrafts goods	26.69	17.05	..	1.81	0.10	..
530502	Setting-up of Common facility-cum-Research Centres	4.06	0.83	..	0.58	..	..
530503	Scheme for establishment of production units	16.49	13.52	..	2.70	..	..
530504	Reorganisation of field staff for export	9.66	..	..	2.41	..	..
530505	Scheme for organisation of handicrafts Co-operative Societies and advance of financial assistance	11.85	5.87	..	1.66	0.75	..
530506	Celebration of All-India Handicrafts Week	1.25	..	..	0.25	..	..
	Total	70.00	37.27	..	9.41	0.85	..

(6) *Sericulture*

530601	Mulberry Plantation Schemes	}	..	..	..	47.00	13.85	1.00	5.70	1.00	1.00
530602	Silk worm Seed Organization		..	..	..	..	..	..	..	..	..
530603	Silk worm rearing organization		..	..	..	..	..	..	..	..	..
530604	Training Schemes		..	..	..	..	..	..	..	..	..
530605	Conditioning and Testing house		..	..	..	..	..	..	..	..	..
530606	Expansion of rearing organisation		..	..	..	..	..	..	..	..	..
530607	Publicity and Propaganda		..	..	..	..	..	..	..	..	..
530608	<i>Tasar</i> Rearing Scheme	..	..	..	..	3.00	..	..	0.50	..	..
Total			..	..	..	50.00	13.85	1.00	6.20	1.00	1.00

(7) *Khadi and Village Industries*

530701	State Contribution to Khadi and Village Industries Board	}	..	..	..	25.00	..	..	4.50	..	..
530702	Hand made paper Scheme		..	..	..	..	..	..	..	..	..
Total			..	..	..	25.00	..	..	4.50	..	..
Total for Sector 5.3. Village and Small Scale Industries			2010.00	1338.87	1.00	205.00	114.75	1.00			

Outlays for Centrally Sponsored Schemes

(Rupees in lakhs)

Serial no.	Schem s	Fourth Plan Outlay	1969-70 Outlay
1	2	3	4
5. INDUSTRY AND MINING			
5.3. VILLAGE AND SMALL SCALE INDUSTRIES			
1	Rural Industries Project <i>P. R. A. I.</i>	199.56	34.60
2	Rural Industries Project, Phulpur, Allahabad	104.59	15.02
Total 5.3. Village and Small Scale Industries		304.15	49.62

16

TRANSPORT AND COMMUNICATIONS

1. ROADS AND BRIDGES

16.1. In 1950-51, U. P. had a road length of 16,182 kilometers, which increased to 23,412 kilometers at the end of the Second Plan and 27,197 kilometers by the end of the Third Plan. The length of surfaced roads in U. P. as percentage of that in the country as a whole fell from 10.4 in 1950-51 to 8.4 in 1965-66. The road length in Uttar Pradesh was 29,213 kilometers by the end of March, 1969. Although the State as a whole had achieved the targets of the Nagpur Plan by the end of the Third Plan, there were many districts, which could not achieve even this minimum by that date.

16.2. The progress of road development in the State during the last 18 years is briefly indicated in the table below :

Period	Scheme	Total expenditure (Rs. in crores)	Physical achievement		
			New roads (km.)	Reconstruction and improvement (km.)	Bridges (No.)
1	2	3	4	5	6
First Plan	Roads Plan Schemes	5.51	2,388	3,381	26
Second Plan	(1) Roads Plan Schemes	14.53	2,486	1,942	60
	(2) Other than Roads Plan Schemes	10.59	1,178	515	30
	(3) Other agencies (i.e. M. E. S., Local Bodies, etc.)	N. A.	1,178	..	..
Third Plan	(1) Roads Plan Schemes	28.08	2,312	2,625	65
	(2) Other than Roads Plan Schemes	5.18	723	162	10
	(3) Other Agencies	N. A.	750	..	..
1966-67	(1) Roads Plan Schemes	5.85	431	712	13
	(2) Other than Roads Plan Schemes	1.23	168	..	2
	(3) Other agencies	N. A.	605	..	..
1967-68	(1) Roads Plan Schemes	4.87	262	204	7
	(2) Other than Roads Plan Schemes	0.97	172	..	..
1968-69	(1) Roads Plan Schemes	5.53	249	250	7
	(2) Other than Roads Plan Schemes	0.84 (anticipated)	129	6	..
Total		..	13,031	9,797	220

16.3. In the meanwhile a new 20-year (1961-81) Road Development Plan, which is known as Bombay Plan had been formulated, under which the total length of surfaced roads to be reached in U. P. by the end of 1981 should be 46,960 kilometers. Thus, Uttar Pradesh will embark on the Fourth Plan with a deficiency of about 17,747 kilometers, which in terms of the Bombay Plan should be made up within a period of 12 years. According to the broad objective of this Plan, no village in the developed agricultural area should be more than 6 kilometers away from a metalled road and more than 2 kilometers from any type of road.

16.4. In a comprehensive plan of development, the special needs of the less developed areas have to be kept in view so that the entire pattern of investment is adapted to the securing of a balanced regional development.

16.5. The following table shows the progress of metalled roads in the various regions of the State up to March, 1968, *vis-a-vis* its requirements of the Nagpur and Bombay Plans :

Region	Meterage required according to Nagpur Plan	Meterage required according to Bombay Plan	Meterage in 1947	Meterage in March, 1961	Meterage in March, 1966	Meterage in March, 1968
1	2	3	4	5	6	7
1. Hills	1,926	4,192	924	2,431	3,168	3,220
2. Bundelkhand	2,808	4,014	1,418	1,856	2,091	2,170
3. Eastern	8,300	14,316	4,762	7,522	8,475	9,428
4. Western	8,467	16,676	5,150	7,995	9,243	9,749
5. Central	3,999	7,762	2,671	3,608	4,220	4,268
Total	25,500	46,960	14,925	23,412	27,197	28,875

16.6. A number of works sanctioned up to March, 1969, will go as spill-over works in the Fourth Plan. On the completion of these works during the Fourth Plan, the position of road meterage in the various regions of the State as percentages of the Bombay Plan targets will be as below :

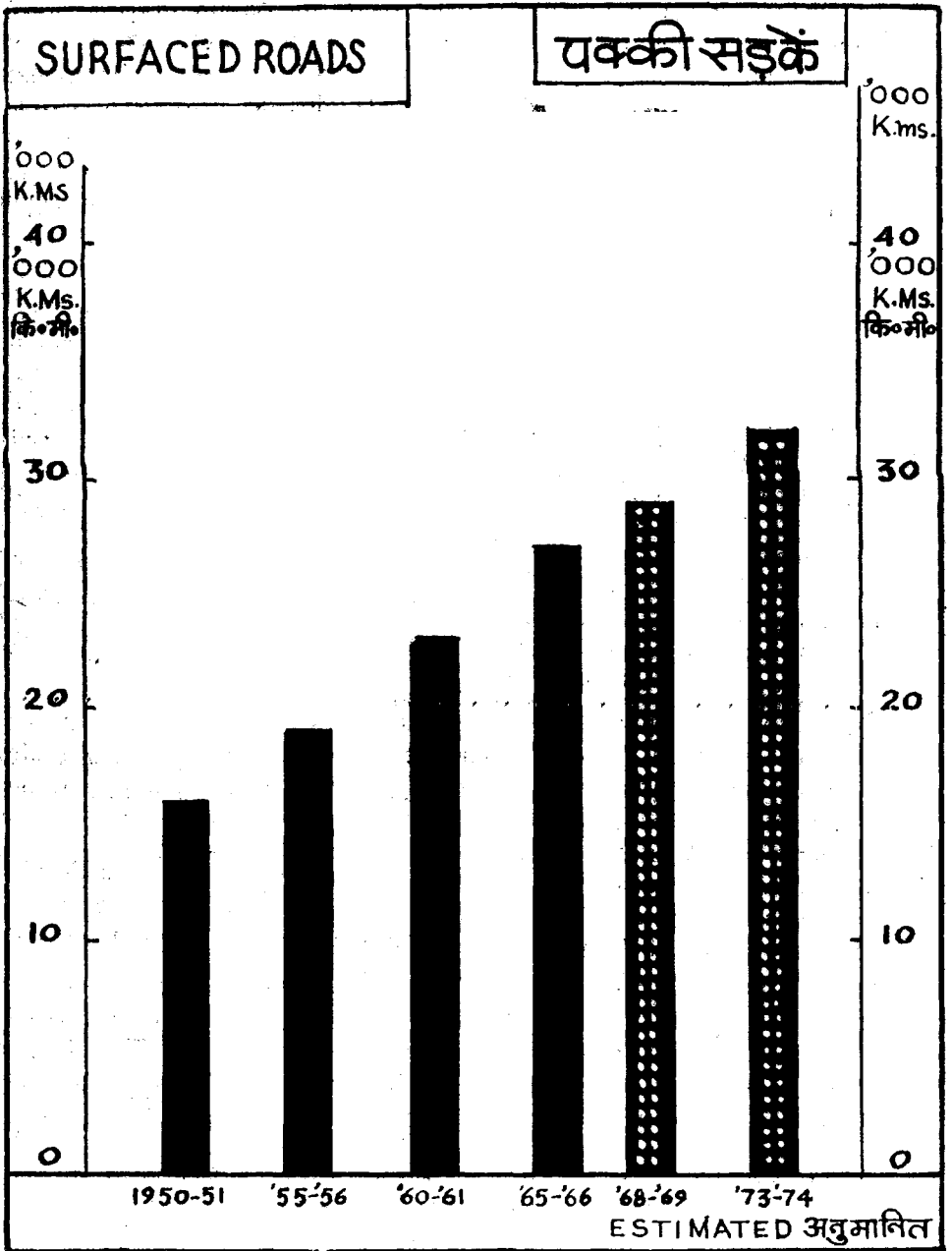
Region	Anticipated meterage on completion of sanctioned works	Percentage of Bombay Plan target
1	2	3
1. Hills	3,736	89.13
2. Bundelkhand	2,396	59.60
3. Eastern	10,375	72.46
4. Western	10,322	61.90
5. Central	4,737	61.64
Total	31,566	67.20

16.7. While the State as a whole had achieved 61.4 per cent of the Bombay Plan at the end of March, 1968, there are certain districts, which are substantially behind this average. These districts include Banda (44.82 per cent), Hamirpur (50.61 per cent), Jalaun (48.93 per cent), Bara Banki (48.66 per cent), Fatehpur (54.06 per cent), Hardoi (44.16 per cent), Kheri (45.18 per cent), Sitapur (54.77 per cent), Budaun (41.02 per cent), Bareilly (44.77 per cent), Farrukhabad (50.88 per cent), Meerut (52.31 per cent), Bahraich (35.97 per cent), and Ghazipur (49.89 per cent). On the whole the hill region and the eastern region are above the State average while the other three regions are below that average. Even among the regions, which have achieved the State average, there are districts which are deficient in the matter of road length. Even though the hill region as a whole has exceeded the State average, the district of Garhwal is considerably below the State average. Roads are necessary for any programme of development in hills and, therefore, a number of schemes are proposed to be taken up in hills in this sector during the Fourth Plan. Weightage is given to deficient regions and districts in the allotment of new roads during the Fourth Plan. It may be mentioned that the State Government took up an accelerated programme of development of roads in the eastern districts. The cost of the programme which was based on the recommendations of the Joint Study Team set up by the Planning Commission was estimated at Rs.13.72 crores. During the Third Plan, schemes costing Rs.4.31 crores were taken up for execution and the actual expenditure was Rs.1.13 crores.

16.8. To make up the deficiency of 17,747 kilometers during the next 12 years, the total cost involved would be about Rs.190 crores excluding reconstruction and improvement of existing roads, construction and reconstruction of bridges, rural roads and other works included in the road sector. In the Fourth Five Year Plan of the State, it has been possible to provide only Rs.50.00 crores for roads and bridges due to constraint on resources. It is, therefore, clear that it would be impossible, so far as this State is concerned to achieve the targets of the Bombay Plan by the end of 1981.

16.9. The Working Group set up by the State to consider proposals for roads and bridges for the Fourth Plan observed that apart from deficiency in the road length, there are a number of other equally serious gaps. Road crusts originally meant to carry high traffic are unable to stand the heavier and faster traffic which has developed in recent years. On several important routes there are missing links, unbridged river crossings and weak culverts and bridges. Most of the arterial highways have road surface with a thickness of 20 centimeters or less instead of the required thickness of 36 to 56 centimeters. Again most of the roads are single - lane roads and travel along them is both slow and unsafe. Inter-State routes are also inadequate to meet the present day requirement. Apart from these deficiencies, there are following four important problems which are influencing the planning of road system :

- (1) Provision of roads related to major industrial, mining and other development projects.



- (2) Rural market roads.
- (3) Roads for the development of backward areas.
- (4) Road system in metropolitan areas and large cities.

16.10. On the suggestion of the Planning Commission a Regional Transport Survey Team was set up in U. P. in January, 1965, which made the following recommendations regarding priorities :

“The top priority would have to be given to those Third Plan works which have already progressed substantially. The second priority would go to the construction of missing links on the State Highways. The next priority would be the provision of missing and strengthening of weak bridges on trunk routes to ensure free flow of traffic. Then there are a number of trunk routes which are sub-standard from the point of view of thickness of crust. In all such cases the crust thickness would have to be raised from 20 to 36 cm. The next would be the widening of such road sections which have high intensity of traffic and are already carrying loads beyond their capacity. Next would come the provision of berms on single lane sections of National Highways and State Highways in preference to making them double lanes. Thereafter would come the provision of new roads ; first, the rural market roads ; secondly roads for development and exploitation of forest and mineral areas ; thirdly, feeders to Lateral Road and lastly, on the basis of ‘desire-line’ maps. In the end, some provision would have to be made for providing bye-passes and replacement of level crossing and raising of low level stretches.”

16.11. The State Working Group generally agreed with the recommendations of the Transport Survey Team and suggested certain modifications that had become necessary with the passage of time.

16.12. In the outlay of Rs.50.00 crores approved for the Fourth Plan, an amount of Rs.24.34 crores is for continuing schemes and Rs.25.66 crores for new schemes. The following table would show the physical targets and financial outlays for the various schemes in the Fourth Plan :

Name of Scheme	Physical target	Financial Outlay (Rs. in crores)
1	2	3
<i>Continuing Schemes—</i>		
1. Reconstruction and improvement of existing roads ..	1,249 km.	4.00
2. New roads construction ..	728 km.	7.00
3. Bridges	50 nos.	3.00
4. Other works and establishment .. ..	..	2.58
5. Tarai area schemes—		
(a) Reconstruction and improvement	116 km.	} 6.28
(b) New roads construction	195 km.	
(c) Bridges	49 nos.	

Name of Scheme	Physical target	Financial Outlay (Rs. in crores)
1	2	3
6. Accelerated road development programme in four eastern districts—		
(a) Reconstruction and improvement	116 km	} 1.48
(b) New roads construction	99 km	
(c) Bridges	2 nos.	
Total for Continuing Schemes		24.34
<i>New Schemes—</i>		
(1) New roads including rural roads	1,669 km.	10.95
(2) Reconstruction and improvement	927 km.	8.00
(3) Bridges	14 nos.	2.91
(4) Other works .. .. .	.. .. .	1.70
(5) Establishment .. .. .	.. .. .	2.10
Total for New Schemes		25.66
GRAND TOTAL		50.00

16.13. At present, 36 per cent of the villages in this State are not connected by any road with important nearby market centres. Of the remaining villages, 26 per cent are connected with surfaced roads and 38 per cent with un-surfaced roads. The strategy of the Fourth Plan takes into account the importance of focal growth points and effort will be made to provide necessary facilities like banking, colleges, processing, marketing and storage at these focal points during the Fourth Plan. The rural roads form an important and integral part of this effort. The Sinha Committee appointed by the Centre had recommended that one-third of the total expenditure on the construction of rural roads should be contributed by the residents of the locality in the form of land, labour or cash and that the rural roads should be developed as low-grade-all-weather roads. With a provision of Rs.7.00 crores for rural roads in the new schemes of the Fourth Plan, the State Government would be spending 14 per cent of the allocation for roads in the State Plan on rural roads. The Transport Development Council at a recent meeting held at Mysore had recommended that at least 25 per cent of the allocation for roads should be earmarked for rural roads. A higher allocation for rural roads has not been possible due to paucity of funds.

16.14. Most of the works sanctioned up to the end of 1968-69 would be completed during the Fourth Plan except for works costing Rs.6.66 crores. The new roads being taken up in the Fourth Plan would be completed as early as possible, but it will not be possible to complete all the new schemes

which would be initiated in the Fourth Plan during the Fourth Plan itself. The total cost of new projects to be taken up in the Fourth Plan would be about Rs.39.00 crores. While the total amount being provided for new works in the Fourth Plan would be only Rs.25.66 crores. There would, therefore, be a spill-over of Rs.20.00 crores (which includes a sum of Rs.6.66 crores for continuing schemes) to the Fifth Plan.

16.15. In the Third Plan the Central Ministry of Transport and Shipping took up the construction of a Lateral Road from Bareilly in U. P. to Amingaon in Assam. The length of this road in U. P. is about 641 kilometers. The road is expected to be completed during the Fourth Plan period. It will be possible to take advantage of the Lateral Road for exploiting the potentialities of the hinterland with the provision of feeder roads. The total cost of these feeder roads is estimated at about Rs.6 crores. An effort will be made to take up as many of these feeder roads in the Fourth Plan as possible as it will not be possible to accommodate all such roads in the Fourth Plan itself.

16.16. Provision has also been made in the Plan for the construction of major bridges on the Ganga and the Ramganga rivers in Farrukhabad district and on the Ganga in Mirzapur district with Central loan assistance* to the extent of 50 per cent of the cost up to a ceiling of Rs.4.50 crores as also for the Buxar Bridge over the Ganga at the border of U. P. and Bihar, the cost of which would be shared equally by the Governments of Uttar Pradesh, Bihar and the Centre.

Supplementary Plan

16.17. Keeping in view the need of the road sector, an additional allocation of Rs.5 crores has been made for the development of roads and bridges in rural areas, in the Supplementary Plan of Rs.727.50 crores. It would be implemented on the availability of additional resources.

2. ROAD TRANSPORT

16.18. Road transport is an important public utility service. It has to cater to a growing volume of passenger and goods traffic. Efficient and quick service goes a long way in the development of the State. Passenger road transport in Uttar Pradesh was nationalised in the year 1947 to provide efficient and comfortable travel facilities. The Government of India also agreed with this policy and the Lok Sabha amended the Motor Vehicles Act, 1939, by incorporating a special chapter in the said Act so as to enable the State Governments to acquire exclusive rights for operating road transport services. The Roadways schemes formed part of the First and the Second Five Year Plans. This sector was, however, treated as a non-Plan item during the Third Plan and the three Annual Plans.

16.19. To a large extent the Plan for development of road transport is determined by the plans for constructions of metalled roads. The State Roadways have gradually expanded but there is considerable gap between the road

* The matter is under correspondence with the Government of India.

length served by the Roadways and the total metalled roads in the State. At the beginning of the First Plan, the Roadways had a coverage of 7,465 kilometers against the total metalled roads of 16,182 kilometers. At the end of the Third Plan the Roadways had a coverage of 17,828 kilometers against a total metalled length of 27,197 kilometers. By March, 1968, Roadways covered a road length of 19,396 kilometers out of 28,835 kilometers of metalled roads in the State.

16.20. The strategy of the Fourth Plan is that while the resources of the private sector should be primarily utilised in the development of goods road transport services, the public sector should assume an increasingly bigger role in the development of passenger road transport services with a view ultimately to nationalising passenger traffic completely. The limited objective during the Fourth Plan is to cater fully to all the additional traffic on the existing routes under operation and to extend the operation of nationalised services to backward areas of Bundelkhand, six eastern districts and the routes contiguous to the existing routes under operation. Provision has also been made to take over new roads like Lateral Road and Tarai Roads etc. This would contribute to the economic development of these areas. Thus, during the Fourth Plan the emphasis would be on consolidation of the work already done and expansion will be undertaken chiefly in the more backward areas. According to the road plan of the State, a length of about 10,000 kilometers of roads would be available for expansion of the Roadways by the end of 1973-74. It is, however, proposed to expand Roadways services to only 1,000 kilometers of roads. This target is proposed to be achieved by introducing 416 buses and four air-conditioned buses for tourist traffic.

16.21. The entire allocation of Rs.500 lakhs will be capital investment on vehicles, land and buildings, tools and plants and furniture and fixtures. The revenue expenditure on the maintenance of existing services and proposed expansion will be borne on the non-Plan budget. The additional revenue expenditure due to the Fourth Plan schemes is expected to be about Rs.920 lakhs. These schemes are expected to yield additional revenue of about Rs.1,050 lakhs. The year-wise break-up of physical and financial targets is given below :

	Total	1969-70	1970-71	1971-72	1972-73	1973-74
Physical Targets						
<i>A—Vehicles—</i>						
(i) Buses	416	142	105	104	60	5
(ii) Air-conditioned buses	4	..	2	..	..	2
<i>B—Road km.</i>	1,000	200	200	200	200	200
Financial Targets (Rs. in lakhs)	500.00	100.00	125.00	125.00	100.00	50.00

16.22. The private sector will continue to play its useful role in providing transport facilities. The fleet of trucks is likely to increase from 19,000 in 1968-69 to 22,500 by the end of the Fourth Plan. The number of buses in the private sector is expected to go up to 5,625 by the end of the Fourth Plan as against 4,500 in 1968-69. It is proposed to open new sub-regional offices and construct bus stations, waiting halls and sheds with necessary facilities and parking places for public carriers. Additional facilities for training of drivers will also be provided.

3. TOURISM

16.23. Even though there is a growing awareness of benefits from the the promotion of tourism, it is not generally realised that tourist industry is one of the largest in international trade. In 1966, 117 million tourists spent £13,000 million in 90 countries. India's share of international tourists was a bare half per cent. Ancient culture, mysticism, historical monuments and natural scenery are, by themselves, not enough for promoting tourism. A tourist, other than a pilgrim, travels for pleasure and relaxation. Naturally he prefers visiting countries and places where necessary amenities and facilities are available.

16.24. The Tourist Department, Government of India, is concentrating on the promotion of foreign tourists. The responsibility of development of home tourism has been left to the States. The States have to develop tourist facilities in a phased manner at places of tourist interest so that a wide base is created for progressive development of home and international tourism.

16.25. A tourist organisation was set up in the State in 1956 and an expenditure of Rs.19 lakhs was incurred during the Second Plan period on tourist development and promotion programmes. During the Third Plan period the expenditure was restricted to Rs.12.00 lakhs as expenditure on construction works had to be curtailed in the wake of foreign aggressions during 1962 and 1965.

16.26. By the end of 1965-66, four tourist bungalows were constructed at Agra, Ayodhya, Varanasi and Allahabad. Pilgrim sheds were constructed at Srinagar and Binsar. Four rest houses were also completed at Sahasradhara (Dehra Dun), Kampil (Farrukhabad), Tarikhet (Almora) and Chinhat (Lucknow). Besides, 20 log cabins were constructed at a number of places in U. P. Tourist bungalows at Lucknow and Hardwar are likely to be commissioned shortly. A number of Zila Parishad dak bungalows were improved. Other facilities were also provided at places mentioned above.

16.27. During 1966-68, an expenditure of Rs.3.29 lakhs was incurred under State Plan Schemes. In the year 1966-67, the work for the construction of Low Income Group hostel at Hardwar was taken in hand. During 1967-68, land for a hostel at Naugarh was acquired. A provision of Rs.13.00 lakhs was made in

the budget for 1968-69 including Rs.9 lakhs for the development of the Corbett National Park. Three mini buses and two additional elephants were proposed to be provided in the Park for the use of the tourists. Amdada-Bijrani-Jaungwar-Patherpani road was being improved to make it a fair weather road. A new scheme to promote tourism among students was also introduced. Facilities were provided to groups of students to visit places of interest in the State and outside the State.

16.28. The tourist bungalow at Varanasi remains almost fully occupied. The occupancy ratio ranged between 82 to 86 per cent. The tourist bungalows at Agra and Allahabad have an occupancy ratio between 40 to 70 per cent, while the tourist bungalow at Ayodhya has a very low occupancy ratio, ranging from five to ten per cent only. The Tourist Department is taking steps to popularise the tourist bungalows so as to ensure fair returns from investments in these bungalows. The 10 Tourist Offices at Agra, Varanasi, Ayodhya, Hardwar, Dehra Dun, Rishikesh, Mussoorie, Kathgodam, Srinagar and Kotdwara are becoming more and more popular. In Agra the number of tourists visiting the Tourist Office has increased from 6,31,622 in 1956-57 to 13,72,750 in 1967-68. The number of tourists visiting the Tourist Office, Varanasi, has increased from 48,740 to 1,85,639, the increase in the Ayodhya Office being from 1,31,740 to 3,41,001 during the same period. The Tourist Offices of Mussoorie and Kathgodam also indicate an increasing trend of tourists visiting the Tourist Offices. In the case of other tourist offices, the number of tourists visiting these offices has remained more or less at the same level.

FOURTH PLAN PROGRAMMES

16.29. For the Fourth Plan the main activities of the organisation would be as below :

- (1) Construction of accommodation for tourists, particularly at places where no accommodation exists or the existing accommodation is insufficient for the increasing number of tourists.
- (2) Organisation of Holiday Camps and Tourist Festivals at hill stations during autumn and winter months.
- (3) Opening of full-fledged Tourist Offices at Mussoorie and New Delhi.
- (4) Organisation of conducted tours and promotion of student travel and hiking, etc. in collaboration with the Youth Hostel Association.
- (5) Training of Tourist officials in the latest techniques of tourist promotion, management of tourist accommodation etc.

16.30. The integrated plan for Agra and Varanasi and the Corbett National Park would take care of the requirements so far as the foreign tourists are concerned. For domestic tourists and pilgrims a sum of Rs.30 lakhs is proposed to be spent during the Fourth Plan. This includes construction of

tourist bungalows at Rishikesh, Chittrakoot, Mahoba and Mathura and extension of tourist bungalows at Lucknow and Allahabad. Necessary improvements would also be effected in the existing accommodation available.

16.31. The hill stations of Uttar Pradesh are quite popular during the summer months of May and June, but during the rest of the year most of the accommodation remains vacant. The season is too small to make any real impact on the economy of the area. In fact, the local bodies find it difficult to find funds for the development of these resorts and the private house-owners also find it difficult to fully let out the available accommodation. Thus, there is dearth of accommodation during the summer months while accommodation remains mostly unoccupied during the remaining part of the year. A possible solution to the problem lies in extending the tourist season and for this purpose intensive promotional efforts are required. One of the programmes to achieve this objective is to organise Holiday Camps and cheap excursions to Mussoorie and Naini Tal during the so-called off season. This programme would be taken up during the Fourth Plan.

16.32. At present, there are only four major tourist offices in this State, viz. at Agra, Varanasi, Hardwar and Naini Tal. There are small offices at Ayodhya, Srinagar, Rishikesh, Dehra Dun, Almora, Ranikhet, Kathgodam and Mussoorie. These existing offices are proposed to be strengthened and a new office is likely to be set up at New Delhi during the Fourth Plan.

16.33. Tourist publicity in Uttar Pradesh has not been very effective so far. To make up the deficiency, it is proposed to publish folders, pamphlets and picture postcards, etc. During the Fourth Plan a number of publications relating to Lucknow, Allahabad, Kanpur, Chittrakoot, Mathura, Mussoorie, Dehra Dun and Naini Tal, etc. are proposed to be brought out. Special publications are also proposed to be brought out on the hills in U. P. as well as Badrinath and Kedarnath. Documentary films are proposed to be prepared on the "City of Nawabs", "Yatra" and "Mussoorie-Dehra Dun".

16.34. Programmes of conducted tours, promotion of student travel and hiking, etc. are proposed to be taken up during the Fourth Plan in collaboration with the Youth Hostel Association and other organisations. Some of the attractive routes are given below :

- (1) Naini Tal—Bhim Tal—Ranikhet—Almora—Kausani
- (2) Delhi—Naini Tal
- (3) Delhi—Corbett National Park
- (4) Yatra trips in the hills
- (5) Trekking in hills
- (6) Local tours at Varanasi, Lucknow, Agra and Hardwar.

16.35. The construction of pilgrim sheds at Rudraprayag, Muni-ke-Reti and Dev-prayag would be taken up at a total cost of Rs.14.23 lakhs, while an

amount of Rs.2.49 lakhs is being provided for the construction of a holiday home at Almora.

16.36. An amount of Rs.50 lakhs is being provided for the development of tourism in this State for the Fourth Plan. The scheme-wise break-up is indicated below :

					(Rs. in lakhs)
Sl. no.	Name of Scheme				Outlay
1.	Construction of tourist accommodation	..	..	..	30 0
2.	Management of tourist bungalow—staff and equipment	..	..	..	8.40
3.	Establishment of Tourist Offices at Mussoorie and Delhi	..	..	..	2.42
4.	Strengthening of Tourism Section in Transport Commissioner's Office				2.10
5.	Organisation of Tourist Festivals at Naini Tal, Mussoorie and Almora	..	..	..	2.00
6.	Publicity, conducted tours, Hospitality Scheme and Travel Agents and printing of publicity materials, etc.				4.70
7.	Training of Tourist Officers	..	..	..	0.38
				Total	50.00

Outlays for State Plan Schemes,

Head—5. TRANSPORT AND COMMUNICATIONS

Sector—6.1. ROADS

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
<i>Reconstruction and Improvement</i>							
610101	Continuing Schemes	353.00	353.00	..	131.00	131.00	..
610102	New Schemes	800.00	800.00	..	27.50	27.50	..
<i>New Roads Construction</i>							
610103	Continuing Schemes	609.00	609.00	..	206.50	206.50	..
610104	New Schemes	1095.00	1095.00	..	7.00	7.00	..
<i>Bridges</i>							
610105	Continuing Schemes	292.00	292.00	..	87.50	87.50	..
610106	New Schemes	291.00	291.00	4.00	2.50	2.50	0.50
<i>Other Works</i>							
610107	Continuing Schemes	222.00	222.00	..	10.00	10.00	..
610108	New Schemes	170.00	170.00	..	3.00	3.00	..
<i>Establishment</i>							
610109	Continuing Schemes	400.00	400.00	..	49.00	49.00	..
610110	New Schemes	622.00	622.00	..	60.00	60.00	..
610111	Development of road communication in Tarai belt of U. P. (Continuing Scheme).	146.00	146.00	..	41.00	41.00	..
610112	Accelerated road development programme in four eastern districts (Continuing Scheme).	5000.00	5000.00	4.00	625.00	625.00	0.50
Total for Sector 6.1. Roads		5000.00	5000.00	4.00	625.00	625.00	0.50

Outlays for State Plan Schemes

Head—6. TRANSPORT AND COMMUNICATIONS

Sector—6.2. ROAD TRANSPORT

(Rupees in lakhs)

Code no.	Group / Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
620101	Nationalised Road Transport	500.00	500.00	3.00	100.00	100.00	1.00

Outlays for State Plan Schemes

Head—6. TRANSPORT AND COMMUNICATIONS

Sector—6.3. TOURISM

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
630101	Tourist Traffic Scheme	50.00	..	..	10.78	..	..

Outlays for Centrally Sponsored Schemes

		(Rupees in lakhs)	
Serial no.	Schemes	Fourth Plan Outlay	1969-70 Outlay
1	2	3	4
6. TRANSPORT AND COMMUNICATIONS			
6.1. ROADS			
I. Roads of Inter-State and Economic Importance			
1	Unemployment Relief Scheme	1.09‡	1.69‡
2	Development of Paunta-Rajbhan-Minus Rohru Road lying within U. P.	3.00‡	1.00‡
3	Development of roads in U. P.-Tibet border region	1.21*	0.70*
4	Construction of Soron-Phulpur-Handia Road in Allahabad district	7.84*	5.00*
5	Construction of Singrauli-Pipri Road in Mirzapur district	8.97†	8.97†
6	Other roads and bridges of Inter-State and Economic Importance (New Scheme)	167.00‡	..
7	Lateral Road Project	775.00‡	425.00‡
II.	Construction of bridges over Ganga and Ramganga	600.00†	62.00†
III.	Construction of a bridge over Ganga at Buxar on the U. P.-Bihar border	150.00†	..
IV.	Inland Water Transport	5.00‡	0.50‡
Total for 6.1. Roads ..		1719.11	504.26

*State Share is met from the Central Road Fund allocations.

†State Share is included in the State Plan.

‡Cent per cent Centrally Sponsored.

EDUCATION

1. GENERAL EDUCATION

17.1. The outlay on educational programme in the First Plan was Rs.19.57 crores. The scheme of compulsory primary education for boys and girls in urban areas was enforced in 95 and 10 municipalities respectively and a large number of Government Basic Primary Schools were opened in rural areas increasing the number of school-going children in the age-group of 6—11 from 20.08 lakhs in 1946-47 to 28.05 lakhs in 1955-56. The corresponding rise in girls' education was from 1.36 lakhs in 1946-47 to 4.08 lakhs and 5.44 lakhs in 1950-51 and 1955-56, respectively. The percentage of school-going children in 1955-56 was 33.45 per cent for boys and girls taken together and 13.54 per cent for girls alone. The number of higher secondary schools went up from 987 in 1950-51 to 1,474 at the end of the First Plan. To meet the aspiration of the people in the eastern part of the State, the University of Gorakhpur was established in 1956.

17.2. During the Second Five Year Plan the expenditure was Rs.14.31 crores against the allocation of Rs.16.49 crores. By the end of the Plan the number of Junior Basic schools rose to 40,083 taking the enrolment of boys to 32.25 lakhs and that of girls to about 8.7 lakhs. The percentage of school-going children in the age-group 6—11 rose to 68.77 per cent for boys, 19.45 per cent for girls and 44.72 per cent for boys and girls together. Further, the increase in the percentage of school-going children in the age group 11—14 was from 23.64 in 1955-56 to 27.21 in 1960-61 in the case of boys, from 3.19 to 5.13 for girls, and from 14.01 per cent to 16.60 for boys and girls taken together. The number of higher secondary schools increased from 1,474 to 1,771. The university education was not ignored. The Varanaseya Sanskrit University was established in 1958, and the Agriculture University at Pantnagar came in 1960.

17.3. The Third Five Year Plan involved an expenditure of Rs.45.60 crores against the approved ceiling of Rs.46.81 crores. There was a very rapid expansion of primary education in the State during the Third Plan. The enrolment of children in classes I to V increased from 40.93 lakhs at the end of the Second Plan to 91.59 lakhs at the end of the Third Plan. The percentage of school-going children, accordingly, went up from 44.72 at the end of the Second Plan to 84.88 at the end of the Third Plan. The enrolment of girls rose from 8.68 lakhs or 19.45 per cent to 32.36 lakhs or 62.28 per cent during

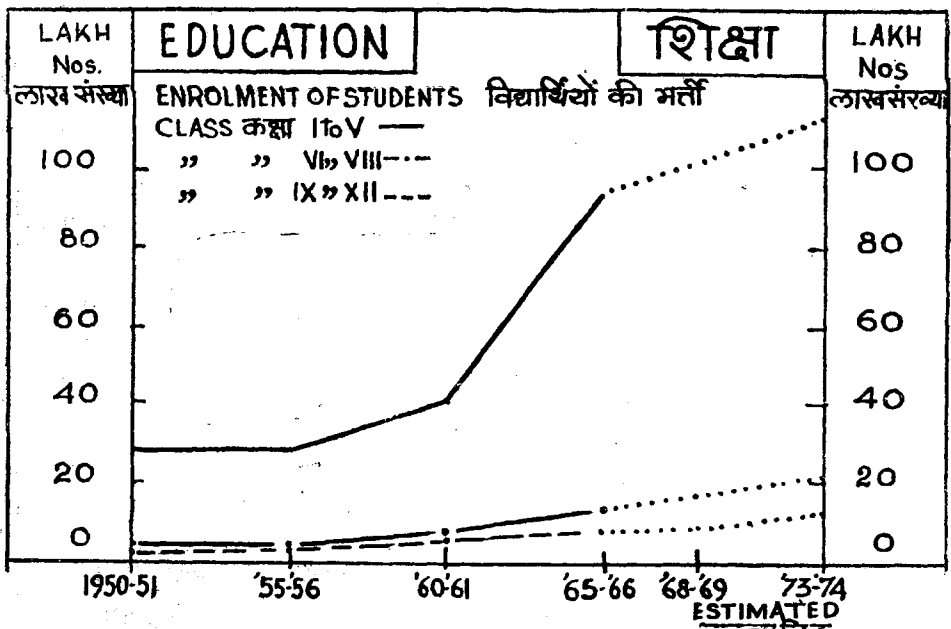
the same period. Due attention was given to the higher secondary stage for which a programme for improvement of science education was launched. The number of higher secondary schools went up to 2,287. The enrolment in classes IX to XII rose from 1.85 lakhs in 1950-51 to 7.80 lakhs in 1965-66. The universities of Kanpur and Meerut were trifurcated out of the Agra University in 1965, so as to reduce its excessive work load.

17.4. The estimated expenditure during the period 1966-69 is Rs.12.54 crores. However, keeping in view the increasing number of school-going children from year to year some expansion was inevitable with the result that the number of primary school children has increased to 99.35 lakhs by March, 1969 of which 36.45 lakhs are girls. The cumulative percentage for boys and girls is 85 per cent, 65 per cent for girls and 100 per cent for boys. The increase in age-group of 11-14 has been 2.13 lakhs over 14.46 lakhs at the end of Third Plan. Steps were taken to improve the quality of education by constructing school buildings and equipping Science laboratories. Teachers' Training Programme was given due attention as a result of which the percentage of untrained elementary teachers which stood at 30 per cent in 1965-66 was brought down to 22 per cent in 1967-68 and is expected to have been reduced to 16 in 1968-69. Special courses were started to meet the shortage of science teachers and girls studying in M. Sc. who undertook to do teaching work for three years after obtaining their degree were offered scholarship of Rs.100 per month with a view to meeting the demand for women teachers. The number of degree colleges has increased five-fold from 40 in 1950-51 to 208 in 1967-68, including 50 post-graduate colleges. All the districts of Uttar Pradesh, excepting Tehri Garhwal and Uttar Kashi, have one or more degree college.

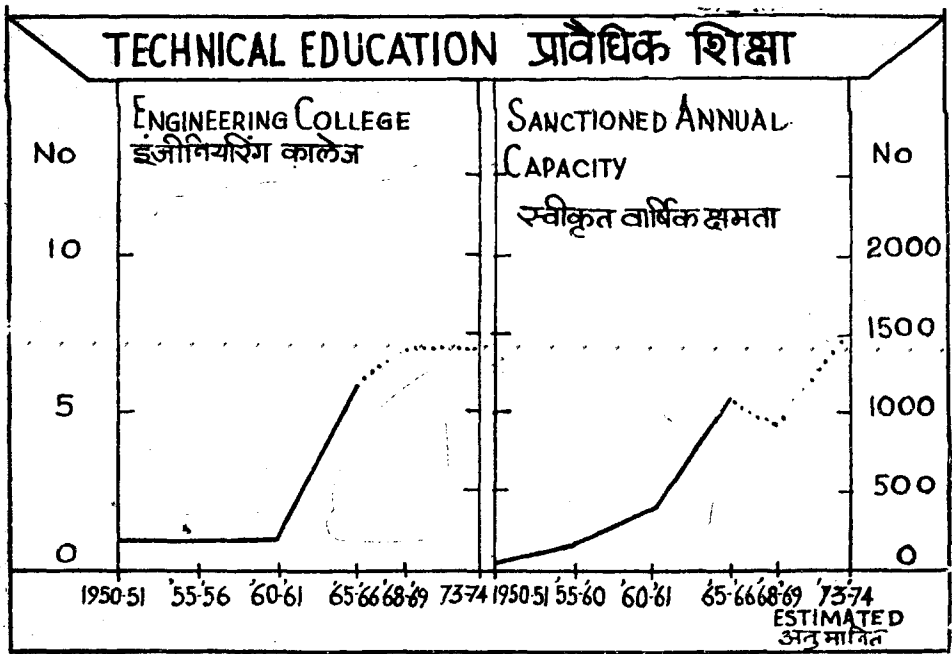
17.5. The magnitude of the task facing the State can be realized from the fact that U. P. has to provide educational facilities for about 16.5 per cent of the country's children. The per capita expenditure on education in 1950-51 was Rs.1.15 per annum, which increased to Rs.2.33 after a decade and Rs.4.94 by the end of the Third Plan. After reviewing the whole position carefully and for meeting the barest essential educational needs an amount of Rs.52.95 crores has been allocated for the Fourth Five-Year Plan. The per capita expenditure is expected to go up to Rs.9.08 per annum by 1973-74 which will be nearly double of the level reached in 1965-66. Highest priority has been accorded to elementary education so as to fulfil the Constitutional directive of providing free education for all children up to the age of 14. The sectoral distribution of expenditure during the earlier Plans was 66 per cent for primary, 15 per cent for secondary and 9 per cent for university education. Other programmes, including teachers' training, N.C.C., oriental education, audio-visual programmes, etc. accounted for the remaining 10 per cent. The proportion in the Fourth Plan will be 66 per cent for elementary, 17 per cent for secondary, 10 per cent for university education and 7 per cent for

ENROLMENT OF STUDENTS

(1950-51 to 1973-74)



PROGRESS OF TECHNICAL EDUCATION (1950-51 TO 1973-74)



others. The group-wise allocation of funds is indicated in the following table :

		(Rupees in lakhs)			
		Outlay for Fourth Plan		Outlay for 1969-70	
		Total	Capital	Total	Capital
1.	Elementary Education	3446.79	72.26	377.38	8.32
2.	Secondary Education	924.00	361.04	83.54	33.08
3.	University Education	553.51	41.01	59.00	3.00
4.	Teachers' Training—				
	(a) Elementary	142.08	93.57	15.58	11.00
	(b) Secondary	47.60	16.02	6.01	1.00
5.	Social Education	43.27	1.50	4.50	—
6.	Other Educational Programmes ..	87.44	5.37	9.07	0.20
7.	Cultural Programmes	50.00	10.49	16.00	5.45
	Total	5294.69	601.26	571.08	62.05

Supplementary Plan

17.6. It will thus be seen that an outlay of Rs.52.95 crores has been set apart for the development of education during the plan period. An additional outlay of Rs.5 crores is also likely to be available, if the resources would permit the financing of the Supplementary Plan.

Elementary Education

17.7. The Fourth Plan aims at broadening access to education at all stages with greater emphasis on the rural and less developed areas and on the education of girls, extending and improving the teaching of Science, toning up teachers' training programme, strengthening of specialized institutions, expansion and improvement of post-graduate education, providing scholarships to meritorious poor students, exploiting the existing facilities to the fullest extent, reducing wastage and raising the quality of education with a view to ensuring increased returns from the investment made. To maintain the percentage of enrolment expected to have been achieved by 1968-69 viz. 85 per cent in the age-group 6-11 and to bring down the present teacher-pupil ratio from 1:53 to at least 1:47 it is proposed to open 2,374

junior basic schools in unserved areas and to appoint 44,868 additional teachers in existing schools in the Fourth Plan. The enrolment in classes I-V is expected to increase from 99.35 lakhs in 1968-69 to 110.68 lakhs at the end of the Fourth Plan. The programme for the Fourth Five-Year Plan also envisages the construction of 500 new school buildings and the improvement of 800 existing buildings.

17.8. The unprecedented expansion of primary education has created a very pressing and irresistible demand for senior basic schools. To accommodate the fast-moving bulge from the primary stage during the Fourth Plan, it is proposed to open 2,431 senior basic schools and to appoint 4,622 additional teachers in existing schools. It is expected that new schools will also be opened by private agencies during the Fourth Plan period. These schools along with those left unaided at the end of the year 1968-69, will be brought on the grant-in-aid list. The special scheme of continuation classes for girls would be expanded by opening 300 such classes. It is expected that the percentage of enrolment in the age-group 11-14 would rise from 26.8 in 1968-69 to 27 in 1969-70 and to 29.16 in 1973-74.

17.9. Further, the programme for the Fourth Five-Year Plan envisages extension of facilities for the teaching of general science in 1,375 senior basic schools, thus providing a sound base for further education at higher levels. At the senior basic stage the emphasis will be laid down on crafts. Agriculture being the main craft, it is proposed to sanction grants for the improvement of agricultural education. Provision has also been made for the establishment of text book libraries for poor girls in senior basic schools.

Secondary Education

17.10. The demand for secondary education has been growing steadily. The enrolment which the primary and middle schools will throw up is something inescapable. The additional enrolment of three lakhs visualised in the Fourth Plan is proposed to be accommodated partly by providing additional sections and facilities in the existing schools and partly by opening new institutions. It is expected that non-government agencies, which have been playing an important role in the sphere of secondary education, will also open schools in unserved areas.

17.11. To improve the quality of education it is proposed to give efficiency grants to institutions which show good performance and non-recurring grants to suitable institutions for buildings, furniture, equipment and libraries. Provision has also been made for building up text book libraries in government and non-government higher secondary schools. It is also proposed to give efficiency awards to selected teachers each year for their good performance and showing excellent results in the examinations. In order to improve the standards of education and also to reduce the number of failures in public examinations a special curriculum research and evaluation unit will be provided in the Board of High School and Intermediate Education.

17.12. For the expansion of Science education during the Fourth Plan it is proposed to provide facilities for science in all Government Inter Colleges and to give grants to existing Higher Secondary Schools for addition of science laboratories and for supplementing the existing equipment and material. For implementing the UNICEF's science schemes it is proposed to create a science cell in the Directorate and to appoint Science Promotion Officers at regional level.

University Education

17.13. With the expanding base at the elementary and secondary levels, the demand for higher education has greatly increased in the past decade. In the Fourth Plan the watch-word in the sphere of higher education will, however, be consolidation and strengthening of existing institutions rather than opening of new ones except where the needs are really pressing. It is proposed to establish a new university for the hilly region of the State. Special emphasis will be laid on expansion and improvement of Science education, particularly at the post-graduate level. The Universities and Degree Colleges would be given suitable development grants to lift the matching grants from the U. G. C. and to raise the standard of higher education and research. Hostel facilities, text books, libraries and other amenities for students will be expanded.

Teachers' Training

17.14. As a result of one-year B. T. C. course, not only the requirements of trained elementary school teachers in the Fourth Plan will be adequately met by the existing training facilities, but by the end of Fourth Plan the backing of untrained teachers will be totally wiped out. During the Fourth Plan the teachers' training programmes will be strengthened and improved. Training facilities for Science and Mathematics teachers for middle sections will be specially provided. The various specialized institutions e.g. the State Institute of Education, the State Institute of Science Education, the Central Pedagogical Institute, the Bureau of Psychology etc. will be suitably strengthened so as to make them more effective and useful in over-all campaign for the qualitative improvement in education.

Social Education

17.15. The programme of adult literacy-cum-functional education with accent on farmers' education for stepping up agricultural production, will be tried. The State Central Library will be strengthened and grants will be given to selected public libraries.

Other Educational Programme

17.16. Due stress will be laid on promotion of physical education, military training, scouting, games and sports in schools, colleges and universities. Hindi will gradually become the medium of instruction at all stages of university education. A corporation will be set up for production of literature in

Hindi at the University level. The programme of production of nationalized text books at school level will also be strengthened and expanded. For training of Hindi teachers, a Hindi teaching Institute will be set up at Allahabad. Assistance will also be given for the promotion of Sanskrit and other oriental languages. The teaching of South Indian Languages will be encouraged.

PROGRAMME FOR 1969-70

17.17. An outlay of Rs.571.08 lakhs, i.e. 10.9 per cent of the Fourth Plan outlay, has been provided for educational development schemes during 1969-70. In the field of primary education it is proposed to open 390 junior basic schools and to appoint 10,200 additional teachers in existing junior basic schools. The enrolment in classes I-V is expected to increase from 99.35 lakhs in 1968-69 to 102.11 lakhs in 1969-70. It is also proposed to improve 56 buildings and to construct 75 buildings of primary schools. 560 additional teachers will be appointed in senior basic schools and 421 new senior basic schools and 50 continuation classes will also be started. 200 schools will also be brought on the grant-in-aid list. It is expected that the percentage of enrolment in the age-group 11-14, would rise from 26.8 in 1968-69, to 27 in 1969-70. Provision has also been made for teaching of general science in 296 senior basic schools in 1969-70.

Publication of Hindi Books

17.18. Consequent on the decision of the State Government to adopt Hindi as its official language, it was felt that Government should actively assist the publication of high class books in Hindi on scientific, technological and other subjects and with this end in view, the State Government started a scheme for publication of Hindi books in 1956. This job was entrusted to Hindi Samiti and up to 1967-68 the Samiti had brought out 156 standard publications. In addition to these, 16 reprints were also published. The programme for 1968-69 included 28 titles to be published at a cost of Rs.3.5 lakhs. The Fourth Five-Year Plan envisages publication of 73 Hindi books mostly of university standard and for this a Plan ceiling of Rs.10 lakhs has been approved. Out of this a sum of Rs.3 lakhs is being provided in 1969-70 for the publications of 23 books.

Sports

17.19. The U. P. Council of Sports was established in 1955 with the main object of making people in the State sports-conscious and to help sports organizations to promote the cause of sports in an organized manner. From its very inception, the council has been devoting its attention to the tasks of raising standards of performance of our young men and women in sports, providing assistance by way of grants to various clubs and State Sports Associations for organizing tournaments etc. every year and providing coaching facilities at different centres throughout the State.

17.20. During the Second Five Year Plan, a Plan ceiling of Rs.33.00 lakhs was allocated for promotion and organization of sports in the State but Rs.29.63 lakhs only could be spent. During the Third Plan, a sum of Rs.20.00 lakhs was spent on sports activities in the State. A multi-purpose sports hall at the Central Sports Stadium was completed at a cost of Rs.4.80 lakhs. Considerable progress was made in the completion of Regional Sports Stadia at Varanasi, Allahabad, Naini Tal, Agra, Bareilly and Jhansi. Financial assistance was also made available for the construction of utility stadia at the district headquarters. Grants to State Sports Associations and clubs were provided for holding tournament and competitive sports. Coaching facilities were also made available each year to a large number of talented boys and girls by the experts in various items of sports. A Central Coaching Camp is being organised each year during summer months at Dehra Dun in different items of sports for giving training to the selected boys and girls who are provided free lodging, boarding and railway fare from their place of residence to Dehra Dun and back. During the annual plans 1966-69, these activities have been continued with an annual plan provision of Rs.2 lakhs. An olympic size swimming pool at the Central Sports Stadium at an estimated cost of Rs.6.75 lakhs is under construction.

17.21. A sum of Rs.30.00 lakhs has been allocated for sports schemes during the Fourth Five Year Plan. It is proposed to cover the whole State more extensively in so far as sports activities are concerned. Grants would be given to the States associations, District Councils of Sports and veteran sportsmen for promotion of sports activities during the Fourth Plan period. A provision of Rs.0.23 lakh has also been proposed for popularization of sports among women during the Fourth Plan period. It is also contemplated to publish an "Annual Resume" of the activities undertaken by the Sports Council and other booklets containing instructions and guide points for various items of sports for distribution free of cost among the players. The programme for the Fourth Plan also envisages the establishment of a sports school where selected boys will be imparted coaching in hockey, foot-ball and athletics. It is also proposed to grant 20 scholarships to promising poor student sportsmen, with a view to giving them financial assistance to enable them to supplement their normal diet and to provide themselves with proper uniform and sports kit.

Cultural Activities

17.22. An amount of Rs.58.99 lakhs was allocated for cultural activities during the Third Five-Year Plan against which an expenditure of Rs.41.20 lakhs was incurred. The College of Arts and Craft, Lucknow was reorganized in 1966-67. Equipments and materials were purchased for the development of various sections of the college. In 1967-68 a National Diploma course in architecture was started in this college. The programme for 1968-69 envisaged arranging exhibitions and publication of work of artists etc. In the Bhatkhande College of Music steps were taken to start new courses in Bharat Natyam and Folk dancing. Other important items are : expansion of the State

Observatory at Naini Tal, giving of grant-in-aid to music institutions and promotion of art and culture.

17.23. It is proposed to utilize an amount of Rs.50.00 lakhs for these activities during the Fourth Plan period. The programme envisages purchase of preservative material, electrical chemical duster, fire fighting equipment etc. for the U. P. State Archives. The work regarding development and reorganization of Government College of Arts and Crafts and Bhatkhande College of Music, Lucknow would continue during the Fourth Five-Year Plan. The U.P. State Observatory at Naini Tal will be provided with a 40" telescope. Grants for promotion of Art and music would continue to be given during the Fourth Five Year Plan as well. The activities of State Lalit Kala Akadami and State Sangeet Natya Bharti will be expanded.

2. TECHNICAL EDUCATION

17.24. The Technical Education Plan mainly concerns diploma and degree level technical education.

17.25. At the degree level there were two institutions in the first plan with an intake capacity of 180 students. At the end of the Second Plan the number of institutions was 4 with an admission capacity of 428 students. The same increased to six institutions with an intake capacity of 1,105 at the end of the Third Plan. There are at present (1968-69) 7 degree colleges/universities imparting technical education with an intake capacity of 1,565 students. These are in addition to the three Central institutions, viz., I. I. T., Kanpur, Banaras Hindu University and Aligarh Muslim University, whose intake capacity is 1,087 students.

17.26. There were 11 diploma institutions at the end of the First Plan with an annual intake capacity of 615 students, which rose to 27 and 2,980 respectively by the end of the Second Plan. The number of such institutions increased to 33 with an intake capacity of 5,750 at the close of the Third Plan. Part-time courses of a duration of 4 years are also being run in two polytechnics to enable those in service to obtain diplomas. The intake capacity of each of the polytechnics is 100. There are also 13 Higher Secondary Technical Schools of certificate standard. Their intake capacity is 780.

17.27. On the financial side, the expenditure on technical education was Rs.110 lakhs in the First Plan, Rs.317 lakhs in the Second Plan and Rs.679 lakhs in the Third Plan. During the three years of Annual Plans from 1966 to 1969, it is expected that about Rs.458 lakhs would have been spent on technical education schemes. With large-scale unemployment of the engineering personnel, there is not much scope for expansion of technical education. Maximum emphasis has, therefore, been laid in the Fourth Plan on the consolidation of existing facilities and improvement in the quality of training. Measures, such as, teachers' training, improvement of teacher-student ratio, curriculum development, additional equipment for workshops and laboratories to

meet the need of the rapidly developing technology have been taken up. Besides, diversification of courses has also been proposed in the Fourth Plan. The details of technical education programme are spelt out in the following paras.

17.28. *Degree Courses*—Emphasis in the Fourth Five-Year Plan has been laid on the diversification of degree courses. Course in Industrial Engineering at Roorkee University, B. Pharm Course at H. B. Technological Institute, Kanpur, Man-made Fibre Technology Course at Government Central Textile Institute, Kanpur, and such other courses as may be recommended by the All-India Council for Technical Education and found suitable are proposed to be started. In addition to this, provision has been made for organising short-term courses at the degree level.

17.29. The Fourth Five Year Plan also includes provision for faculty development and replacement of obsolete equipment in the older institutions.

17.30. *Diploma Courses*—At the diploma level, provision has been made for the establishment of two Polytechnics with an intake of 120 each. These would be set up only after the need for the new Polytechnics has been fully established, considering the requirement of technical personnel during the Fourth and subsequent Plans.

17.31. Apart from the traditional courses in Civil, Electrical and Mechanical Engineering, the Working Group recommended that great emphasis should be laid on the introduction of diversified courses to meet the need of developing technology. Tentatively, the following courses have been proposed to be started only after their industrial need was established :

(1) 3-year diploma course in Pharmacy at Government Girl's Polytechnic, Lucknow.

(2) 3-year diploma course in Instrument Technology at Government Polytechnic, Kanpur, and School of Paper Technology, Saharanpur.

(3) One-year post-diploma course in Air Conditioning and Refrigeration at M. G. Polytechnics, Hathras, and Allahabad Polytechnic, Allahabad.

(4) One-year post-diploma course in Automobile Engineering at P. M. V. Polytechnic, Mathura and Government Polytechnic, Lucknow.

(5) One-year post-diploma course in Industrial electronics at Allahabad Polytechnic, Allahabad, Government Polytechnic, Lucknow, and K. L. Polytechnic, Roorkee.

(6) One-year post-diploma course in Industrial Engineering at Government Polytechnic, Kanpur, Allahabad Polytechnic, Allahabad, and School of Paper Technology, Saharanpur.

(7) One-year post-diploma course in Machine-Tool Technology at Allahabad Polytechnic, Allahabad, and Government Polytechnic, Lucknow.

(8) One-year post-diploma course in Foundry-Technology at Technical College, Dayalbagh, Agra.

(9) In addition, the Government of India have recommended for a diploma course in Commercial Practice. Further, it is also proposed to organise part-time diploma courses. Thus, in all, 440 seats would be provided through the diversified courses, which include 120 seats for 3-year Chemical Operators' Course at the Government Polytechnics, Gorakhpur and Bareilly. Adequate provisions have been made for those schemes, which were implemented in the Third Five-Year Plan, but in which full facilities of staff, equipments and buildings could not be provided so far. Provision has been made for the development and production of teaching aids, text-book loan scheme, loans and scholarships to students and for the latter's amenities.

17.32. *Secondary Technical Schools*—There are at present 13 Secondary Technical Schools functioning in the State with an intake capacity of 780. These Secondary Technical Schools have not met the object with which these were established. Government of India have now recommended for the vocationalisation of the Secondary Technical Schools. Provision for this purpose has been included in the Plan.

PROGRAMME FOR 1969-70

17.33. Out of a provision of Rs.180.000 lakhs earmarked for the first year of the Fourth Plan, a sum of Rs.77.140 lakhs is proposed to be utilised on degree courses and an amount of Rs.102.860 lakhs on diploma courses. The provision of Rs.180 lakhs includes Rs.28.525 lakhs for new schemes and Rs.9.950 lakhs for the construction of hostels which were treated as Centrally Sponsored Scheme till 1968-69.

17.34. At the degree level, provision has been made for the spill over expenditure and the continuance of the schemes already completed. A sum of Rs.3.00 lakhs is being provided for the replacement of obsolete equipment and of Rs.1.849 lakhs for faculty development in Roorkee University and a sum of Rs.0.451 lakh for faculty development in the Government Central Textile Institute, Kanpur. The intake of 1,565 which was reduced to 930 during 1968-69 is to be reviewed during 1969-70.

17.35. It is proposed to start one-year Post-Diploma Course in Refrigeration and Air-Conditioning at Hathras (20 seats), one-year course in Automobile Engineering at P. M. V. Polytechnic, Mathura (20 seats) and Government Polytechnic, Lucknow (20 seats) and one-year course in Industrial Electronics at Allahabad Polytechnic, Allahabad (10 seats). Besides, a three-year Chemical Operators' Course is also proposed to be started at the Government Polytechnics, Gorakhpur and Bareilly with 60 seats at each institution. Thus, the rated intake of 5,750 at diploma level will go up to 5,970 in 1969-70.

17.36. The following table gives an idea of the outlays envisaged for the degree and diploma courses :

					(Rupees in lakhs)	
					Fourth Plan Outlay	Outlay for 1969-70
(i) Degree Courses	...	..	...	...	290.97	77.14
(ii) Diploma Courses	...	...	-	...	757.03	102.86
Total ...					1048.00	180.00

Outlays for State Plan Schemes

Head—7. SOCIAL SERVICES

Sector—7.1. GENERAL EDUCATION

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
	(1) Primary Education						
710101	Opening of Pre-primary classes in Government Girls Normal Schools	3.57	1.00	—	0.90	0.20	..
710102	Grant-in-aid to un-aided Pre-primary schools	7.76	—	—	2.03	—	..
710103	Grant for opening of Junior Basic Schools in rural areas	211.96	—	—	22.00	—	..
710104	Grant for appointment of additional teachers in Junior Basic Schools in rural areas	1714.30	—	—	195.56	—	..
710105	Grant for opening of Junior Basic Schools in urban areas	182.10	—	—	9.77	—	..
710106	Grant for appointment of additional teachers in Junior Basic Schools in urban areas	85.25	—	—	2.62	—	..
710107	<i>Ad hoc</i> grant to Swalambi Schools	4.50	—	—	1.80	—	..
710108	Reduction in wastage and stagnation	2.50	—	—	0.50	—	..
710109	Improvement of school buildings in rural areas	20.00	—	—	1.40	—	..
710110	Grant for construction of buildings for schools in rural areas which have no buildings	25.00	—	—	3.75	—	..
710111	Appointment of Sub-Deputy Inspector of Schools	10.80	—	—	0.50	—	..
710112	Appointment of Assistant Inspectresses of Girls Schools	7.00	—	—	0.26	—	..
710113	Creation of posts of Deputy Inspectresses of Girls Schools	6.87	—	—	0.43	—	..

710114	Grant for opening of continuation classes in selected Junior Basic Schools for girls in rural areas	37.73	..	..	3.13	..	..
710115	Grant for appointment of school mothers in Mixed Junior Basic Schools in rural areas	8.00	..	..	0.20	..	..
710116	Grant for construction of sanitary blocks for girls in Mixed Junior Basic Schools in rural areas	1.50	..	..	..	..	..
710117	Grant for upgrading of Junior Basic Schools or opening of New Senior Basic Schools for boys by Zila Parishad rural areas	306.10	..	..	49.00	..	..
710118	Grant for upgrading of Junior Basic Schools or opening of new Senior Basic Schools for girls by Zila Parishads in rural areas	280.40	..	..	28.07	..	..
710119	Grant for upgrading of Junior Basic Schools or opening of new Senior Basic Schools for girls by Municipal Boards in urban areas	104.20	..	..	11.90	..	..
710120	Grant to Senior Basic Schools for boys and girls which are not in receipt of grant-in-aid	127.90	..	..	9.00	..	..
710121	<i>Ad hoc</i> pre-grant to newly opened Senior Basic Schools in un-served areas	10.00	..	..	1.00	..	..
710122	Grant for appointment of additional teachers in Zila Parishads Senior Basic Schools	99.50	..	..	4.47	..	..
710123	Grant for appointment of additional teachers in Municipal Boards Senior Basic Schools	8.34	..	..	0.60	..	..
710124	Opening of Government Senior Basic Schools for girls in remote/un-served areas	48.81	39.30	..	2.36	1.50	..
710125	Grant for introduction of General Science in Senior Basic Schools run by local bodies including Municipal Boards and private managements	87.99	..	..	18.16	..	..
710126	Improvement of Agricultural education at Senior Basic Stage	8.25	..	..	0.70	..	..
710127	Grant for establishment of Text Books libraries for poor girls in Senior Basic Schools	2.59	..	..	0.50	..	..
710128	Incentive to elementary School teachers for improving their qualifications	2.00	..	..	0.15	..	..

Head—7. SOCIAL SERVICES

Sector—7.1. GENERAL EDUCATION—(contd.)

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
Spill-over Schemes							
710129	Construction of hostels for Government Senior Basic Schools for girls in rural areas and smaller towns	0.62	0.62	..	0.62	0.62	..
710130	Construction of buildings in connexion with the opening of Government Senior Basic Schools	31.34	31.34	..	6.00	6.00	..
	Total 1	3446.79	72.26	..	377.38	8.32	..
(2) Secondary Education							
710201	Conversion of certain Government Junior High Schools for boys into High Schools and opening of Government High Schools for boys (VI—X)	28.49	20.00	..	1.66	0.50	..
710202	Conversion of certain Government Junior High Schools for girls into High Schools	23.73	12.50	..	2.50	0.75	..
710203	Conversion of certain Government High Schools (Boys/Girls) into Higher Secondary Schools	46.98	25.00	..	4.44	2.00	..
710204	Additional staff in connexion with introduction of certain subjects/ opening of additional sections in the Government Higher Secondary Schools (VI—XII)	21.50	..	..	2.93	..	..
710205	Grant-in-aid to un-aided Higher Secondary Schools	163.30	..	..	7.50	..	..

- 710206 Liberalisation of grants-in-aid to non-Government Higher Secondary Schools in respect of hill and backward areas of Mirzapur district
- 710207 *Ad hoc* grant for opening of new non-Government Higher Secondary Schools in unserved urban areas
- 710208 Building up of text books libraries in Government and non-Government Higher Secondary Schools
- 710209 Grant to aided Higher Secondary Schools for additional enrolment
- 710210 Bus grant for girls institutions
- 710211 Strengthening of Government Higher Secondary Schools for additional enrolment
- 710212 Facilities for the teaching of Science in certain Government Higher Secondary Schools for boys and girls and construction of new Science Labs. in certain Government Higher Secondary Schools ..
- 710213 Development of Agricultural Farm attached to A. N. Jha Government Inter College, Rudrapur (Naini Tal)
- 710214 Grant to aided Higher Secondary Schools for Science Labs. and material and equipment for improving Science education ..
- 710215 Creation of Science Cell in the Directorate for the UNICEF' science schemes
- 710216 Improvement of the libraries of Government Higher Secondary Schools
- 710217 Improvement of the libraries of aided Higher Secondary Schools ..
- 710218 Efficiency Grant to aided Higher Secondary Schools
- 710219 Provision of play-grounds in non-Government Higher Secondary Schools for boys and girls
- 710220 Provision of buses for Government Girls Institutions
- 710221 Improvement and provision of Special amenities for girls reading in Boys Higher Secondary Schools
-

7.50	...	...	1.00	..	..
6.25	...	..	0.71	...	..
2.50	..	..	0.26	..	..
15.00	..	..	2.60	..	..
8.50	..	..	..	..	..
73.57	40.00	..	7.85	4.75	..
126.27	116.40	..	8.05	4.00	..
3.10	..	..	0.95	..	..
32.00	..	..	5.15	..	..
7.64	..	..	..	..	..
7.00	..	..	0.50	..	..
19.51	..	..	0.80	..	..
5.00	..	..	1.00	..	..
3.09	..	..	0.18	..	..
16.89	..	..	1.62	..	..
3.96	..	..	0.51	..	..

Head—7. SOCIAL SERVICES

Sector—7.1. GENERAL EDUCATION—(contd.)

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
710222	Construction of hostels for girls in Government Higher Secondary Schools	1.50	1.50	..	0.15	0.15	..
710223	Construction and re-conditioning of buildings for the Government Higher Secondary Schools for boys and girls	50.00	50.00	..	2.50	2.50	..
710224	Incentive to Secondary School teachers for improving their qualifications	1.50	..	..	0.15	..	..
710225	Aid to talented children for further studies in selected schools	2.54	..	..	0.12	..	..
710226	Efficiency awards to School teachers	1.57	..	..	0.63	..	..
710227	Strengthening of the Directorate	12.21	..	..	2.06	..	..
710228	Construction of buildings for Headquarters Office	15.00	15.00	..	1.00	1.00	..
710229	Strengthening of Statistical Units at the Headquarters and District Offices	2.50	..	..	0.22	..	..
710230	Strengthening of the special Audit Unit at the Headquarters Office	10.75	..	..	1.09	..	..
710231	Grant-in-aid to Higher Secondary Schools for auditing of accounts	25.00	..	..	..	..	..
710232	Strengthening and improvement of the Organisation for the publication of text books	9.50	5.00	..	1.60	0.50	..
710233	Strengthening of the Board of High School and Intermediate Education, U. P.	40.00	20.00	..	4.63	3.00	..

710234	Strengthening of the Office of the Registrar, Departmental Examinations, U. P.	..	..	..	..	..
710235	Creation of two new regions for girls at Jhansi and Faizabad	..				..
710236	Strengthening of educational organisations at District and Regional level					..
710237	Creation of the posts of District Inspectresses of Girls Schools					..
710238	Provision of Deputy Inspector of Urdu Medium Schools					..
710239	Appointment of Science Promotion Officers at Regional level					..
710240	Provision of vehicles for the Regional and District offices and Directorate	..	..	..	..	..
710241	Upgrading of posts of DIOS from U.P.E.S. Junior scale to U.P.E.S. Senior Scale of pay	..	..	..	..	..
710242	Provision of Associate Inspectors/Inspectresses of Schools in U.P.E.S. Junior scale in districts where the number of Higher Secondary Schools is large.	..	..	..	..	..
710243	Provision for award of additional scholarships in Classes VII and VIII					..
710244	Provision of additional scholarships in Classes IX—XII	..				..

Spill-over Schemes—

710245	Introduction of Science in certain Government Higher Secondary Schools having Inter classes	..	..	..	..	..
710246	Upgrading of Government Junior High Schools for girls to High School Standard	..	..	..	..	..
710247	Upgrading of Government Junior High Schools for boys to High School Standard	..	..	..	..	..
710248	Introduction of new subjects and opening of additional sections in Government Higher Secondary Schools	..	..	..	..	..
710249	Construction of buildings for existing Government Higher Secondary Schools for boys and girls	..	..	..	..	..

5.00	...	...	1.00	..	..
4.70	...	...	..	..	..
8.60	...	...	0.98	...	...
6.26	...	...	0.89	...	..
0.79	...	...	0.11	...	..
10.72	...	...	..	...	..
8.99	...	...	1.13	..	...
1.45	...	...	0.14	...	...
8.00	...	...	1.00	...	..
10.00	...	...	..	...	..
10.00	...	...	..	...	..
1.61	1.61	...	1.61	1.61	..
1.13	1.13	...	1.00	1.00	...
2.36	2.36	...	0.50	0.50	...
1.09	1.09	...	0.80	0.80	...
27.05	27.05	...	3.00	3.00	...

Head—7 . SOCIAL SERVICES

Sector—7.1. GENERAL EDUCATION—(contd.)

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
710250	Extension and electrification of existing buildings of Government Higher Secondary Schools	1.29	1.29	..	1.05	1.05	..
710251	Construction of buildings at Varanasi in place of those transferred to Sanskrit University	0.59	0.59	..	0.59	0.59	..
710252	Upgrading of Government Girls High Schools to Intermediate Standard	9.46	9.46	..	3.50	3.50	..
710253	Construction of Science Labs. under the scheme for the development of Multipurpose Schools	0.22	0.22	..	0.22	0.22	..
710254	Construction of hostel buildings for girls in secondary schools	4.66	4.66	..	0.66	0.66	..
710255	Construction of buildings for the Government Higher Secondary Schools for boys/girls and acquisition of land for 9 schools	6.18	6.18	..	1.00	1.00	..
	Total (2)	924.00	361.04	..	83.54	33.08	..
(3) University Education							
710301	Establishment of Naini Tal University	60.00	..	..	1.00	..	..
710302	Development grants to Universities	135.00	..	..	20.00	..	..
710303	Maintenance grants to new Degree Colleges and new faculties including education	87.00	..	..	12.00	..	..
710304	Development grants to non-Government Degree Colleges	135.00	..	..	6.00	..	..

710305	Special facilities for girls education in Degree and post-graduate classes in Science	..	..	..	..	..
710306	Strengthening of existing Government Degree Colleges and opening of new ones	..	..	..	..	..
710307	Merit grant to Degree Colleges	..	..	..	..	..
710308	Rural Institutes	..	..	..	..	..
710309	Incentive to Degree College teachers for improving their qualifications	..	..	..	..	..
710310	Loans to students going abroad for higher studies in Science					
710311	Travel grants for study abroad	..	..	..	..	..
710312	Travel grants for attending international conferences, etc. outside India					
710313	Grants-in-aid for providing Superintendent of Physical Education in Degree Colleges	..	..	..	..	..
710314	Co-operative lending libraries in Universities and Colleges					
710315	Autonomous Corporation for preparation and production of University level books in Hindi	..	..	..	..	..
710316	Opening of new Government Degree Colleges and expansion of existing Degree Colleges	..	..	..	..	..
	Total (3)	..	..	..	..	..

(4) Teachers' Training

(i) Primary

710401	Raising the status of Training Institutions	..	..	..	..	..
710402	Additional furniture and equipment for Government Normal Schools and Inservice Training Centres	..	..	..	..	..

15.00	..	..	1.50	..	..
55.00	30.00	..	8.00	0.50	..
3.75	..	..	0.75	..	..
5.00	..	..	1.00	..	..
1.25	..	..	0.25	..	..
2.50	2.50	..	0.50	0.50	..
1.25	..	..	0.25	..	..
1.25	..	..	0.35	..	..
10.00	..	..	0.50	..	..
10.00	..	..	1.00	..	..
23.00	..	..	3.90	..	..
8.51	8.51	..	2.00	2.00	..
553.51	41.01	..	59.00	3.00	..

257

12.29	..	..	1.51	..	..
3.60	..	..	1.80	..	..

Head—7. SOCIAL SERVICES

Sector—7.1. GENERAL EDUCATION (contd.)

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
710403	Increasing the annual intake of the three Government Junior Basic Training Colleges	15.26	5.70	..	..	..	..
710404	Increasing the annual intake of Government C.T. College for Women, Lucknow and Modinagar (Meerut)	6.95	..	..	0.55	..	..
710405	Opening of Government C.T. Training Colleges for boys and girls for Science and Maths. teachers	15.39	..	..	..	..	..
710406	Training of Science teachers of Elementary Schools	0.72	..	..	0.72	..	..
	Spill over Schemes						
710407	Construction of buildings in connexion with the scheme relating to Government Normal Schools and extension of Training facilities	68.98	68.98	..	6.00	6.00	:
710408	Extension of Government buildings of existing Elementary teachers' Training Institutions	17.68	17.68	..	4.00	4.00	..
710409	Construction and extension of buildings of existing Government Normal Schools	1.21	1.21	..	1.00	1.00	..
	Total (I)	142.08	93.57	..	15.58	11.00	..
	(ii) Secondary						
710410	Publication of educational research papers and studies	2.50	..	..	0.25	..	..
710411	Strengthening of Government Training College for women, Allahabad	3.52	2.50	..	0.39	0.10	..

258

710412	Introduction of L. T. course at Government College of Home Science, Allahabad	1.40	..	..	..	..	..	..
710413	Strengthening of Government C. P. I., Allahabad for remedial teaching course	4.42	1.50	..	0.60	..	..	..
710414	Strengthening of English Language Teaching Institute	2.63	1.50	..	0.16	..	..	..
710415	Extension Service Centres	2.80	..	..	0.56	..	..	..
710416	Strengthening of Bureau of Psychology for training of career masters	1.56	..	..	0.17	..	..	..
710417	Subsidy for Inter-State educational excursions for teacher trainees	0.50	..	..	..	..	..	..
710418	Strengthening of Government Basic Training College, Varanasi	3.00	3.00	..	0.15	0.15	..	..
710419	Strengthening of Government Constructive Training College, Lucknow	3.00	2.00	..	0.20	..	..	..
710420	Strengthening of State Institute of Elementary Education	1.69	..	..	0.13	..	..	..
710421	Strengthening of Science Institute and preparation of instructional material, etc. under UNICEF'S scheme	15.06	..	..	2.65	..	..	..

Spillover Schemes

710422	Upgrading of Government College of Home Science, Allahabad to L. T. level	5.52	5.52	..	0.75	0.75	..	..
	Total (ii)	47.60	16.02	..	6.01	1.00	..	..
	Total (4)	189.68	109.59	..	21.59	12.00	..	..

(5) Social Education

710501	Adult Literacy-cum-Functional education	30.77	..	..	4.00	..	..	..
710502	Grant-in-aid to selected public libraries in urban areas	10.00	..	..	0.50	..	..	..
710503	Strengthening of State Central Library	2.50	1.50	..	..	..	..	..
	Total (5)	43.27	1.50	..	4.50	..	..	..

Head—7. SOCIAL SERVICES

Sector—7.1. GENERAL EDUCATION—(concl'd.)

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
(6) Other Educational Programmes							
<i>(i) Education Department</i>							
710601	Extension of N. C. C. Scheme	2.50	—	..	0.25	..	..
710602	Promotion of Physical education and Youth Welfare Programme	10.00	..	..	1.75	..	..
710603	Extension of Bharat Scouts and Girl Guides in U. P.	5.00	..	..	0.50	..	..
710604	Development grant to Oriental institutions	10.00	..	..	0.75	..	..
710605	Pre-grant to Oriental Institutions	5.00	..	..	0.25	..	..
710606	Strengthening of the Inspectorate of Sanskrit Pathshalas ..	1.27	..	..	..	..	..
710607	Establishment of Hindi-teaching Institute	11.80	5.00	..	..	..	..
710608	Grant to Hindustani Academy	0.75	..	..	0.15	..	..
710609	Development of the School of South Indian languages at Lucknow	0.75	..	..	0.22	..	..
<i>Spill-over Schemes</i>							
710610	Construction of buildings for existing Government Sanskrit Pathshalas	0.37	0.37	..	0.20	0.20	..
Total (i)		47.44	5.37	..	4.07	0.20	..

(ii) *Information Department*

710620 Publication of books in Hindi

(ii) *Community Development Department*

710621 Sports Schemes -- -- -- .. .

Total (6) .. .

(7) **Cultural Programmes**

710701 Expansion of U. P. State Archives

710702 Re-organisation of Government College of Arts and Crafts, Lucknow

710703 Re-organisation of Archaeology

710704 Grant for the expansion and development of Lalitkala Academy ..

710705 Development of Bhatkhande College of Hindustani Music, Lucknow

710706 Development of U. P. State Observatory, Naini Tal

710707 Grant for development and expansion of U. P. Sangeet Natya Bharati,
Lucknow

710708 Re-organisation of Museums

710709 Establishment of Directorate of Cultural Affairs

Total (7) .. .

Total for Sector 7.1. General Education -- -- .. .

10.00	..	..	3.00	..	..
30.00	..	..	2.00	..	..
87.44	5.37	..	9.07	0.20	..

2.00	..	0.37	0.15	..	0.07
4.00	1.70	..	0.60	0.45	..
3.40	1.20	..	0.40	..	..
3.50	..	..	0.60	..	..
3.40	1.22	..	0.40	..	..
24.80	6.37	16.55	12.50	5.00	7.41
3.30	..	..	0.50	..	..
5.00	..	..	0.85	..	..
0.60	..	..	..	..	..
50.00	10.49	16.92	16.00	5.45	7.48
5.294.69	601.26	19.92	571.08	62.05	7.48

Outlays for State Plan Schemes

Head—7. SOCIAL SERVICES

Sector—7.2. TECHNICAL EDUCATION

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
<i>Continuing Schemes</i>							
720101	University of Roorkee	26.00	..	5.00	6.00	..	1.00
720102	M. M. M. Engineering College, Gorakhpur	44.00	..	9.00	15.00	..	1.00
720103	H. B. T. I. Kanpur	80.00	..	15.00	20.00	..	3.00
720104	Government Central Textile Institute, Kanpur	5.00	1.00	2.00	1.70	0.20	1.00
720105	Pant College of Engineering Technology	100.00	..	11.00	26.00	..	3.00
720106	Consolidation of Government Polytechnics	112.34	28.00	6.00	18.67	3.62	1.00
720107	Grant-in-aid to non-Government Polytechnics	73.00	..	10.00	17.00	..	2.00
720108	Government Leather Institute, Agra	10.00	3.00	0.40	1.80	1.30	0.20
720109	Regional School of Printing including Part-time	11.00	3.00	0.60	1.56	0.10	0.20
720110	Secondary Technical Schools adjunct (Eight number)	40.00	10.00	..	3.00	2.00	..
720111	Secondary Technical Schools independent (Five number)	3.00	3.00	..	3.00	3.00	..
720112	Government Girls Polytechnic, Lucknow	8.00	0.50	..	1.00	..	..
720113	Chemical Operation Course (3 Centres)	37.00	13.50	2.50	2.79	0.80	..
720114	New Institutions approved in Third Plan yet to be started	60.00	20.00	8.00	..	..	..

New Schemes

720201	Re-organisation of Degree Courses and Organisation of Sandwich Courses at degree level	..	..	..
720202	Diversification of diploma courses, introduction of Commerce courses and organisation of Sandwich courses	..	..	..
720203	Vocationalization of Secondary Education	..	..	..
720204	Staff quarters	..	..	..
720205	Faculty Development including Teachers Training Programme	..	..	..
720206	Replacement of obsolete equipment in the older Institutions	..	..	..
720207	Institute of Paper Technology, Saharanpur	..	..	..
720208	Scholarships	..	..	..
720209	Technical Education Loan (Scholarship)	..	..	..
720210	Director of Technical Education and State Board of Technical Education	..	..	..
720211	Student amenities for Polytechnics	..	..	..
720212	Text Books Loan Scheme	..	..	..
720213	Development production of Teaching Aids	..	..	..
720214	Construction of hostels at Government Polytechnics, Kanpur, Faizabad and Mirzapur	..	..	..
720215	Construction of hostels at Government Polytechnics, Moradabad, Gonda, Basti, Azamgarh and Srinagar (Garhwal)	..	..	..
720216	Construction of hostels at S. T. C., Bareilly, Lucknow, Faizabad, Mirzapur, Gonda, Gorakhpur, Moradabad and Azamgarh	..	..	..
720217	M. L. N. Regional Engineering College, Allahabad	..	..	..
	Total for Sector 7.2. Technical Education			..

35.00	..	3.60	2.00	..	..
80.00	4.04	4.00	5.00	0.53	..
47.24	15.00	8.00	..	..	..
30.00	9.86	..	5.00	1.86	..
30.00	..	..	2.80	..	..
30.00	..	..	5.00	..	..
20.00	..	3.00	1.25	..	..
12.00	3.00	..	3.00	..	..
100.00	100.00	..	25.00	25.00	..
8.00	0.14	..	1.49	0.14	..
9.00	1.00	..	..	..	..
1.00	..	..	..	..	..
4.00	..	..	..	..	..
5.69	5.69	..	3.86	3.86	..
16.21	16.21	..	4.10	4.10	..
5.52	5.52	..	1.98	1.98	..
5.00	..	0.40	2.00	..	..
1,048.00	239.46	88.50	180.00	48.49	12.40

Outlays for Centrally Sponsored Schemes

(Rupees in lakhs)

Serial no.	Schemes	Fourth Plan Outlay	1969-70 Outlay
1	2	3	4
7. SOCIAL SERVICES			
7.1. GENERAL EDUCATION			
1	Autonomous Corporation for Production of University Level Books in Hindi.	133.00	24.00
2	Establishment of Pre-Vocational Centres	19.54	3.44
3	Promotion of National Integration (Inter-State Exchange of Teachers).	9.20	1.00
Total—7.1. General Education ..		161.74	28.44

Outlays for Centrally Sponsored Schemes

(Rupees in lakhs)			
Serial no.	Schemes	Fourth Plan Outlay	1969-70 Outlay
1	2	3	4
7. SOCIAL SERVICE			
7.2. TECHNICAL EDUCATION			
1	Motilal Nehru Regional Engineering College	50.00	15.00
2	Post-Graduate Course in the Regional Engineering College, Allahabad	35.00	6.00
3	Post-Graduate Course in the Institution under the administrative control of the State Government	65.00	10.00
Total 7.2. Technical Education ..		150.00	31.00

HEALTH AND FAMILY PLANNING

18.1. The gradual increase in the outlays for Medical and Health under the successive five-year plans is an index to the rapid expansion of these services in the State. The Third Plan outlay of Rs.28.14 crores was more than double of that in the Second (Rs.12.60 crores) and more than five times of that in the First Plan (Rs.5.58 crores). The setback suffered by the national economy following the Pakistan aggression and successive droughts during the period of *ad hoc* Plans (1966-67 to 1968-69) slowed down the pace of expansion under the social services when the total estimated expenditure for Health Sector came down to Rs.14.67 crores, but an effort was made to maintain the level of development achieved by the end of the Third Plan. The allocation made under the Fourth Five-Year Plan has again been stepped up to about one and a half times that of the Third Plan for this sector. The increase in the Plan outlays and continuance of services created under the previous plans is also reflected in the continuous rise in the per capita expenditure on Medical and Health Services. It rose to Rs.1.55 per annum within a decade from mere 0.51 paise in 1950-51 and is likely to be stepped up to Rs.5.13 by the end of the Fourth Plan.

Medical Education

18.2. The State has eight Medical Colleges. In addition to the two Medical Colleges of Lucknow and Agra existing in the First Plan with an intake capacity of 75 students, each, a Medical College at Kanpur with an admission capacity of 100 students was started in the Second Plan. In the Third Plan, the Medical College at Allahabad was started with 50 seats which were raised to 100 from the academic session, 1968. The Medical College, Meerut, was established in 1967-68, with a capacity of 50 students, which was raised to 100 in 1968-69. A Medical College is coming up at Jhansi, and admission of 50 students for this institution has already started at Meerut. It is hoped that the buildings of this college will be completed during the Fourth Plan and the admission capacity would also be raised to 100. The work on the construction of yet another Medical College at Gorakhpur has already started and it is expected that it would begin functioning with 50 students by the end of the Fourth Plan. The intake of Agra, Kanpur and Lucknow Medical Colleges has also been gradually raised to 127, 189 and 189 respectively. Two Medical Colleges are functioning in the two Central Universities of Aligarh and Varanasi with 50 and 70 seats each. The total

intake of the State and Central Medical Colleges is 878, which would be raised to 978 by the end of 1973-74 after the two medical colleges of Jhansi and Gorakhpur have started functioning.

18.3. At the end of the Second Plan, U. P. had nearly 8,000 doctors whose ratio to the population was 1 : 9,300. The present doctor-population ratio in the State has come down to 1 : 8320.

18.4. It would not be possible to further increase the admission capacity of existing Medical Colleges during the Fourth Plan period owing to constraint of resources. Provision has, however, been made for meeting the deficiencies of staff, equipment, medicines, laboratory and hospital facilities which could not keep pace with the rapid expansion in the intake of existing Medical Colleges. A provision of Rs.1,300.00 lakhs has been made for the purpose which includes construction works involving an expenditure of Rs.826.16 lakhs. The centrally sponsored schemes provide for ten post-graduate courses, four of which would be instituted at Lucknow, three at Agra, two at Allahabad and one at the Medical College, Kanpur, involving an expenditure of Rs.100.00 lakhs.

Training Programmes

18.5. A major impediment in the expansion of medical and health services is the dearth of the auxiliary nurse-midwives, pharmacists, X-ray technicians and sanitary inspectors. The training programmes for these categories of para-medical personnel were taken up under the out-going plans to meet the shortage. At present, there are 11 General Nurses Training Centres, five General Midwifery Training Centres and 10 Auxiliary Nurse-Midwifery Training Centres with a total intake capacity of 980, 224, and 650 respectively. The intake capacity of the existing four General Nurses Training Centres attached to Medical Colleges at Lucknow, Kanpur, Agra and Allahabad will be increased by 450 seats and a new training centre with 150 seats will be set up at the Medical College, Meerut. A college imparting degree course in nursing will be started at Kanpur. Three more mid-wifery training centres will be established. It is expected that the present nurse-bed ratio of 1 : 10 in the State will improve to 1 : 8 at the end of the Fourth Five-Year Plan.

18.6. The training of compounders was stopped in 1958-59 owing to certain objections raised by the Pharmacy Council of India and a diploma course in Pharmacy was started in its place from 1961-62 for 50 students at the Kanpur Medical College. The admission capacity of the Centre was later raised to 60 and a similar course was started at the Medical College, Allahabad, with the admission capacity of 60 trainees. One more training centre with an intake capacity of 60 students will be started at the Meerut Medical College.

18.7. In 1968-69, there would be in position four X-ray Technical Training Centres and three Laboratory Technical Training Centres. The intake capacity of the two Laboratory Technical Training Centres at Lucknow and Kanpur will be increased from 20 to 40 and a new training centre with a capa-

city of 40 students will be established at Medical College, Allahabad. To augment the availability of X-Ray Technicians, the admission capacity of the X-ray Technicians Training Centre, Lucknow, will be increased from 12 to 20.

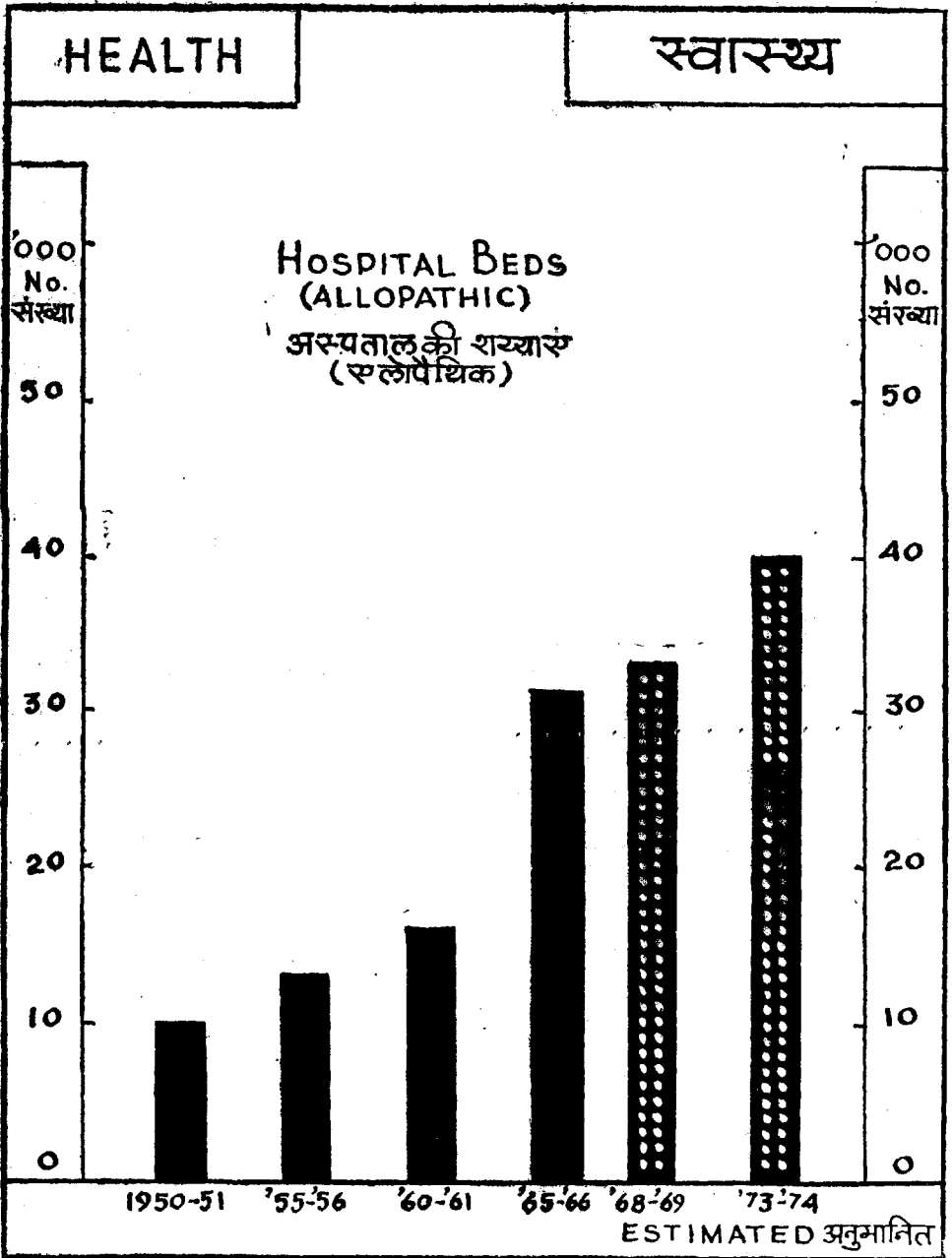
18.8. Training courses for Physiotherapists, Occupational Therapists and Operation Theatre Technicians are proposed to be introduced with an intake of 10 trainees for each course at the Medical College, Lucknow. Training facilities for Basic Health Workers are also proposed to be expanded.

18.9. The programme for 1969-70 includes establishment of one training centre for laboratory technicians with an admission capacity of 40. The centre will be set up at the Medical College, Allahabad. For the proposed Nurses Degree Course, the training of tutors would also begin in the first year.

Hospitals and Dispensaries

18.10. The number of dispensaries and hospitals including primary health centres increased from 1,882 to 3,013 during the Third Plan, while the number of beds rose from 19,314 to 30,961 giving a ratio of one bed for 2,593 persons as against the all-India average of one bed per 2,049 persons. At the beginning of the Fourth Plan, the total number of beds were 32,742. During the Fourth Plan, 7,495 beds, including 1,468 teaching beds and 1,580 under the Employees State Insurance Scheme, will be added which would raise the total number of beds to 40,237 and reduce the bed-population ratio to 1 : 2,250 against the corresponding all-India ratio of 1 : 1,666. Funds have been provided for the improvement of State hospitals and dispensaries, blood banks in 30 districts, emergency services in eight hospitals, establishment of 10 rural dispensaries, improvement of 15 selected hospitals on poly-clinic pattern with pathological, radiological and anaesthetic services, dental clinics in 35 district headquarter hospitals and 10 more children's clinics. The nursing scheme will be introduced in 17 hospitals and the remaining five district hospitals will be provided with Medical/Surgical facilities. In the J. K. Institute of Radiology and Cancer Research, the diagnostic and Radio Therapy facilities will be further developed and up-to-date diagnostic-cum-treatment facilities in cardiology will be provided at the Medical College, Kanpur. Five pediatric departments of the district hospitals will be upgraded through the assistance of UNICEF. Nine tahsil hospitals will be provided medical/surgical facilities, while five of these will be equipped with 'X-Ray Machines'.

18.11. On the mental health side, a mental health wing with 50 beds will be added to the Medical College, Lucknow, nine mental health clinics will be established and 61 beds will be provided in the existing mental hospitals. The Mental Hospital, Agra, will be brought to the level of a National Institute and at Lucknow Medical College, a Mental Health Wing will be developed for expanding teaching facilities for the under-graduate students.



18.12. In order to rationalise the workload in district headquarter women hospitals, 32 posts of subcharges will be created for selected hospitals. For the same purpose, one more P. M. S. Officer will be provided to 51 district headquarter hospitals. Provision has also been made for provincialisation of 15 dispensaries, leprosy institutions and I.D.H. hospitals.

18.13. In 1969-70, it is proposed to commission 500 beds and start construction work for 408 additional beds, to open 6 more blood banks, to establish two rural dispensaries, seven dental clinics and two children's clinics, to provide facilities of Radiology, Pathology and Anaestheology to three district hospitals and medical/surgical facilities to five other hospitals, and to establish a centre of advanced cardiology at the Medical College, Kanpur. Full nursing scheme will be introduced in three places while 10 doctors will be posted to the district hospitals under the rationalisation schemes.

Primary Health Centres

18.14. In the field of rural medical relief, the aim in the past had been to increase the number of dispensaries, so that no one would have to travel more than five miles to obtain medical aid. This concept having since changed, a departure was made from the old practice of offering purely curative service to the system of providing integrated services. In other words, both preventive and curative services radiated from a single source called the "Primary Health Centre". At present, 688 Primary Health Centres are functioning in the State. Besides, 40 allopathic dispensaries were also established in rural areas during the Third Plan. In 1967-68, four new allopathic dispensaries were opened in Hill and Rural areas.

18.15. A new scheme of "Rural Medical Extension Service" has been introduced to extend specialised services in rural areas, as an experimental measure. Under this programme, a team of four doctors has to visit four rural centres in a week. Besides, a scheme of "Mobile Dispensaries" has also been started for the people in Hill areas and eastern districts, where, due to difficult terrain, they are not able to avail themselves of the medical facilities available in the nearest town. In March, 1968, three such dispensaries were started. This year, four mobile and ten travelling dispensaries are proposed to be opened.

18.16. Out of 688 Primary Health Centres, 390 have their own buildings. Provision has been made for construction of 75 primary health centre buildings and laboratory blocks for 12 of these. Assistance is expected from UNICEF for the improvement of 300 primary health centres. Twenty-five Zila Parishad dispensaries, where primary health centres have been established, will be provincialized. Provision has also been made for additional drugs, laboratory equipment, etc., and commissioning of 816 beds at the primary health centres.

18.17. The rapid expansion of medical and basic health services has made it necessary to bring about an integration of the two services looking

after the curative and preventive wings, so that the primary health centres may be developed on polyvalent pattern. It is accordingly proposed to unify the P. M. S. and P. H. S. cadres during the Fourth Plan period. The scheme will involve an expenditure of Rs.73.80 lakhs.

18.18. Besides providing additional drugs and equipment to the existing Primary Health Centres, the construction work will also be taken in hand in 1969-70. It is also proposed to bring about the integration of the medical and health services from the very first year.

Control of Communicable Diseases

18.19. Control of communicable diseases, like malaria, small-pox, filaria, tuberculosis and leprosy has been accommodated under the Central Sector, while the State Plan provides for chest surgery units, tuberculosis hospitals, establishment of a T. B. Cell at the State Directorate, grants-in-aid to voluntary organisations for T. B. and establishment of analytical laboratories.

Malaria—Measures adopted for the eradication of Malaria have resulted in a marked decline in its incidence. Sixty-seven units were set up all over the State under Malaria Eradication Programme during the Second Plan period. At present 51.27 units are in maintenance phase during which vigilance services for detection of fever cases and examination of blood slides are undertaken as a part of the normal health services. A complex of Basic Health Services has been introduced at the block level where one Basic Health worker has been appointed for a population of 10 to 12 thousand persons, for the vigilance services of detecting fever cases. The Malaria Eradication Programme has brought down the mortality rate to 0.6 per cent by 1964 from 10.71 per cent in 1947. In the Fourth Plan, 15.73 units comprising 222 blocks will enter into maintenance phase but two units in the border districts will continue under the attack and consolidation phases. During 1969-70, 3.56 units will be in the pre-consolidation phase, 10.90 in the consolidation phase and 1.25 units are expected to enter into maintenance phase.

Small-Pox—The National Small-Pox Eradication Programme was started in 1962. Between 80 and 100 per cent of the population has been protected in various districts and the attack and surveillance operations have been completed. There has consequently been a marked reduction in the incidence of this disease. The primary vaccination of the new-borns and re-vaccination of others will continue.

Filariasis—The extent of filariasis in U. P. is alarmingly high. About 3.30 crores of the State population is suspected to be suffering from the disease. At the end of the Third Plan, ten units were functioning and according to the recommendation of the National Filaria Control Board, the programme is to be further intensified. During the Fourth Plan period, 16 Filaria

Clinics will be established. Two new control units will be established and five existing units will be reorganised during 1969-70. Four out of the 16 Filaria clinics will also be opened in the first year.

Tuberculosis—So far 59 T. B. clinics have been set up on the Government of India pattern. There are also five ordinary type T. B. clinics, 13 T. B. Sanatoria and hospitals and five non-Government T. B. Clinics. The proposals for the Fourth Plan include upgrading of 36 T. B. clinics, commissioning of 400 T. B. isolation beds in selected district hospitals and establishment of two Regional Thoracic Surgery Centres and two T. B. hospitals. In addition to the T. B. Training and Demonstration Centre, Agra, one more such centre will be established in the eastern districts. The programme for 1969-70 comprises upgrading of T. B. clinics and setting up a T. B. Cell at the State Directorate.

Leprosy—A significant progress has been made in the field of leprosy control. During the Third Plan, the programme was reorganised and survey, education and treatment (SET) units were introduced. At present, 30 SET Units and 14 Control Units are functioning and a leprosy rehabilitation and training centre is expected to start functioning at the Medical College, Kanpur by the end of 1968-69. This centre will be further expanded during the Fourth Plan period. Additional 50 SET Units and 10 Leprosy Control Units will be established during the Fourth Plan period, of which 10 SET and two Leprosy Control Units will start functioning in 1969-70.

V. D. Control—Venereal diseases are endemic in the Jaunsar-Bawar and Jaunpur Rewain zones of Dehra Dun, Tehri-Garhwal and Uttar Kashi Districts. Ten V. D. Clinics are proposed to be opened during the Fourth Plan period. Of these, two will be established in 1969-70.

Other Schemes—Among the important schemes included in the Fourth Plan are manufacture of triple antigen vaccine at the State Vaccine Institute, Patwadangar, where manufacturing facilities for anti-rabic and freeze dried small-pox vaccine will be expanded. One public health laboratory will be established at each of the 10 divisional headquarters.

Family Planning

18.20. One of the objectives of the Fourth Plan is to limit the growth of population for attaining socio-economic betterment of the people. The family planning programme has accordingly been adopted for implementation on a massive scale. With a modest beginning in the Second Plan, when 25 urban and 150 rural family planning clinics were opened, the programme had made a considerable headway by the end of the Third Plan with 875 rural, 75 urban and 10 mobile family planning clinics and three Regional Training Centres were functioning. Subsequently, 72 urban clinics and 108 mobile

centres at the district family planning bureaux, 54 each for sterilization and IUCD, were set up. The mobile programme was re-organized in 1967-68, when whole-time district family planning officers were made responsible under the overall supervision of the District Magistrates, for the success of the programme. District Health—Education-cum-Information Officers were appointed to look after the publicity of the programme and four additional training centres, to make a total of seven, were established for imparting training to the personnel. The successive drives launched under the programme show a steep rise in IUCD and sterilizations in 1967-68 when the figures for these were 1,03,043 and 1,59,168 against 45,347 and 76,343 respectively in 1965-66.

18.21. In the Fourth Plan, the target for sterilization is 25 lakhs and that for IUCD 18.87 lakhs. The concept of family planning programme has been enlarged from a purely negative one of preventing child birth to the welfare of a small and limited family. To that end, a number of schemes relating to the well being of mothers, infants and children such as Prophylaxis against nutritional anaemia, immunisation against Diphtheria and Tetanus, etc. have been added. It is expected that this would make Family Planning Programmes more acceptable.

Indigenous Systems of Medicine

18.22. Programmes relating to indigenous systems of medicine were included in the earlier plans to give due encouragement to these systems. At the end of the Third Plan, there were 683 Ayurvedic/Unani dispensaries. In the subsequent three years, 15 dispensaries were opened and a State Ayurvedic Service was constituted besides other steps taken to raise the academic standard of non-Government Ayurvedic/Unani colleges.

18.23. In the Fourth Plan, provision has been made for establishment of 100 four-bedded Ayurvedic/Unani dispensaries and three Urban Ayurvedic/Unani hospitals with 25 beds each. Steps will also be taken for the expansion of State Ayurvedic College and Hospital, Lucknow, the college of Shudha Ayurveda attached to the Varanasi Sanskrit College and the State Pharmacy of Ayurvedic/Unani medicine.

18.24. The National Homoeopathic College, Lucknow, was taken over by Government in February, 1968. So far, 10 State Homoeopathic dispensaries have also been started. In the Fourth Plan, the National Homoeopathic College, Lucknow, will be improved and expanded, increased grants will be paid to the 10 existing non-Government Homoeopathic institutions and 25 four-bedded Homoeopathic dispensaries will be established.

Other Programmes

18.25. Under Employees' State Insurance Scheme, medical facilities are rendered to the insured persons, mostly working in the factories of the State. The E. S. I. programme included in the Fourth Plan envisages establishment

of 12 E. S. I. hospitals and 16 E. S. I. dispensaries with an addition of 1,580 beds. A cesium plant unit will be provided at the existing E. S. I. hospital, Pandu Nagar, Kanpur and H. M. R. Odelco Camera to the E. S. I. Chest Hospital, Kanpur. Provision has also been made for strengthening the E. S. I. Directorate including creation of a post of Joint Director and other engineering staff to supervise speedy and proper execution of E. S. I. schemes.

18.26. Voluntary organisations doing useful work in the field of medical treatment, like Swami Vivekanand Memorial Centenary Poly-clinic, R. K. Mission, Lucknow, the Eye Hospitals of Sitapur, Aligarh and Kanpur will be given adequate grants to continue their activities.

18.27. Strengthening of the Medical Directorate including construction of buildings for the Directorate and Workshop for repairs and maintenance of X-Ray apparatus, electro-medical appliances, etc., expansion of the central transport organisation and establishment of four regional workshops and four mobile maintenance units, improvement of the Public Analyst Laboratory, expansion of the drug control organisation for the enforcement of Ayurvedic and Homoeopathic Drug Control and improvement of the school Health Services are some of the other notable schemes included in the Fourth Five Year Plan.

18.28. The distribution of the outlay proposed in the Fourth Plan and 1969-70 for major programmes, both under the State Plan and centrally sponsored programme is shown in the table below :

Programme	(Rupees in lakh)			
	State Plan		Centrally sponsored	
	1969-70	Fourth Plan	1969-70	Fourth Plan
(1) Medical Education	164.90	1300.00	12.61	100.00
(2) Training Programmes	8.72	185.00	0.60	4.03
(3) Hospitals and dispensaries	108.13	1202.18	0.38	13.50
(4) Primary Health Centres and Basic Health Services	30.97	335.70	150.00	900.00
(5) Control of communicable diseases	13.43	129.12	352.95	2205.81
(6) Family Planning .. ..	..	..	880.49	5384.33
(7) Indigenous Systems of Medicine	18.01	115.00	10.00	50.00
(8) Other programmes	35.84	283.00	..	..
Total	380.00	3550.00	1407.03	8657.67

SUPPLEMENTARY PLAN

18.29. The outlay for Medical and Health is likely to be increased by Rs.2.00 crores if additional resources could be mobilised for the State Plan. In that eventuality the total outlay would increase to Rs.37.50 crores.

Outlays for State Plan Schemes

Head—7. SOCIAL SERVICES

Sector—7.4. HEALTH AND FAMILY PLANNING

(Rupees in lakhs)

Code no.	Group / Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
	(1) Medical Education						
740101	Requirement of G.S.V.M. Medical College, Kanpur	123.59	59.34	..	15.21	8.10	..
740102	Requirement of S. N. Medical College, Agra	103.79	29.90	..	11.95	2.25	..
740103	Provision for M.L.N. Medical College, Allahabad	104.77	47.74	..	9.12	3.95	..
740104	Spill-over requirements of construction works of Kanpur, Agra and Allahabad Medical Colleges	36.20	36.20	..	12.50	12.50	..
740105	Requirement of K. G. Medical College, Lucknow	102.32	..	..	20.52	..	..
740106	Expansion of facilities for under-graduate Dental Education at Dental Wing of K. G. Medical College, Lucknow	0.35	..	..	..	..	..
740107	Opening of two more medical Colleges at Jhansi and Gorakhpur	485.00	400.00	..	44.20	34.00	..
740108	Establishment of Medical College at Meerut with 600 bedded hospital	315.98	253.01	..	49.00	40.00	..
740109	Provision for opening of one Medical College in Rural/Hill areas .. .. .	..	..	..	..	..	..
740110	Grant-in-aid to Varanasi Hindu University for maintenance of hospital and beds	22.00	..	..	1.20	..	..
740111	Medical Research	5.00	..	..	1.00	..	..
740112	Post-graduate course for inservice doctors	1.00	..	..	0.20	..	..
740113	Provision for increase in admission capacity by 200 students in different medical colleges in the State .. .. .	..	..	..	..	..	..
	Total (1)	1300.00	826.19	..	164.90	100.80	..

(2) Training Programme

740201	Training of Dental Hygienists at the Dental Wing of K. G. Medical College, Lucknow .. .. .	..	..	..	..
740202	Training of Nurses .. .. .	..	..	..	..
740203	Opening of three Midwifery training centres and construction of buildings .. .. .	..	..	..	..
740204	Diploma course in Pharmacy at G.S.V.M. Medical College, Kanpur				
740205	Expansion of applied Nutrition programme of P.H.I., U.P., Lucknow				
740206	Diploma course in Pharmacy at M. L. Nehru Medical College, Allahabad and Meerut .. .. .	..	..	..	..
740207	Training of Laboratory and X-ray technicians including un-trained in service technicians .. .. .	..	..	..	..
740208	Award of stipends to students .. .. .	..	..	..	..
740209	Compulsory rotating Internships .. .. .	..	..	..	..
740210	Training of para-medical workers at Medical Colleges, Kanpur and Allahabad .. .. .	..	..	..	..
740211	Training of Public Health personnel and Basic Health Workers ..				
740212	Training of Male Health Visitors in Tuberculosis .. .. .	..	..	..	..
				Total (2)	..

(3) Hospitals and Dispensaries

740301	Increase in bed strength at the district and Women's hospitals ..				
740302	Provision of additional facilities at the existing State hospitals and dispensaries .. .. .	..	..	..	..
740303	Establishment of Blood Banks at 30 district headquarters hospitals ..				
740304	Protective measures against radiation of Hazards .. .. .	..	..	..	..

2.24	..	..	1.02	..	..
110.23	65.75	..	1.22	0.60	..
11.85	5.22	..	0.74	0.20	..
1.60	..	..	0.20	..	..
..
13.10	11.00	..	0.10	0.10	..
4.10	..	..	1.43	..	..
4.80	..	..	0.28	..	..
15.68	..	..	0.15	0.15	..
4.60	4.00	..	0.25	0.10	..
12.00	1.30	..	2.33	0.30	..
4.80	4.80	..	1.00	1.00	..
185.00	99.07	..	8.72	2.45	..
241.00	130.00	..	10.43	6.00	..
383.14	12.21	..	45.26	0.86	..
7.20	..	..	0.44	..	..
3.00	..	..	0.80	..	..

Head—7. SOCIAL SERVICES

Sector—7.4. HEALTH AND FAMILY PLANNING—(contd.)

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
740305	Emergency services at district and Women's hospitals	10.00	..	..	0.80	..	..
740306	Provision for Ambulance including garages and driver's quarters ..	25.76	12.40	..	5.76	0.25	..
740307	Construction of 10 Rural Allopathic dispensaries	18.24	13.63	..	0.81	0.50	..
740308	Improvement, expansion, renovation and construction of selected District Hospitals in Rural/Urban areas .. .. .	..	..	..	..	..	..
740309	Construction and expansion of Nurses Homes	48.35	48.35	..	2.00	2.00	..
740310	Supply of UNICEF vehicle for up-graded Paediatric department of District Hospitals	0.61	..	..	0.02	..	..
740311	Conversion of District Hospitals into Poly-clinics:						
	(a) Nursing scheme at 17 places	40.15	..	..	1.47	..	..
	(b) Specialists facilities in Radiology, Pathology, etc.	11.12	..	..	0.72	..	..
	(c) Dental Clinics	26.55	8.00	..	2.26	0.40	..
	(d) Children Clinics at 10 palces	6.40	2.52	..	0.50	0.13	..
	(e) Medical Surgical/facilities at five places	5.35	2.75	..	0.65	0.15	..
740312	Establishment and upgrading of Mental Units at Lucknow and Agra ..	31.53	11.50	..	3.00	1.00	..
740313	Provincialization of 15 dispensaries including Leprosy hospitals and I.D.H.	15.00	..	..	0.80	..	..

740314	Medical/Surgical facilities at nine places and X-ray units at five places in State owned Tahsil hospitals	..	..	..
740315	Provision for advance cardological facilities in the Medical College Kanpur	..	..	..
740316	Provision for advance Anti-Cancer facilities at Kanpur	..	..	..
740317	Provision for spill over items	..	..	..
				Total (3) ..

(4) Primary Health Centres and Basic Health Services

740401	Basic Health Services Schemes	..	..	..
740402	Implementation of UNICEF scheme for the development of Health Services in Blocks	..	..	..
740403	Construction of buildings for dispensaries in connexion with the establishment of Primary Health Units	..	..	..
740404	Spill over items	..	..	..
				Total (4) ..

(5) Control of Communicable Diseases

740501	Control of T. B. including construction of building etc.	..	..	..
740502	Leprosy Control Programme	..	..	..
740503	Grant-in-aid to Hind Kusht Niwaran Sangh	..	..	..
740504	Expansion of State Vaccine Institute, Patwadangar, district Naini Tal	..	..	..
740505	Improvement in Pilgrimage routes	..	..	..
740506	Expansion of Public Health Laboratory	..	..	..
740507	Improvement of existing I.D. Hospitals	..	..	..

196.25	173.00	..	9.45	5.45	..
26.00	4.00	9.00	5.43	..	3.50
30.00	4.00	15.00	5.15	0.15	3.00
76.52	76.52	..	12.38	12.38	..
1,202.17	498.88	24.00	108.13	29.27	6.50
73.80	..	..	18.72	..	..
128.64	..	..	7.90	..	..
128.00	107.00	..	3.35	2.80	..
5.26	5.26	..	1.00	1.00	..
335.70	112.26	..	30.97	3.80	..
54.72	35.50	..	1.57	0.15	..
4.35	3.49	..	2.05	1.45	..
5.00	..	..	1.00	..	..
24.05	1.00	..	2.11	0.10	..
5.00	..	..	1.00	..	..
8.50	..	..	..	..	..
8.50	3.50	..	..	..	..

Head—7. SOCIAL SERVICES

Sector—7.4. HEALTH AND FAMILY PLANNING—(contd.)

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
740508	Replacement of 15 Public Health Ambulances	10.50	—	—	2.80	..	..
740509	Spill over items	8.50	8.50	..	2.90	2.90	—
	Total (5)	129.12	51.99	..	13.43	4.60	..
	(6) Family Planning	<i>Centrally Sponsored Scheme</i>					
	(7) Indigenous System of Medicines						
740701	Grant-in-aid to Homoeopathic Medical Colleges and their attached hospitals	6.50	—	..	1.00	..	..
740702	Maintenance grant for extra Medicine	0.50	—	..	0.10	..	..
740703	Expansion of National Homoeopathic Medical College, Lucknow	8.02	4.65	..	1.00	0.73	..
740704	Establishment of Homoeopathic dispensaries	4.58	..	..	0.30	..	..
740705	Grant-in-aid to Homoeopathic Medical practitioners and institutions	3.05	..	..	0.61	..	..
740706	Manufacture of Homoeopathic medicines and research in Homoeopathy	1.85	1.00	..	—	..	..
740707	Expansion of existing Ayurvedic/Unani dispensaries	26.50	..	..	2.20	..	..
740708	Improvement and expansion of Ayurvedic colleges affiliated to Board of Indian Medicines and establishment of Ayurvedic University	32.50	..	..	5.50	..	..
740709	Expansion of the College of Sudha Ayurved, Varanasya Sanskrit University	15.00	..	..	4.90	..	..

740710	Expansion of State Ayurvedic College, Lucknow	..	..
740711	Expansion of State Pharmacy of Ayurvedic and Unani Medicines	..	..
740712	Provision for collection of old manuscripts, translation and publication of modern Ayurvedic works	..	..
740713	Establishment of Ayurvedic/Unani Hospitals in urban areas	..	..
740714	Introduction of refresher course for Chikitsa Adhikaris and training of Ayurvedic Nurses and compounders	..	..
740715	Grant-in-aid to the Board of Indian Medicines, U. P. for maintenance	..	..
740716	Provision for cultivation, collection, and supply of herbs and drugs	..	..
740717	Scholarships to the students of Ayurvedic/Unani Colleges.	..	..
740718	Grant-in-aid to institutions and practitioners in Ayurvedic/Unani medicines and increase in subsidy	..	..
740719	Strengthening of Directorate of Ayurvedic and subordinate offices	..	..
740720	Provision for spill over items	..	..
	Total (7)	..	..

(8) Other Programmes

740801	Employees' State Insurance Scheme	..	..
740802	Grant-in-aid to non-Government medical institutions including those of local bodies	..	..
740803	Grant-in-aid to Swami Vivekanand Polyclinic	..	..
740804	Grant-in-aid to Eye Hospitals, Sitapur, Aligarh and Kanpur	..	..
740805	Strengthening of the staff of the Medical Directorate	..	..
740806	Construction of C. M. S. D. building and Workshop for the repairs of X-ray	..	..
740807	Establishment of Central Workshop for repairs and maintenance of appliances	..	..
740808	Provision for the posts of Overseer and other allied staff	..	..

0.50	--	..	0.10	--	--
2.50	1.00	..	0.60	10.50	--
1.00	--	--	0.20	..	--
4.50	--	--	0.40	--	--
1.00	--	--	0.20	--	--
1.00	--	--	0.20	--	--
1.00	--	--	0.10	--	--
1.50	--	--	0.10	--	--
2.00	--	--	0.40	--	--
1.00	--	--	0.10	--	--
0.50	0.50	--	--	--	--
115.00	7.15	--	18.01	1.23	--

281

15.20	--	--	1.57	..	--
30.25	--	--	5.00	..	--
20.00	--	--	4.00	..	--
25.00	--	--	5.00	--	--
22.50	--	--	2.50	--	--
30.00	30.00	..	3.00	3.00	--
11.00	--	--	0.26	--	--
3.50	--	--	0.58	..	--

Head—7. SOCIAL SERVICES

Sector—7.4. HEALTH AND FAMILY PLANNING—(concl.d.)

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign exchange	Total	Capital	Foreign exchange
1	2	3	4	5	6	7	8
740809	Provision for Referral Library at Directorate and Divisional hospitals	2.00	..	..	..	..	..
740810	Workshop for maintenance of vehicles	16.51	2.00	..	3.01	0.12	..
740811	Improvement of Registration and Vital Statistics	30.72	..	..	5.84	..	..
740812	Expansion of Drugs Control Organization	10.00	..	..	0.77	..	..
740813	Expansion of the Laboratory of the Public Analyst Government	11.48	6.00	0.40	0.61	..	..
740814	Construction of 13 Mortuaries	2.99	2.49	..	0.12	0.12	..
740815	Expansion of the State health Education—						
	(a) Headquarter organization	6.33	..	..	0.46	..	..
	(b) Prevention of Food Adulteration	8.00	..	..	1.00	..	..
	(c) School Health services	16.12	..	..	..	..	..
	(d) Up-grading of the post of Deputy Director (S.V.I.) to that of Director	1.25	..	..	0.12	..	..
740816	Creation of Nursing Training cell	1.16	..	..	..	..	..
740817	Construction of buildings for District Health Officers at ten places	14.00	14.00	..	..	..	..
740818	Spill over items	5.00	5.00	..	2.00	2.00	..
	Total (g)	283.01	59.49	0.40	35.84	5.24	..
	Total for Sector 7.4. Health and Family Planning	3550.00	1655.03	24.40	380.00	147.39	6.50

Outlays for Centrally Sponsored Schemes

7. SOCIAL SERVICES

7.4. HEALTH AND FAMILY PLANNING

		(Rupees in lakhs)	
Serial no.	Schemes	Fourth Plan Outlay	1969-70 Outlay
1	2	3	4
<i>(1) Medical Education</i>			
1	Post-graduate department of Medicines at G. S. V. M. Medical College, Kanpur	10.00	10.11
2	Establishment of Post-graduate department of Pathology with provision for section of Microbiology and Virology and construction of hostel and Animal House at S. N. Medical College, Agra.	10.00	1.70
3	Post-graduate department of physiology at S. N. Medical College, Agra	10.00	..
4	Post-graduate department of Surgery at M. L. N. Medical College, Allahabad	10.00	..
5	Post-graduate department of Anatomy at M. L. N. Medical College, Allahabad	10.00	..
6	Post-graduate department of Surgery at K. G. Medical College, Lucknow	10.00	1.50
7	Post-graduate course in the department of Preventive Medicines at K. G. Medical College, Lucknow	10.00	4.20
8	Post-graduate department of Plastic Surgery at K. G. Medical College, Lucknow	10.00	3.10
9	Expansion of Post-graduate course in Dental Education in Orthodontia, Periodontia, Oral Surgery at the Dental College, Lucknow	10.00	2.00
10	Post-graduate department of Medicine at S. N. Medical College, Agra	10.00	..
Total Group (1)		100.00	12.61
<i>(2) Training Programme</i>			
1	Institution of courses in Physiotherapists, Occupational therapists at K. G. Medical College, Lucknow	4.03	0.60
Total Group (2)		4.03	0.60
<i>(3) Hospitals and Dispensaries</i>			
1	Establishment of Mental Health Clinics	13.50	0.38
Total Group (3)		13.50	0.38
<i>(4) Primary Health Centres and Basic Health Services</i>			
1	Basic Health Services— Expansion of—	900.00	150.00
Total Group (4)		900.00	150.00

7.4 HEALTH AND FAMILY PLANNING—(concl.)

		(Rupees in lakhs)	
Serial no.	Schemes	Fourth Plan Outlay	1969-70 Outlay
1	2	3	4
<i>(5) Control of Communicable diseases</i>			
1	T. B. Control including upgrading of 36 Government of India's pattern T. B. Clinics, Anti-T. B. Drugs, construction of buildings, 400 isolation beds in the District Hospitals and establishment of second T. B. Demonstration centre	238.14	22.34
2	National Malaria Eradication programme	1280.59	222.42
3	National Small-pox Eradication programme	436.52	73.00
4	Manufacture of Freezed dried vaccine	88.00	13.27
5	Leprosy control programme including establishment of 10 Leprosy centres, 50 SET units and up-grading of six existing Leprosy centres	65.78	2.97
6	Control of Filariasis	60.80	13.72
7	Trachoma control programme	13.48	1.33
8	Cholera control Programme	7.50	0.90
9	V. D. Control	15.00	3.00
Total Group (5)		2205.81	352.95
<i>(6) Family Planning</i>			
1	Urban Family Planning Centres	198.70	30.94
2	Rural Family Planning Centres	2220.92	318.37
3	Sub-centres		
4	Family Planning Training	264.43	50.85
5	Sterilization programme	744.96	116.16
6	I. U. C. D. programme	185.59	28.84
7	Other schemes under Family Planning to make it popularise	1769.72	335.33
Total Group (6)		5384.32	880.49
<i>(7) Indigenous Systems of Medicines</i>			
1	Higher Education Training and Research in Indian systems of Medicines	50.00	10.00
Total, Group (7)		50.00	10.00
Total 7.4. Health and Family Planning		8657.66	1407.03

19

WATER SUPPLY

19.1. In most parts of the State people depend for obtaining water for drinking and washing on rivers, lakes, streams, wells and ponds. In many cases this water is highly contaminated and unsafe for human consumption, and sometimes available at great distances. It has been observed that in cities and towns where piped water supply has been introduced, death rate due to gastro-enteric fevers, cholera and dysentery, etc., has gone down considerably. In fact, there are more diseases which are water-borne than those which are filth-borne. A water supply system also give an opportunity to effect speedy removal of human excreta and other offensive wastes. The First, the Second and the Third Five-Year Plans included schemes for protected water incidence of mortality and morbidity on account of water-borne and other allied diseases. Pure drinking water facilities and proper arrangement of sewerage are considered to be essential for the existence of a civilized community.

19.2. There are two parts of the water supply scheme — (i) Urban Water Supply and Sewerage, and (ii) Rural Water Supply and Sanitation.

Urban Water Supply and Sewerage

There are 248 Urban Towns in the State. The allocation of funds during the three Plans was as follows :

						(Rupees in lakhs)
First Plan	..	..	..	..	..	664.484
Second Plan	..	..	..	..	..	489.000
Third Plan	..	..	..	..	..	957.50
					Total	2110.984

There were 132 urban towns having piped water supply, 18 towns having sewerage and 11 towns having surface drainage by the end of the Third Plan. The urban population served with piped water supply was 81.689 lakhs, i.e. 85 per cent and 44.589 lakhs, i.e. 47 per cent (1961 Census) was covered by sewerage.

During the three annual plans, viz. 1966-67, 1967-68 and 1968-69, the financial and physical achievements have been as follows :

Year	Financial allocation (Rs. in lakhs)	Physical Achievement
1966-67	131.71	8 New Water Works. 1 Sewerage scheme.
1967-68	163.67	3 New Water Works. (1 partial). 3 New Sewerage schemes(partial)
1968-69 (Anticipated)	{ 152.50 6.00	2 New Sewerage schemes. Construction and repairs of Ghats.
Total	453.88	

Rural Water Supply Scheme

Two special Survey and Investigation Divisions were created in the State by the Government of India to assess the problems of Rural Water Supply. From the assessment report prepared by them it was found that out of 1,12,624 villages-including 215 Town Area and Notified Area Committees, which had been declared rural in 1961 Census in the 54 districts of the State, there were as many as 27,287 villages where drinking water was either not available at all or, if it was available, the quality was not up to the mark. The population of these villages was 1,53,78,730.

By the end of 1967-68, the total number of villages served through water supply and hand-pumps was 2,068 and 426 respectively.

Programmes for the Fourth Plan

19.3. The State is criss-crossed with a number of rivers most of which have a perennial flow on account of originating in the Himalayas. There is thus no shortage of surface water, which is used by the agrarian population for a variety of purposes from irrigation to drinking. The State being predominantly agricultural, the bulk of the population lives in small villages which are mostly on the banks of rivers, and scattered over the State's area of 294,000 sq. kilometers. It would be a tremendous task to cover all such villages with piped/protected water supply and consequently, Government had to focus attention in respect of rural water supply on areas which are densely populated. Moreover, large areas of the State have been covered by tube-wells and pumping sets, etc.; set up under the irrigation programme. The population of such places has the facility of drinking water also from such irrigation schemes. After reviewing the physical progress during the last two decades and considering the priorities, it has been felt necessary to give more emphasis to sewerage schemes, particularly in those areas where water supply system already exists and where filariasis is hyperendemic. Eastern and hill

districts, backward and scarcity hit areas have also been given preference over other places. Even though the problem is immense, due to the paucity of resources it has been possible to provide only Rs.18 crores for the schemes of this sector during the Fourth Five Year Plan. In the Supplementary Plan, an additional provision of Rs.12.00 crores has been made. The availability of funds will depend on the mobilisation of additional resources. The break-up of the outlay of Rs.18 crores for different programmes is as follows :

(1) <i>Urban Water Supply and Sewerage—</i>						(Rs. in crores)
A. Water Supply	..	..	..	..		4.58
B. Sewerage	..	..	..	..		7.80
C. P. R. A. I. Schemes		..	..	..		0.02
					Total	12.40
(2) <i>Rural water Supply and Sanitation—</i>						
A. Water Supply	..	..	..	..		4.55
B. Sewerage	..	..	..	..		0.05
C. Water Supply Schemes for Hill Areas		..	..	..		1.00
					Total	5.60
					GRAND TOTAL	18.00

19.4. It may be added that besides the water supply schemes executed under this sector through the agency of the LSGED, provision for construction of wells is also made under the schemes for Welfare of Backward Classes and the well construction programme of the Community Development Department. An amount of Rs.85 lakhs has been earmarked for extending drinking water facilities amongst the Scheduled Tribes and Scheduled Castes. The amount set apart for Scheduled Castes is Rs.75 lakhs and that for Scheduled Tribes Rs.10 lakhs, which will be given as subsidy to the extent of Rs.2,000 per project. It is expected that 3,700 projects under the subsidy scheme for Scheduled Castes and 500 projects under the Scheme of Subsidy for Scheduled Tribes would be completed by the end of the Fourth Plan. Under the well construction programme the spill-over works of the earlier plans will be completed.

Urban Water Supply

19.5. By the end of 1968-69, 142 towns with a population of 82.12 lakhs or about 89 per cent of the urban population would have water supply system. Work will be in progress in 30 towns in the Fourth Plan. Out of these, schemes in 16 towns shall be completed during the Fourth Plan period. These 16 towns include 12 towns where re-organisation works are in progress and two towns where water works are to be freshly introduced. The comprehensive re-organisation schemes in the remaining 14 towns are proposed to be completed in phases during the Fourth Plan and shall spill-over to the next plan.

Urban Sewerage

19.6. Besides eleven towns which have surface drainage, sewerage system will be provided in 29 towns. Work will be in progress on these schemes, which will cover an amount of Rs.7.50 crores and balance of Rs.0.30 crores will be spent on 10 schemes for the re-organisation of the existing systems.

Rural Water Supply

19.7. During the Fourth Plan 1,140 additional villages with a population of 19.70 lakhs or 3 per cent of the rural population will be served with piped water supply and hand-pumps. The estimated expenditure on continuing schemes to be taken up during the Fourth Plan will be Rs.3.32 crores, leaving Rs.1.32 crores for new schemes.

Rural Sewerage

19.8. The amount of Rs.0.05 crore will be utilised for the completion of the continuing works and for introducing the facility at two new places

Drinking Water Supply in Hills

19.9. A sum of Rs.100 lakhs has been provided for the work under this sector in the first year (1969-70) of the Fourth Plan. This amount will be spent only on those schemes which will be recommended by the Hill Development Board.

Outlays for State Plan Schemes

Head—7. SOCIAL SERVICES

Sector—7.5. WATER SUPPLY

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
750101	<i>Urban—</i>						
	(a) Water Supply	458.00	458.00	20.00	59.60	59.60	4.00
	(b) Sewerage	780.00	585.00	..	90.00	67.50	..
	(c) Environmental Water Supply and Sanitation	2.00	..	..	0.40	..	..
	Total ..	1240.00	1043.00	20.00	150.00	127.10	4.00
750102	<i>Rural—</i>						
	(a) Water Supply	454.50	27.50	..	148.00	11.25	..
	(b) Sewerage	5.50	4.12	..	2.00	1.50	..
	Total ..	460.00	31.62	..	150.00	12.75	..
750103	Provision for Water Supply in Hillareas	100.00	..	..	100.00	..	..
	Total for Sector 7.5.—Water Supply ..	1800.00	1074.62	20.00	400.00	139.85	4.00

Outlays for the Centrally Sponsored Schemes

(Rupees in lakhs)

Serial no.	Schemes	Fourth Plan Outlay	Outlay for 1969-70
1	2	3	4
7. SOCIAL SERVICES			
7.5. WATER SUPPLY			
1	Establishment of Two Regional Survey Divisions	110.00	18.60
Total for 7.5.—Water Supply		110.00	18.60

HOUSING AND URBAN DEVELOPMENT

20.1. In the First Five-Year Plan, an allocation of Rs.881.82 lakhs was made for Housing Schemes. Against this, a sum of Rs.527.58 lakhs was utilised in the construction of 14,136 houses. During the Second Plan period, against an outlay of Rs.1,045 lakhs, a sum of Rs.858.114 lakhs was spent and 20,462 houses were constructed. The outlay for Housing in the Third Five Year Plan was Rs.920 lakhs. During the course of the Plan period, various economy proposals were implemented and building programme had to be curtailed as a result of the two emergencies. Consequently, the actual expenditure amounted only to Rs.446 lakhs, and 12,319 houses were constructed. During the three years of Annual Plans, viz. 1966-67, 1967-68 and 1968-69, the total expenditure on Housing comes to Rs.191 lakhs and 2,194 houses were completed. An outlay of Rs.700 lakhs for the programme has been proposed for the Fourth Plan period.

20.2. According to the observations of the Planning Commission, it seems necessary to review the policy of the States' direct investment in the construction of houses. It may be worthwhile to re-orient the housing policy so as to earmark more resources for providing the basic framework for planning and amenities in urban and rural areas, immediate reconditioning of slums and the provision of finance for co-operative and private housing. This recommendation is already being implemented by the State Government in as much as only the Subsidized Industrial Housing Scheme in the public sector is executed by the State Government. All the other schemes are being executed by the local bodies and the private sector, and they are only being financed by the State Government.

20.3. The housing shortage which was already quite acute at the beginning of the Third Five Year Plan has continued to grow with the rapid urbanisation and industrialisation during the Third Plan and subsequent years.

20.4. The following housing schemes are being implemented in the State :

(a) The Integrated Subsidized Housing Scheme for industrial workers and economically weaker sections of the community is a part of the industrial expansion programme. It also caters to the needs of the weaker sections of the community. The industrial population alone is likely to be 5,96,000 by the end of the Fourth Plan and 50 per cent of the housing shortage will be in the industrial sector alone. To cover only 15 per cent of the labour population, 82,225 houses will be required, but considering the very limited resources of the State, only Rs.340 lakhs

have been provided for this scheme. The amount will be utilized to complete the spill-over works and for the construction of 5,440 new houses. Besides, the existing executing agencies, viz. Public Works Department and private employers, the Housing Board will also be taking up this programme.

(b) The other Housing Scheme, which serves a major part of the population is the Low Income Group Housing Scheme. To cover only 27½ per cent of the shortage of houses in this group, 32,890 houses are required to be constructed during the Fourth Plan period, but in view of the limited resources, only Rs.230 lakhs have been provided for this scheme. It is expected that against this allocation 1,840 new houses will be constructed. This scheme is implemented through the agency of local bodies, the Housing and Development Board and registered co-operative housing societies.

(c) To cover the urban population and to eradicate slums from the various congested urban areas, a provision of Rs.65 lakhs has been made under the Slum Clearance Scheme and 1,040 new houses are expected to be completed. This scheme is also implemented through the local bodies and the Housing and Development Board of the State.

(d) The Regional Planning Scheme is being implemented since February, 1962, through the State Town and Country Planning Department, as a Centrally Sponsored Scheme. Under this scheme, Master Plans and Regional Plans of areas which have potentialities for industrial development are prepared. At present 4 Master Plans and 4 Regional Plans are under preparation. This scheme has now been included in the State Plan. It is proposed to carry out work on the preparation of 6 Regional Plans and 214 Master Plans during the Fourth Five Year Plan with an outlay of Rs.65 lakhs.

(e) The expenditure under the schemes Middle Income Group Housing and Land Acquisition and Development, which was so far shown under "Non-Plan" will now form part of the State Fourth Plan because these schemes have now been included in the Plan, and expenditure on these schemes during the five years would be Rs.1 crore each year.

20.5. For 1969-70, an amount of Rs.60 lakhs has been allocated for the schemes of Housing sector. The target of the construction of houses is 432 under the Subsidized Industrial Housing Scheme, 128 under the Low Income Group Housing Scheme and 140 under the Slum Clearance Scheme. Besides, land will be acquired and developed and houses will be constructed under the Middle Income-Group Housing Scheme.

Outlays for State Plan Schemes

Heads—7. SOCIAL SERVICES

Sector—7.6 HOUSING AND URBAN DEVELOPMENT

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign exchange	Total	Capital	Foreign exchange
1	2	3	4	5	6	7	8
760101	Subsidised Housing Scheme for industrial workers and economically weaker sections of community.	340.00	283.00	..	27.00	21.00	..
760102	Low Income Group Housing Scheme	230.00	230.00	..	16.00	16.00	..
760103	Slum clearance Scheme	65.00	41.50	..	7.00	5.00	..
760104	Regional Planning Scheme	65.00	..	..	10.00	..	..
760105	Middle Income Group Housing Scheme	..	..	..	..	..	..
760106	Land Acquisition and Development Scheme	..	..	..	..	..	..
				(Token provision)			
Total for Sector 7.6 Housing and Urban Development		700.00	554.50	..	60.00	42.00	..

WELFARE OF BACKWARD CLASSES

21.1. The term "Backward Classes" denotes scheduled castes, scheduled tribes, denotified communities and other backward classes. There are 66 communities recognised as scheduled castes in this State and their population is about 21 per cent of the State's total population. The State has tribal concentrations in the hilly, Tarai and southern regions whose population is estimated to be 5.5 lakhs. In June 1967, the Central Government declared five of these communities with a population of about 1.4 lakhs as scheduled tribes. The question of declaring some more communities having tribal characteristics as scheduled tribes is also under consideration of the Central Government. The population of denotified tribes is 20 lakhs. Among other backward classes are 37 Hindu and 21 Muslim communities. The welfare schemes undertaken by the Government for the amelioration of the conditions of the above categories of backward classes fall into three groups—

- (i) Education,
- (ii) Economic Uplift, and
- (iii) Health, housing and other schemes.

Scheduled Tribes

21.2. As the scheduled tribes have been declared as such only in June 1967, the schemes in respect of them were taken up for the first time in 1968-69. The educational schemes for scheduled tribes are all on the pattern of identical schemes for scheduled castes. The schemes for economic development are also identical except the one relating to the rehabilitation of the tribals. This is a special scheme for the rehabilitation of 300 families of tribals by advancing Rs.5,000 per family. The schemes relating to "Health, housing and other schemes" are also on the pattern of identical schemes for scheduled castes with the difference that in the case of tribals no people's contribution is required. The outlay proposed for the schemes of Welfare of Scheduled Tribes is Rs.107.10 lakhs.

Scheduled Castes

21.3. The Welfare of Scheduled Castes is being pursued from the First Plan. More than 2,08,451 scheduled caste students were benefited under the educational programme. In the Second Five Year Plan period 7,63,837 scholarships were offered to Harijan students and reimbursement of fee was made in respect of 25 lakh students. In addition, 26,603 students of post-matric classes were granted scholarships. In the Third Plan about 1.9 lakh students belonging to scheduled castes benefited from fee concessions and 1.24

lakh students were awarded stipends and non-recurring assistance out of the Plan expenditure. The level reached at the end of the Second Plan entered the maintenance phase and became a part of the non-plan development expenditure. If this fact is not borne in mind an incorrect impression is likely to be created that the level of the educational programme was lower in the Third Plan than that of the Second Plan. More than 6,000 Harijan students were given stipends for completing craftsman training and stenography. A polytechnic for scheduled castes was started at Aryanagar, Lucknow, in addition to the existing three technical centres opened during the Second Plan. Two new trades of moulding and armature winding were started at the Bakshika-Talab Training Centre, Lucknow. In the field of economic uplift, subsidies for starting small crafts were given to 450 co-operative societies of Harijans. Assistance was also given for the construction of nearly 10,900 masonry and drinking water wells, the installation of 6,100 hand-pumps and the purchase of 154 work sites and 1,300 house sites. Grants were given to 4,915 scheduled castes engaged in unclean professions for the construction of houses in rural areas. Seven industrial estates for Harijans started during the Second Plan were also completed. During 1966-67 a sum of Rs.52.43 lakhs was spent on the welfare of Harijans which was mainly utilised on the implementation of the educational schemes. A new scheme of giving non-recurring assistance for the purchase of books, appliances, etc., to scheduled caste students taking up medical, engineering and technical courses was introduced during the year. In the year 1967-68, a sum of Rs.56.38 lakhs was utilised and in the budget for 1968-69, provision of Rs.64.71 lakhs was made and subsequently, an additional provision of Rs.10 lakhs was made to implement special programmes in the context of Gandhi Centenary celebrations.

21.4. For the Fourth Plan period proposals involving an outlay of Rs.309.80 lakhs for educational schemes relating to scheduled castes have been formulated. The number of stipends will be increased and Harijan students will be encouraged to pursue Science education so as to avail themselves of openings in a growing technological society. It is proposed to benefit 1,94,000 students. The scheme of reimbursement of loss of fee income to non-Government educational institutions will be continued. A sum of Rs.90 lakhs has been provided for the purpose in the Fourth Plan and it is proposed to benefit additional 1,05,883 students studying in classes VII to X under this scheme. The other features of the Fourth Plan are aid to institutions serving the cause of education to scheduled castes, non-recurring assistance to scheduled caste students pursuing medical, engineering and technological courses for the purchase of books, appliances, etc., stipends to extra-meritorious students to meet their educational and residential needs and stipends for craftsman training. The last of this scheme consists of stipends to attract Harijan student to technical education to avail of the reservation of 20 per cent seats in the technical educational institutions. The provision for this is Rs.25 lakhs and it is expected that about 8,300 students will be benefited.

21.5. The provision for schemes relating to economic development of the scheduled castes is 126.60 lakhs. It will be spent on the expansion and improvement of existing three technical training centres by starting three new trades, subsidy for agricultural and horticultural development in rural and some urban areas and subsidy for development of cottage industries.

21.6. The provision for "Health and Housing Schemes" is Rs.126.50 lakhs and it consists of the two items of subsidy for drinking water projects and construction of houses. Another special feature is the appointment of Enforcement Inspectors to bring back people still practising untouchability in violation of the Untouchability (Offences) Act, 1955. The total outlay for Harijan Welfare Schemes is Rs.562.90 lakhs.

Other Backward Classes

21.7. The schemes in respect of the other backward classes are identical to those relating to scheduled castes. In the First Plan 3,500 students in Primary Schools, 6,000 in Higher Secondary Schools and 350 in College classes were given stipends. Another 3,600 were given aid for books and examination fees. Two hundred and seven boys in various technical institutions also received help in the shape of stipends and non-recurring assistance. Fifty-five boys received training in the three technical training centres. In the Second Plan 6,355 denotified tribe students and 56,800 other backward classes students were given stipends and non-recurring assistance for purchase of books, etc. In the Third Plan financial assistance was given to 35,157 students of other backward classes. Subsidy for starting small crafts were given to 41 Co-operative Societies of non-scheduled tribals.

21.8. During the Fourth Plan it is proposed to concentrate only on schemes relating to the education of other backward classes, and an outlay of Rs.50 lakhs is proposed for the purpose. The idea is that it is mainly through educational facilities that the backwardness of the backward classes can be eliminated. The main schemes are grant of stipends and non-recurring assistance for purchase of books and stationery to the students of these communities. A provision of Rs.40 lakhs has been made for this and it is expected to benefit 47,100 additional students. It has been felt that the students belonging to backward communities are not in a position to go in for technical education on account of their economic condition and their representation in the technical institutions remains inadequate. A sum of Rs.10 lakhs has been provided for giving stipends for technical training and this will benefit 3,333 students.

PROGRAMME FOR 1969-70

21.9. The outlay proposed for 1969-70 is Rs.62.00 lakhs of which Rs.42.51 lakhs will be spent on the programmes for the benefit of scheduled castes, Rs.15.88 lakhs on scheduled tribes and Rs.3.61 lakhs on other backward classes. Education would receive the highest priority with an allocation of

Rs.43.34 lakhs. Stipends and non-recurring assistance would be given to 35,000 scheduled caste students, 4,260 students belonging to backward classes and 1,764 scheduled tribe students reading in pre-matric classes, while fee concessions will be afforded to 9,415 students of scheduled castes and 1,176 of scheduled tribes. Stipends will also be granted to students belonging to scheduled tribes and scheduled castes numbering 33 and 333, respectively, for craftsmanship training. Under the Economic Uplift and Health and Housing programmes it is proposed to rehabilitate 60 families and give grants for the construction of 100 drinking water wells and 66 houses to scheduled tribes during 1969-70. The programme for the year includes subsidy to 200 families for agricultural purposes, 400 persons belonging to scheduled castes for the development of cottage industries and grants to 100 persons each for the construction of houses and for drinking water supply.

Supplementary Plan

21.10. Thus, a total outlay of Rs.720.00 lakhs has been provided for the Fourth Five-Year Plan. In addition, a sum of Rs.700.00 lakhs has been included in the Supplementary State Plan, which will be spent only when additional resources become available.

Outlays for State Plan Schemes

Head—7. SOCIAL SERVICES

Sector—7.7. WELFARE OF BACKWARD CLASSES

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total Outlay	Capital	Foreign Exchange	Total Outlay	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
(1) Scheduled Tribes							
<i>Education</i>							
770101	Grant of Stipends to students in Pre-matric classes	15.00	..	..	1.50	..	..
770102	Re-imbusement to loss of fee income due to freeship to students in Classes VII to X.	5.76	..	..	1.00	..	..
770103	Grant of stipends for Craftsmanship Training.	0.50	..	..	0.07	..	..
770104	Non-recurring assistance to students pursuing studies in Medical, Engineering and technology for purchase of books, appliances etc.	0.50	—	..	0.10	..	..
770105	Ashram Type Schools	35.84	8.00	..	2.84	0.50	..
	Total ..	57.60	8.00	..	5.51	0.50	..
<i>Economic Uplift</i>							
770106	Subsidy for Agriculture and Horticulture Development	6.00	—	..	1.20	..	—
770107	Subsidy for Development of Cottage Industries	6.00	—	..	1.20	..	—
770108	Rehabilitation of Tribals	15.00	..	..	3.00	..	..
	Total ..	27.00	..	..	5.40	..	..

Head—7. SOCIAL SERVICES

Sector—7.7. WELFARE OF BACKWARD CLASSES—(Concl'd.)

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total Outlay	Capital	Foreign Exchange	Total Outlay	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
<i>Health, Housing and other Schemes</i>							
770109	Drinking water supply facilities	10.00	..	..	2.00	..	..
770110	Housing for Scheduled Tribes	5.00	..	..	1.00	..	..
770111	Provision for Technical Staff and Vehicles	6.00	..	..	1.37	..	..
770112	Grant to voluntary agencies for doing educational and Socio-Economic work among tribals.	0.50	..	..	0.10	..	..
770113	Publicity and Propaganda	1.00	..	..	0.50	..	..
	Total	22.50	..	..	4.97	..	..
	Total for Group (1)	107.10	8.00	..	15.88	0.50	..
(2) Scheduled Castes							
<i>Education</i>							
770201	Grant of stipends and non-recurring assistance to students of pre-matric classes with special preference to those offering science, Agriculture and Technical subjects in classes IX—X.	165.00	..	..	23.63	..	..
770202	Re-imbusement of loss of fee income to non-Government recognised educational institutions due freeship to students of classes VII to X.	90.00	..	..	8.00	..	..
770203	Improvement and expansion of the institutions viz., Hostels, Libraries, Schools aided by Harijan Sahayak Vibhag.	8.00	..	..	0.50	..	..
770204	Non-recurring assistance to Scheduled Caste students pursuing Medical, Engineering and Technology for purchase of books appliances etc.	5.00	..	..	0.25	..	..

770205	Special allotment for stipends to extra meritorious students from Class VI on wards to meet their educational and residential needs.	16.80	..	..	0.84	..	..
770206	Grant of stipends for craftsmanship training	25.00	..	..	1.00	..	..
Total		309.80	..	..	34.22	..	..

Economic Uplift

770207	Expansion and Improvement of three Technical Training Centres and G. B. Pant Polytechnic.	15.65	10.40	..	0.50	0.50	..
770208	Subsidy for Agricultural Development in rural and semi-urban areas	51.00	..	..	1.00	..	..
770209	Subsidy for development of cottage industries in rural and urban areas	58.45	..	..	2.00	..	..
770210	Establishment of Harijan Industrial Estates	1.50	1.50	..	1.50	1.50	..
Total		126.60	11.90	..	5.00	2.00	..

Health, Housing and Other Schemes

770211	Subsidy for construction of drinking water projects in rural and urban areas.	75.00	..	..	2.00	..	..
770212	Subsidy for construction of Houses in rural and urban areas	50.00	..	..	1.00	..	..
770213	Statistical cell	1.00	..	..	0.19	..	..
770214	Travelling allowance to Scheduled Caste candidates for attending interviews in connexion with their employment.	0.50	..	..	0.10	..	..
Total		126.50	..	..	3.29	..	..
Total for Group (2)		562.90	11.90	..	42.51	2.00	..

(3) Other Backward Classes,

Education

770301	Grant of stipends and non-recurring assistance to other Backward Classes students of pre-matric classes.	40.00	..	..	3.61	..	..
770302	Grant of stipends to other Backward Classes students for Training in Craftsmanship.	10.00	..	..	..	..	..
Total for Group (3)		50.00	..	..	3.61	..	..
Total for Sector 7.7. Welfare of Backward Classes		720.00	19.90	..	62.00	2.50	..

Outlays for Centrally Sponsored Schemes

(Rupees in lakhs)

Serial no.	Scheme	Fourth Plan Outlay	1969-70
7. SOCIAL SERVICES			
7.7. WELFARE OF BACKWARD CLASSES			
A. Scheduled Tribes			
<i>Education</i>			
1	Post-matric Scholarships	12.50	1.50
2	Hostels for Girls/Boys	5.00	1.00
	Total	17.50	2.50
<i>Economic Uplift</i>			
1	Special area Projects	20.00	4.00
2	Co-operation—		
	(i) Grant and Managerial Subsidy		2.00
	(ii) Loan	36.50	3.50
	(iii) Managerial and Supervisory staff and vehicle		0.50
	Total	56.50	10.00
<i>Health, Housing and Other Schemes</i>			
1	Research and Training/Pilot Projects	7.00	2.50
2	Pilot Scheme for adult literacy and social welfare	1.50	0.50
	Total	8.50	3.00
	Total for Group (A)	82.50	15.50
B. Scheduled Castes			
<i>Education</i>			
1	Post-Matric Scholarships	800.00	140.00
2	Establishment of hostels for scheduled caste girls	5.00	1.00
3	Pre-examination Training for Scheduled Caste and Scheduled Tribes Students for appearing at competitive examination for State Civil Services.	6.00	1.50
	Total	811.00	142.50
<i>Economic Uplift</i>			
<i>Health, Housing and Other Schemes</i>			
1	Construction of houses for sweepers in urban areas	10.00	2.00
2	Abolition of the practice of carrying night soil on head or body load	10.00	2.50
3	Construction of Houses for Scheduled Castes engaged in unclean professions.	7.50	1.00
4	House-sites for Scheduled Caste engaged in unclean professions through acquisition of land and direct purchase.	2.50	0.50
	Total	30.00	6.00
	Total for Group (B)	841.00	148.50

(Rupees in lakhs)

Serial no.	Scheme	Fourth Plan Outlay	1969-70
C. Denotified Tribes			
<i>Education</i>			
1	Special allotment of stipends to denotified tribes students studying Science, Agriculture and other technical subjects in classes IX and X.	2.50	0.50
2	Pre-matric scholarships	5.00	1.00
3	Ashram Type Schools	34.00	6.31
Total		41.50	7.81
<i>Economic Uplift</i>			
1	Stipends for receiving Training in craftsmanship	1.00	0.20
2	Subsidy for Agricultural Development	3.75	1.24
3	Subsidy for Cottage Industries	5.00	1.50
4	Rehabilitation on land/employment/project/for factory areas	3.50	1.00
Total		13.25	3.94
<i>Health Housing and Other Schemes</i>			
1	Subsidy for construction of houses	5.00	1.00
Total		5.00	1.00
Total for Group (C)		59.75	12.75
D. Special Scheme for other Backward classes namely Muslim Guzers Communities engaged in unclean professions other than Hindus			
1	Post-matric Scholarships to denotified tribes, nomadic and other Lower-Income Group students.	22.15	4.43
2	Ashram Type Schools for Muslim Guzers	8.00	1.20
3	Scholarships for Muslim Guzers	1.25	0.25
4	Housing Scheme for Muslim Sweepers	3.00	0.60
Total for Group (D)		34.40	6.48
E. Ashram Type School for Children of Sweepers and Scavengers		8.00	1.20
Total for Group (E)		8.00	1.20
Total 7.7. Welfare of Backward Classes		1,025.65	184.43

SOCIAL WELFARE

22.1. The Social Welfare Schemes in Uttar Pradesh were initiated in 1955 with a view to providing essential services and amenities to the socially and physically handicapped, neglected and helpless people and also to those who require special care and protection.

22.2. During the Second Five Year Plan, some schemes for the development of institutional services catering to the needs of handicapped children, destitute women and beggars were introduced. Some of the important schemes that were taken up during the Second Plan are two Blind Schools at Lucknow and Gorakhpur and one Deaf and Dumb School at Agra for the education and training of blind, deaf and dumb children; two Work Houses, one at Hardwar and the other at Varanasi, for the training and rehabilitation of beggars; two After-care-Homes, one at Meerut and Lucknow, and a Rescue Home at Dehra Dun for the maintenance and rehabilitation of destitute women including the women exposed to moral danger, and five Protective Homes at Lucknow, Gorakhpur, Varanasi, Meerut and Agra for the maintenance and rehabilitation of women and girls apprehended under the Suppression of Immoral Traffic in Women and Girls Act, 1956. All these schemes proved very useful and the homes cited above are running well.

22.3. During the Third Five Year Plan, the schemes of the Second Plan were expanded and intensified. Besides, new institutional schemes for the eradication of juvenile delinquency, welfare of women, children and handicapped were taken up. During the Plan 10 Welfare Extension Projects were started by the U. P. State Social Welfare Advisory Board with the assistance of the State Government with a view to raising the economic condition of women and children in rural areas through an integrated programme of adult literacy, training in useful crafts and pre-primary education to village children. Two Homes, one at Agra for the orphans and foundlings and the other at Meerut for the maintenance of the children accompanying the women inmates of the After-care-Homes and Protective Homes, were established. The U. P. Children Act was introduced in 12 districts of the State for the reformation of the juvenile delinquents and youthful offenders. Under the Act 12 Observation Homes for keeping the juvenile delinquents during trial period and two Approved Schools with a capacity of 100 inmates each were established for providing reformatory training and education to the delinquent children committed by the Juvenile Magistrates. The Probation Schemes which also aims at reforming young offenders was operative in 22 districts in the beginning of the Third Plan. It was extended to 10 additional districts during the Third

Plan. The two existing Blind Schools at Lucknow and Gorakhpur were upgraded to the Junior High School standard and their admission capacity was raised from 50 to 75. Two hundred and sixty-nine scholarships were awarded to orthopaedically handicapped students for professional and vocational training. A Training-cum-Production-cum-Counselling Centre was established at Kanpur for eradication of juvenile beggary and vagrancy.

22.4. In 1966-67, a Home with a capacity of 100 children was established at Deoria for the maintenance and rehabilitation of children of Jawsans. Buildings of the Deaf, Dumb and Blind Schools, which remained incomplete during the Third Plan were completed. Three hundred and sixty scholarships were awarded to physically handicapped children for prosecuting education or receiving professional and vocational training and 78 handicapped persons were awarded monetary assistance for the purchase of artificial limbs to enable them to get gainful employment and become useful citizens. An additional Government Approved School was opened at Ghazipur for the treatment of juvenile delinquents under the U. P. Children Act. During 1967-68, the U. P. Children Act was extended to one additional district, the capacity of Protective Home was raised from 50 to 75 inmates and one Work House for beggars was established at Lucknow. Balbari and Creche Units, one each in the two State After-care-Homes, were established for the maintenance and care of the infant children of the inmates of the Homes; 383 physically handicapped students were awarded scholarships; and 133 orthopaedically handicapped were given monetary assistance for purchase of artificial limbs.

22.5. A provision of Rs.9.34 lakhs was made in the budget for 1968-69. A sum of Rs.8.51 lakhs is expected to be utilised during the year. The programme for the year 1968-69, consists of the opening of seven Family and Child Welfare Projects through the State Social Welfare Advisory Board with a view to providing integrated services to the rural population; two Homes having a capacity of 100 inmates each for the maintenance and rehabilitation of orphans and destitute children and for the destitute women and young widows having no means of livelihood; and a Pilot Project for beggary and vagrancy. The U. P. Children Act is to be enforced in three additional districts, viz., Basti, Saharanpur and Naini Tal. In each of these districts an Observation Home would be established and Reformation Officer appointed. One additional Government Approved School will be established for the care, custody and training of the delinquent children under the Children Act.

22.6. *Fourth Five Year Plan*—According to the sample survey conducted by the Directorate of Economic Intelligence and Statistics in 1961, the number of handicapped persons in U. P. was 3,69,000 including blind, deaf, mute, orthopaedically disabled, infirm, etc. Since then, there has been an increase of five per cent in their number. It has been estimated that about two per cent of the total population in U. P., i.e., 4,20,000 are mentally deficient. The

number of beggars in U. P. was 34,546 on the basis of the provisional census figures of 1961, but now this figure may have registered an increase of five per cent. Women and children constitute about 75 per cent of the total population of the country of which approximately 10 per cent are mal-adjusted and uncared for. Quite a fair percentage of women and girls are exposed to moral danger or are without adequate means of livelihood. Besides, a large number of families and communities in rural areas being backward, require help to enable them to improve their socio-economic condition. The magnitude of the problems concerning these categories of persons is so enormous that it is difficult to cope with them with the existing limited budget. To begin with a modest outlay of Rs.100.00 lakhs has been provided for the schemes of the Fourth Plan, including an outlay of Rs.11.00 lakhs for 1969-70. The outlays for various groups are given below :

Group	Fourth Plan Outlay	Outlay for 1969-70 (Rs. in lakhs)
1. Family and Child Welfare Project	..	..
2. Women Welfare	6.00	0.24
3. Child Welfare	7.06	0.05
4. Eradication of Beggary	9.15	1.50
5. Social Defence	39.79	3.65
6. Rehabilitation of handicapped	26.50	2.93
7. Grant-in-aid to voluntary organizations	6.50	1.82
8. Training Research and Administration	5.00	0.81
Total	100.00	11.00

22.7. It is proposed to continue, expand and intensify most of the existing schemes. Besides, some new programmes are proposed to be undertaken under which two hostels for working women will be established. One of them will be opened in the first year and the other in the third year of the Plan. Each Hostel will have a capacity of 50 inmates. There is no separate government institution for the destitute female children requiring protection and care. A Balika Niketan with a capacity of 100 inmates will be established. Another new programme included in the Fourth Plan is the establishment of a Home for Foster Children with a view to keeping them separate from other orphans so as to protect them from a feeling of inferiority complex. This Home will be started in the third year of the Plan and will have a capacity of 50 inmates. It is also proposed to construct the building for one Children Home, one After-care-Home, two Approved Schools and one Blind School. At present, three Work Houses for beggars have been functioning in this State.

However, it is felt that the evil of beggary cannot be effectively controlled unless intensive programmes dealing with different categories of beggars are launched. In order to eradicate this evil, it is proposed to establish during the Fourth Plan a Pilot Project on the lines suggested by the Government of India.

22.8. Other new programmes included in the **Fourth** Plan are two Sheltered-Workshops for the Blind, two Braille Libraries, a Home-cum-Sheltered Workshop for the physically disabled persons and grant to prisoners and probationers. For the effective implementation of the schemes of the Fourth Plan, it is proposed to strengthen the Directorate of Social Welfare. It is also proposed to provide facilities for in-service-training to the field workers of the Department in the institutions imparting training in social work to enable them to learn new methods and techniques for tackling the social problems. It is also proposed to launch Research Projects through the Universities, Planning Research and Action Institute and Social Welfare Department to assess the magnitude of various social problems, to evaluate and follow up the various programmes of the Department and social needs of the people.

22.9. Family and Child Welfare Projects, which are to be implemented by the State Social Welfare Advisory Board are likely to entail an outlay of Rs.160.05 lakhs including Rs.13.72 lakhs for the Annual Plan of 1969-70.

Outlays for State Plan Schemes

Head—7. SOCIAL SERVICES

Sector—7.8. SOCIAL WELFARE

(Rupees in lakhs)

Code no.	Group / Schemes	Fourth Plan			1969-70		
		Total Outlay	Capital	Foreign Exchange	Total Outlay	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
	(1) <i>Family and Child Welfare Project</i>	..	..	..	..	..	..
	(2) <i>Women Welfare</i>						
780201	Establishment of two hostels for working women	2.25	..	..	0.24	..	..
780202	Training Centre-cum-Sheltered Workshop for rehabilitation of destitute Women.	3.75	..	..	..	..	..
	Total (2)	6.00	..	..	0.24	..	..
	(3) <i>Child Welfare</i>						
780301	Establishment of Bal Niketan	2.37	..	..	..	..	..
780302	Establishment of creche and Balbari in Rescue Home established under Second Plan.	0.29	..	..	0.05	..	..
780303	Construction of buildings for Children Home	3.00	3.00	..	..	..	..
780304	Establishment of Foster Care Home	1.40	..	..	..	..	..
	Total (3)	7.06	3.00	..	0.05	..	..
	(4) <i>Eradication of Beggary</i>						
780401	Establishment of Pilot Project on Beggary and vagrancy	9.15	..	..	1.50	..	..
	Total (4)	9.15	..	..	1.50	..	..

Head—7. SOCIAL SERVICES

Sector—7.8. SOCIAL WELFARE—(concl'd.)

Code no.	Group/Schemes
1	2
	<i>(5) Social Defence</i>
780501	Implementation of the U. P. Children Act in 10 additional districts Reformation officers and staff.
780502	Observation Homes
780503	Establishment of Additional Government approved school
780504	Construction of Building for Government approved school
780505	Establishment of five additional Rescue Organisations in connexion with the implementation of the Immoral Traffic in Women and Girls Act, 1956.
780506	Expansion of the capacity of Protective Homes established under Second Five-Year Plan
780507	Establishment of one additional Protective Home under S. I. T. Act
780508	Assistance to inmates discharged from various departmental institutions for rehabilitation purposes
780509	Expansion and Improvement of ten district Sheltered-cum-Reception Centres established under Second Five-Year Plan
780510	Expansion and improvement of 16 Observation Homes established under the U. P. Children Act
780511	Construction of the building for the After-care Home
	Total (5)

(Rupees in lakhs)

Fourth Plan Outlay			1969-70		
Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
3	4	5	6	7	8
4.24	..	..	0.20	..	..
11.60	..	..	0.61	..	..
2.74	..	..	..	..	..
3.00	3.00	..	..	..	..
2.41	..	..	0.20	..	..
0.84	..	..	0.16	..	..
3.00	..	..	0.70	..	..
1.50	..	..	0.30	..	..
1.46	..	..	0.28	..	..
6.00	..	..	1.20	..	..
3.00	3.00	..	..	..	..
39.79	6.00	..	3.65	..	..

<i>(6) Rehabilitation of Handicapped</i>									
780601	Scholarships to physically handicapped students and mentally retarded Children for pursuing educational, professional and vocational training	2.50	..	..	0.40	..	..	..	..
780602	Grant-in-aid to physically and orthopaedically handicapped persons for the purchase of artificial limbs, hearing aids etc.	2.50	..	..	0.40	..	..	..	..
780603	Establishment of a school for mentally retarded children ..	3.00	..	..	0.65	..	..	..	..
780604	Establishment of two sheltered workshops for Blind ..	4.50	..	..	0.50	..	..	..	..
780605	Establishment of 2 Braille Libraries for Blind ..	0.50	..	..	0.18	..	..	..	..
780606	Upgrading and expansion of Deaf and Dumb Schools Agra and Bareilly from 50 to 100 children ..	2.00	..	..	0.20	..	..	..	..
780607	Establishment of an additional Blind School ..	3.00	..	..	0.60	..	..	..	..
780608	Establishment of an additional Deaf and Dumb School ..	2.50	..	..	..	..	..	..	..
780609	Establishment of Home-cum-Sheltered Workshop-cum-Training Centres for physically disabled persons ..	3.00	..	..	..	..	..	..	..
780610	Construction of building for Government Blind School ..	3.00	3.00	..	..	..	..	..	..
Total (6)		26.50	3.00	..	2.93	..	..	..	..
<i>(7) Grant-in Aid to Voluntary Organisations</i>									
780701	Grant-in-aid to voluntary organisations for running widow Homes and Orphanages ..	3.40	..	..	0.53	..	..	..	..
780702	Grant-in-aid to Voluntary Organisation for running institutions for mentally and physically handicapped persons ..	1.85	..	..	0.24	..	..	..	..
780703	Grant-in-aid for rehabilitation of prisoners and probationers ..	0.25	..	..	0.05	..	..	..	..
780704	Grant-in-aid to voluntary organisation in connection with children programme ..	1.00	..	..	1.00	..	..	..	..
Total (7)		6.50	..	..	1.82	..	..	..	..
<i>(8) Training, Research and Administration</i>									
780801	Provision for inservice training of field workers and staff for the headquarters of the Directorate of Social Welfare ..	3.00	..	..	0.50	..	..	..	..
780802	Provision for Research and Survey ..	2.00	..	..	0.31	..	..	..	..
Total (8)		5.00	..	..	0.81	..	..	..	..
Total for Sector 7. 8. Social Welfare		100.00	12.00	..	11.00	..	..	..	..

CRAFTSMEN TRAINING AND LABOUR WELFARE

23.1. The programme under this sector consists of three groups. The first group includes Labour Welfare schemes, administrative machinery for conciliation of disputes and assistance to Trade Unions. The second group called "Manpower and Employment" comprises the schemes of setting up employment exchanges, collection of employment market information and establishment of vocational guidance units. The third group called "Craftsmen Training" relates to the schemes for training of craftsmen in order to provide technical hands to meet the manpower requirement of factories.

Labour Welfare

23.2. The First Five-Year Plan aimed at the provision of amenities to workers, improvement in industrial relations and effective enforcement of labour laws in the State. At the end of the First Plan, there were 45 labour welfare centres for catering to the recreational, social and educational needs of the working class. These activities were further intensified in the Second Plan. During the Third Plan period, 6 more welfare centres were opened and 6 were upgraded. Five hobby centres and 5 peripatetic training centres were also set up. Social workers numbering 120 were appointed to take up social work among the working class people. Twenty youth clubs and 2 children's recreational wings in labour welfare centres were opened. Two batches consisting of 49 workers were taken out on an educational tour. Two hundred and fifty persons were imparted training under the Staff Training Programme. Besides, a legal counsel was appointed to advise the working class organisations in matters relating to industrial disputes.

23.3. During the year 1966-67, an X-ray plant was purchased for the T.B. Clinic at the Labour Welfare Centre, Babupurwa, Kanpur. Some additional staff was also appointed. In 1967-68, one labour welfare centre building at Bareilly was completed, two Class 'C' centres were reorganised, one Children's Recreation Centre and one Sub-Regional Conciliation Office were opened.

Out of an outlay of Rs.51.03 lakhs proposed for Labour Welfare schemes during the Fourth Plan period, Rs.18.81 lakhs are to be spent on the expansion, reorganization and improvement of the administrative machinery at the Directorate, Regional and Sub-regional level and the strengthening of factory inspection service. Two regional and two sub-regional offices are proposed to be set up besides the existing 7 regional and 6 sub-regional offices. It is also proposed to undertake studies relating to productivity and standardisation of norms regarding work loads in textiles, sugar, glass and engineering industries

along with motion study of productivity which cannot be determined by a stop-watch at a cost of Rs.2.85 lakhs. Under another scheme, 104 Labour Inspectors, besides ancillary staff, are to be appointed with a total outlay of Rs.18.07 lakhs for effective enforcement of Minimum Wages Act, Bonus Act and Biri and Cigar Workers Act. Of these, 35 will be appointed during 1969-70. Two more labour courts at Agra and Bareilly are to be set up in addition to the existing five labour courts and three industrial tribunals working at Kanpur, Lucknow, Meerut and Allahabad. For the collection, compilation and analysis of labour statistics five statistical cells have already been set up during the Third Five Year Plan. Two more cells will be opened during the Fourth Plan period in the remaining two regions with an outlay of Rs.2.02 lakhs.

Other schemes under this group envisage construction of two additional wards with 34 additional beds at Raipur T. B. clinic, Kanpur, opening of three Family Planning clinics in three Labour Welfare Centres of Kanpur and purchase of books and journals for departmental libraries. The proposed outlay for the first year of the Fourth Plan is Rs.5.83 lakhs.

Manpower and Employment

23.4. During the First Plan period the Organisation of Training and Employment was under the Government of India. The Second Plan envisaged expansion of employment services to all district headquarters and important industrial centres, establishment of specialised sections in employment exchanges to cover the employment market and to take up statistical work and youth employment services. At the end of the Second Plan, 57 employment exchanges including four sub-employment exchanges and two University Employment Information Bureaux, were functioning. The salient achievements during the Third Plan were expansion of employment service and employment market information programme to all the districts, establishment of 50 employment information and assistance bureaux, 14 vocational guidance units and four University Employment Information and Guidance Bureaux. A professional and executive employment office and a staff training unit were also set up.

23.5. Schemes of expansion of employment services, collection of employment market information, vocational guidance and strengthening of the Directorate of Training and Employment were included in the Annual Plans for 1966-69.

23.6. During the Fourth Plan period it is proposed to extend the employment service further by opening 8 Town Employment Exchanges, one University Employment Information and Guidance Bureau at Meerut University, one Evaluation and Survey Unit at the Headquarters of the Employment Directorate, 3 Employment Market Information Units, in Uttarakhand and 15 Vocational Guidance Units. It is also proposed to upgrade 4 Districts Employment Exchanges to the status of Sub-Regional Employment Exchanges and to strengthen the Directorate, Professional and Executive Employment offices and the University Employment Information and Guidance Bureaux for

enabling them to render more effective service. The proposals relating to Manpower and Employment schemes involve an expenditure of Rs.21 lakhs during the Fourth Plan. During 1969-70, three Town Employment Exchanges, one University Employment Information and Guidance Bureau, one Evaluation and Survey Unit, three Employment Market Information Units and four Vocational Guidance Units are proposed to be set up along with strengthening of the administrative machinery and the improvement of two University Employment Information Guidance Bureaux.

Craftsmen Training

23.7. There were eight organised institutes for craftsmen training with a total capacity of 1,832 seats at the end of the First Plan. During the Second Plan period, seven new ITIs were established besides raising the seats in the existing institutions by 1,032. Thus, in all 4,072 seats were added.

23.8. The Third Plan witnessed considerable expansion of the craftsmen training programme. Thirty-three new ITIs were opened and 13,499 additional seats were provided. By the end of the Third Plan, the State thus had 48 ITIs with 17,568 seats. As the programme of construction of buildings could not keep pace with the opening of ITIs, a number of ITIs were started in hired buildings.

23.9. The programme during the Annual Plans following the Third Five Year Plan consisted of creation of additional seats in the existing ITIs. Five thousand and twelve additional seats were introduced in 1966-67 and 2,204 additional seats were created in 1967-68. In the year 1968-69, 2,000 seats of unpopular trades will have been converted into popular trades. At the start of the Fourth Five Year Plan, the State will have a total of about 24,784 seats in the ITIs whose number will increase to 49.

23.10. It is felt that in the present context of the employment situation there is no scope of further expansion of craftsmen training facilities. During the Fourth Plan, it is proposed to consolidate the existing facilities by making up the deficiencies of equipment and building, etc., to carry out certain readjustments by converting 1,000 seats of unpopular trades into popular ones and to set up technical libraries and maintenance section at all the ITIs with a view to improving the standard of training. These proposals involve an expenditure of Rs.264.50 lakhs including Rs.225 lakhs on construction of buildings and purchase of equipment for the existing ITIs during the Fourth Plan. Four hundred and eighty seats are proposed to be converted during 1969-70, at a cost of Rs.16.20 lakhs.

23.11. It has been decided to intensify as well as diversify Apprenticeship Training programme during the Fourth Plan and Film Industry has been included in the list of designated trades. In order to provide proper training in the trades connected with the film industry, it is proposed to set up an ITI exclusively for film trades at Ghaziabad where a large film studio is to be opened shortly. Pending finalisation of the details, preparation of syllabi, etc.,

a token provision of Rs.1 lakh has been included in the Fourth Plan for the Film Institute.

23.12. Apprentices Act was passed by the Parliament in 1961 to regulate and control the training of trade apprentices in the country. This Act was enforced in U. P. in 1963. The Apprenticeship Training Scheme has also been reorganised and the number of designated trades increased from 26 to 50, and almost all the industries in the State have been brought within the ambit of the Apprenticeship Training. For U. P., a target of training 6,500 apprentices during the Fourth Plan period has been fixed by the Government of India. For achieving this target additional surveyors will be appointed at the ITIs, 3 centres will be set up for imparting related instructions as required under the Act and arrangements will be made for imparting basic training. Some clerical staff will also be provided at the Headquarters, Employment Exchanges and the ITIs for the apprenticeship work. A provision of Rs.26 lakhs during the Fourth Plan, including Rs.3.25 lakhs during 1969-70, has been made.

23.13. The ever-increasing needs of industry require better trained and skilled workers conversant with the latest production techniques. It is, therefore, proposed to increase the knowledge of industrial workers by arranging theoretical instructions through evening classes for them either in Technical Institutes or within the factory premises. The detailed scheme is under formulation by the Government of India and, pending its finalisation, a token provision of Rs.1 lakh has been included in the Fourth Plan.

23.14. The craftsmen training and apprenticeship schemes proposed in the Fourth Plan involve a total expenditure of Rs.291.50 lakhs. An outlay of Rs.110.00 lakhs has been proposed for 1969-70.

Outlays for State Plan Schemes

Head—7. SOCIAL SERVICES

Sector—7. 9.—CRAFTSMEN TRAINING AND LABOUR WELFARE

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
	<i>(1) Labour Welfare and Welfare Administration</i>						
790101	Reorganisation of T. B. Clinics and provision for additional T. B. clinics	6.01	2.04	..	0.20	0.20	..
790102	Strengthening of Regional offices and Headquarter Administration ..	2.09	..	..	0.29	..	..
790103	Family Planning Clinics in Labour Welfare Centres	0.52	0.32	..	0.06	0.06	..
	Total (1) ..	8.62	2.36	..	0.55	0.26	..
	<i>(2) Enforcement of Labour Laws</i>						
790104	Expansion and Decentralization of Conciliation Machinery ..	7.80	..	..	1.77	..	..
790105	Strengthening of Factory Inspection services	8.99	..	..	1.03	..	..
790106	Strengthening of Machinery for better and effective endorsement of Minimum Wages Act, Bonus Act, etc.	18.07	..	..	1.01	..	..
	Total (2) ..	34.86	..	..	3.81	..	..
	<i>(3) Other Schemes</i>						
790107	Expansion and Reorganization of efficiency section	5.03	..	..	1.09	..	..
790108	Strengthening of Statistical cells Regional and Headquarters offices	2.02	..	..	0.28	..	..
790109	Purchase of Books and Journals for departmental Libraries ..	0.50	..	..	0.10	..	..
	Total (3) ..	7.55	..	..	1.47	..	..
	Total (1) to (3) ..	51.03	2.36	..	5.83	0.26	..

Head—7. SOCIAL SERVICES

Sector—7.9.—CRAFTSMEN TRAINING AND LABOUR WELFARE—(concl'd.)

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
<i>Manpower and Employment</i>							
790201	Expansion of Employment Service	8.20	..	..	0.89	..	..
790202	Collection of Employment Market Information	0.75	..	..	0.09	..	..
790203	Vocational Guidance	4.10	..	..	0.30	..	..
790204	Strengthening of Employment Wing of the Directorate	1.60	..	..	0.19	..	..
790205	Strengthening of Employment Exchanges	6.35	..	..	0.53	..	..
	Total	21.00	..	..	2.00	..	..
<i>Craftsmen Training</i>							
790301	Craftsmen Training (carried over)	225.00	175.00	..	90.55	60.56	..
790302	Consolidation of Craftsmen Training	39.50	..	..	16.20	..	..
790303	Apprenticeship Training	26.00	..	..	3.25	..	..
790304	Part-time classes for Industrial workers	1.00	..	..	..	..	..
	Total	291.50	175.00	..	110.00	60.56	..
Total for Sector 7.9. Craftsmen Training and Labour Welfare ..		363.53	177.36	..	117.83	60.82	..

OTHER PROGRAMMES

(1) STATISTICS

24.1. Planning calls for continuous supply of an increasing volume of primary data, its processing and analysis for arriving at correct decisions. A nucleus statistical organisation has existed in this State since 1942 but it was not adequate to meet the requirements of planning. Statistical schemes were included for the first time in the Second Plan, when an expenditure of Rs.23.86 lakhs was incurred. The activities under the Second Plan comprised inquiries in co-ordination with the National Sample Survey, setting up district statistical organisation in 26 districts and a Planning Statistics Division at the Headquarters and training of statistical personnel.

24.2. In the Third Plan, the total expenditure on statistical schemes was Rs.26.39 lakhs. The programme included appointment of District Statistics Officers in the remaining 25 districts of the State excepting Uttarakhand for collection and supervision of primary data, seasonal surveys and the study of the plan programmes.

24.3. The flow of information from the field has considerably improved but it is still lagging behind the requirements in coverage, scope and accuracy. The schemes included in the Fourth Plan primarily aim at extending the coverage, improving the reliability, filling in the remaining gaps and strengthening the statistical organisation. The scheme of estimation of the district level income, preparation of district statistical handbooks and statistical manuals of local bodies would go a long way in collection and processing of the field data and will ensure its accuracy. The scheme of collection of socio-economic data respecting Uttarakhand would extend the coverage of statistical information to that area also. A Housing Cell is proposed to be established for the compilation and maintenance of data on housing conditions in the State. A composite scheme covering diverse subjects is being introduced for quinquennial surveys and regular check-up of the estimates of farm production, trade, transport, capital formation, employment, consumer expenditure, etc., with a view to rationalising operation of different surveys conducted from time to time.

24.4. An amount of Rs.20.30 lakhs has been provided in the Fourth Plan for statistical schemes.

24.5. A centrally sponsored scheme for undertaking a survey of village and small scale industries at a cost of Rs.5.00 lakhs is proposed to be taken up in the Fourth Plan. It would help in filling up the gaps in income estimates also.

(2) INFORMATION AND PUBLICITY

24.6. The aim of the publicity programmes is to generate in the minds of the people an awareness of the aims, objects and content of the development activities of the State. Information and Publicity schemes were not included in the First Plan. The programme involved an expenditure of Rs.56.53 lakhs in the Second Plan, Rs.63.02 lakhs in the Third Plan and Rs.9.62 lakhs during the Annual Plans period 1966-69.

24.7. In the Second Plan period, 8,400 radio sets were purchased and installed in rural areas. Another 8,900 were made available for community listening during the Third Plan but none were purchased thereafter, and in 1968-69 it was decided to restrict the scheme to the hill districts only. Under another scheme 'Films and Photography', 14 films were produced in the Second Plan, 44 in the Third, and 13 in the subsequent 3 years. In the Second Plan, 2,980 cinema slides were also prepared for publicity purposes. Information Department organised 776 Kisan Melas and Exhibitions during the Second Plan, participated in 143 exhibitions in the Third and 78 exhibitions in 1966-67 and 1967-68. Publicity through folders, pamphlets, charts, booklets, etc. was taken up in the Second Plan when 26 posters, 7 pamphlets and 43 folders were published. Two books on Who's Who of the Fighters of Freedom pertaining to Varanasi and Jhansi were published. During the two years following the Third Plan, 25 booklets and a number of posters were brought out. One hundred and fifty-two drama shows were staged in the Third Plan and 80 in 1966-67, but the scheme was given up in 1967-68.

24.8. During the year 1967-68, District Information set up was abolished and a number of schemes were given up in order to find resources for directly development programmes but steps are now being taken to reorganise the State Information Department as multipurpose publicity apparatus with an eye to co-ordinate the activities of publicity services created for different developmental programmes and to lend information support to them by establishing a common channel of publicity for all the developmental activities of the State. A modest programme with an outlay of Rs.20.00 lakhs has been chalked out for Information and Publicity schemes under the Fourth Plan.

24.9. Under the scheme of publications, 15 posters, 58 folders and 11 pamphlets will be brought out for publishing the activities of the State Government. Eighteen one reelers in black and white are proposed to be produced during the Fourth Plan period besides preparation of 16 m.m and 35 m.m. prints of each film and purchase of ready-made documentaries or short films from the Government of India or private producers for publicity through mobile units or commercial release to cinema houses. For the rural areas, where Kisan Melas and Exhibitions are an important media of publicity, it is proposed to participate in 180 exhibitions. In addition to the three existing exhibition units, one more will be set up during the Fourth Plan. The programme of

publicity through the newspaper includes issuing 46 advertisements to 120 Hindi weeklies, 15 Urdu weeklies, 30 monthlies and 60 daily papers. The Community Listening scheme has been restricted to the eight hill districts of Chamoli, Pithoragarh, Uttarkashi, Garhwal, Tehri-Garhwal, Almora and parts of Naini Tal and Dehra Dun. Out of 4,000 Gaon Sabhas in these areas, 1,300 have so far been provided with the community listening sets. Four hundred more sets will be installed in five districts excluding Uttarakhand where 500 sets will be installed.

(3) EVALUATION

24.10. The need for a scientific and systematic evaluation of programme and activities has always been felt to ensure that the programmes are implemented in an effective and efficient manner. Evaluation, broadly speaking, is introspection. Periodically, it is necessary to assess the impact of what has been done, to locate and analyse the reasons of shortfalls or failures, if any, and to adjust the future plans in the light of the findings of the evaluation. Evaluation is, even a continuous process, a technique and a tool of the administrative machinery to gauge the progress and to help indicate future policy in respect of a particular programme. While all important programmes should have built in system of concurrent evaluation, there is need of an independent evaluation, at certain stages because those who are directly involved in the programme cannot generally judge for themselves the effectiveness of their efforts in a detached manner. Their nearness to the event and their personal association with the programme tend to colour their vision, their opinions and their judgment. Evaluation, therefore, enjoins a quality of detachment, a sense of aloofness and a high degree of objectivity. Viewed in this context, independent evaluation is a positive service to the programme or activity being evaluated.

24.11. On the recommendations of the 'Working Group on Evaluation in the States' set up by the Planning Commission under the Chairmanship of Dr. V. K. R. V. Rao, an Evaluation Organisation was set up in Uttar Pradesh in 1965-66; with the objective of assessing the achievements, organisational structure and method and pace of development and for suggesting ways and means to effect improvements at various levels. In the beginning, a State Evaluation Advisory Board was set up with the Chief Minister as Chairman to select programmes for evaluation studies and to review and approve the recommendations made in the evaluation study reports. A separate State Evaluation Committee, headed by the Chief Secretary of the State, was made responsible to ensure implementation of the recommendations of the evaluation reports.

24.12. Keeping in view the recommendations of the Working Group on Evaluation in the State (1964), the following criteria are followed for the selection of programmes for evaluation :

- (1) The highest priority is given to production oriented schemes in the fields of agriculture, industry, irrigation, co-operation, animal husbandry, fisheries and forestry.

(2) The next priority is given to studies in those sections of planning and development which have lagged in momentum due to various bottlenecks and hurdles coming in the field of social and welfare services.

(3) Preference is also given to schemes for the intensive development of backward areas.

24.13. Since the establishment of the Evaluation Organization, about 40 studies relating to agriculture, horticulture, soil conservation, community development, power, fisheries, industry, forest, animal husbandry and co-operation have been taken up. Out of these, 15 have already been completed. For 1969-70 also, about 25 studies have already been selected including programme of commercial crops, working of seed multiplication farms, soil testing scheme and a number of schemes relating to industries, health and backward areas. For each year of the Fourth Plan, a work programme will be drawn up well in advance and it is expected that it would be possible for the Evaluation Organisation to take up about 100 evaluation studies during the Fourth Plan period.

24.14. During the Annual Plans of 1966-67 and 1967-68, an amount of Rs.4.41 lakhs was utilized by the Evaluation Organisation. For 1968-69 an amount of Rs.3.36 lakhs has been provided for evaluation programmes. An outlay of Rs.2.81 lakhs has been proposed for expansion of the Evaluation Organisation during the Fourth Plan.

(4) PLANNING RESEARCH AND ACTION INSTITUTE

24.15. Planning Research and Action Institute was established in 1954 to study field conditions, identify problems, evolve solutions by field experimentation in real life conditions and then pass them on to the planners and field agencies for widespread application. Over the last 14 years many problems relating to agriculture, soil conservation, Usar reclamation, rural industries, public health and family planning organisation, training of rural youth, etc., have been taken up for action research. As a result, the nature of difficulties and pre-requisites of success for many programmes have been identified. Quite a number of programmes evolved in the P. R. A. I. have been accepted for application in the field. The Institute has achieved a measure of success in improving the technology of *khandsari* sugar industry, village pottery, agricultural implements and soil conservation.

24.16. During the year 1968-69, a provision of Rs.2.50 lakhs was made in the Plan budget for various research activities. The main activities consist of small-scale Cement Project, Potteries Projects, Soil Conservation work in Hill areas, Women's programme, rural latrine and manufacture of sugar on small scale.

24.17. For the Fourth Plan, Planning Research and Action Institute has been allotted a sum of Rs.63.75 lakhs for various activities under different sectors as detailed below :

<u>Sectors</u>	<u>(Rs. in lakhs)</u>
1. Agriculture	.. 10.00
2. Soil Conservation	.. 15.00
3. Animal Husbandry	.. 6.75
4. Village and Small Industries	.. 10.00
5. Water Supply	.. 2.00
6. Research Activities	.. 20.00
TOTAL	.. 63.75

24.18. The Pilot Development Project, Etawah and Rural Industries Project, Phulpur (Allahabad), will continue to be the field laboratories of the Planning Research and Action Institute.

(5) YOUTH PROGRAMMES

Supplementary Plan

24.19. At present youth programmes are being implemented by a number of departments. It is considered essential that all these programmes should be co-ordinated and the entire programme be reoriented in such a way as to utilise the energy and capacity of the youth in constructive channels. With this end in view a Youth Welfare Board will be established in the State. Besides co-ordination, the Board will try to initiate such programmes which would help in removing the restlessness among the youth, filling them with a feeling of hope and confidence for the future and utilising their energy in implementing constructive programmes. An amount of Rs.3.50 crores has been set apart for these programmes in the supplementary plan.

Outlays for State Plan Schemes

Head—3. MISCELLANEOUS

Sector—3.1. STATISTICS

Code no.	Group/Schemes	(Rupees in lakhs)					
		Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
810101	Surveys on cost of Farm Production, Trade, Transport, Capital Formation, Employment, Consumer Expenditure etc. for Regional level estimates	7.00	..	..	0.16	..	..
810102	Estimation of District Level Incomes	2.50	..	..	0.06	..	..
810103	Equipment of District Statistics Officers for better efficiency	1.50	..	..	0.10	..	..
810104	Improvement of official statistics and its dissemination	1.32	..	..	0.13	..	..
810105	Provision of a Jeep for Directorate	0.67	..	..	0.33	..	..
810106	Creation of Housing Cell	1.31	..	..	0.22	..	..
810107	Preparation of District Statistics Handbooks	1.00	..	..	..	..	..
810108	Collection of Socio-economic data from Uttar Pradesh	3.00	..	..	..	..	..
810109	Preparation of Local Bodies Statistics Manual	2.00	..	..	..	..	..
Total for Sector 3.1. Statistics		20.30	..	..	1.00	..	..
<i>Centrally sponsored scheme</i>							
Survey of Village and Small Scale Industries		5.00	..	..	0.85	..	..

Outlays for State Plan Schemes

Head—8. MISCELLANEOUS

Sector—8.2. INFORMATION AND PUBLICITY

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
820101	Publication	5.00	..	..	1.00	..	..
820102	Film & Photography	5.60	..	..	1.20	..	..
820103	Kisan Melas and Exhibitions	5.10	..	..	1.10	..	..
820104	Advertisement campaign for language newspapers	1.80	..	..	0.20	..	..
820105	Community Listening scheme	2.50	..	..	0.50	..	..
Total for Sector 8.2. Information and Publicity		20.00	..	..	4.00	..	..

Outlays for State Plan Schemes

Head—8—MISCELLANEOUS

Sector—8.4. HILL AND BORDER AREAS

(Rupees in lakhs)

Sl. no.	Group / Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
1	Uttarakhand	2000.00	1430.17	11.48	349.96	251.60	1.45
2	Hill Areas .. .. .	..	..	..	25.00	..	..
Total for Sector 8.4. Hill and Border Areas		2000.00	1430.17	11.48	374.96	251.60	1.45

Outlays for State Plan Schemes

Head—8—MISCELLANEOUS

Sector—8.5.—EVALUATION

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
850101	Evaluation Organisation	2.81	..	..	0.77	..	..

Outlays for State Plan Schemes

Head—8. MISCELLANEOUS

Sector—8.6. OTHERS

(Rupees in lakhs)

Code no.	Group/Schemes	Fourth Plan Outlay			1969-70		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
860101	Research Programme of P. R. A. I.						
860201	Pilot Project for utilizing Rural Manpower	218.17	..	..	99.74	..	..
860301	Metric Weights and Measures						
Total for Sector 8.6. Others		218.17	..	..	99.74	..	..

25

SPECIAL PROBLEM AREAS

25.1. Eastern U. P., hill districts and Bundelkhand have been recognised as relatively backward areas. It is the accepted policy of the State Government that the regional disparities within the State should be removed. The limiting factors, however, are the enormity of the problem and the limitation of funds.

25.2. The eastern region, comprising 15 districts, is characterised by high density of population, dependence on agriculture, fragmented and scattered agricultural holdings, lack of non-agricultural employment, under-employment and low standard of living. The density of population of the region is 395 per square km. as against 300 for the entire State. The size of holdings is very small which will be evident from the fact that more than 75 per cent of the agricultural households have holdings of less than 5 acres (2.02 hectares). The *per capita* availability of cultivable land is also relatively smaller, it being only 0.61 hectares per agriculture worker as compared to the State average of 0.85 hectares. Floods are a recurring feature which greatly hamper agricultural development programmes of the region. Chronically drought affected areas also are mainly situated in the eastern region.

25.3. For assessing the levels of development and suggesting ways and means to accelerate the growth of the districts of Deoria, Azamgarh, Jaunpur and Ghazipur, a Joint Study Team (popularly known as Patel Committee) was appointed in 1962. The Team submitted its report in 1964 and development work on the basis of its recommendations was started in 1964-65. Later in 1966-67, Ballia and Basti were also included in the programme. The Government of India provided additional assistance for one year. The assistance for 1965-66, was adjusted within the normal central assistance to the State. The State Government did whatever was possible within its limited resources and has taken care to provide funds specially for priority programmes in these districts.

25.4. Bundelkhand has certain special problems some of which are : paucity of roads in the rural area thus isolating the interior from the mandis and rail heads, shortage of drinking water in large tracts, existence of vast area under culturable waste, lack of irrigation facilities, and negligible industrial development. The number of workers employed in registered factories in 1966-67, was only 157 per lakh of population in Bundelkhand as against the State's average of 396.

25.5. The hill districts are sparsely populated. The proportion of cultivable land to the total area is low and the pressure of population on land is high. The poor means of transport and communications and difficult terrain of the region are among the inhibiting factors of economic development of the region. This region also suffers from lack of industrialization and shortage of drinking water. Considering the strategic importance and depressed economic condition of the northern border of the State, a separate division of Uttarakhand was created and special programmes of development were launched which are still continuing.

25.6. The development of the backward areas received greater attention during the Third Plan than during the previous Plans. Although departmental schemes and programmes were not formulated then strictly on a regional basis, attempts were made to include programmes to meet the special needs of the less developed areas. It is one of the primary objectives of the Fourth Plan to reduce disparities in social services and economic infra-structure between the backward and other areas.

Supplementary Plan

25.7. The outlays proposed during the Fourth Plan for the development of 15 eastern districts, Bundelkhand and Hill districts are Rs.219.55 crores, Rs.54.02 crores and Rs.62.73 crores respectively. Additional programmes of the order of Rs.4.50 crores would be taken up for the benefit of these areas, if additional resources are available. Some of the programmes that are proposed to be undertaken in the three backward areas of the State are described in the following paragraphs :

Eastern Districts

25.8. Even though the need for providing diversified occupations is great to relieve the high pressure of population on land, agriculture being the main occupation of the people will continue to receive priority. The fragmentation and sub-division of holdings hampers the introduction of permanent improvements and progressive agricultural practices. Consolidation operations are already underway in the region and they would be intensified during the Plan period. An outlay of Rs.14.93 crores has been provided for consolidating 16.39 lakh hectares.

25.9. Considerable attention will be paid on developing minor irrigation works. The targets are : construction of 1.25 lakh masonry wells, boring of 1.60 lakh wells, installation of 65,000 pump sets and sinking of 60,000 private tube-wells. These works will create an additional irrigation potential of 9.83 lakh hectares. Besides this, an additional irrigation potential of 3.10 lakh hectares is likely to be created through the State minor irrigation works. An outlay of Rs.39.60 crores has been provided for the major and medium irrigation schemes which are likely to create an additional potential of 5.03 lakh hectares. Chakia tahsil of Varanasi, Meja and Karchana tehsils of Allahabad and the district of Mirzapur form part of the Central plateau,

which have an uneven topography, making the agricultural land prone to the hazards of erosion. Moreover, many seasonal and perennial streams that criss-cross this region aggravate the problem of erosion. Consequently, about 51 per cent of the cultivable area of this tract is in the grip of severe soil erosion. It has been decided to give particular attention to this problem. It is proposed to bring an area of 2.47 lakh hectares under soil conservation with an outlay of Rs.3.09 crores.

25.10. As regards improved agricultural practices, it is proposed to bring an area of 15.25 lakh hectares under the high yielding varieties. Plant protection measures would be extended over an area of 13.79 lakh hectares. The following are some of the other measures which are proposed to be undertaken to help agricultural development :

(i) Intensification of soil testing programme for which the existing soil testing laboratories will be strengthened and new soil testing laboratories would be established for recommending the correct manurial schedules for various crops.

(ii) Subsidization of transport cost of fertilizers in hilly and inaccessible areas of Mirzapur District.

(iii) Strengthening of agricultural workshops for augmenting production of improved implements suitable for the region.

(iv) Establishment of a regional research station at Faizabad and strengthening of the existing station at Azamgarh and Varanasi.

(v) Area development work in Azamgarh District.

(vi) Intensification of vegetable cultivation in 11 selected districts.

(vii) Establishment of a State Garden at Varanasi.

(viii) Package programme of Banana and pine-apple in Gorakhpur and Basti Districts.

(ix) Intensification of jute cultivation in the jute growing districts.

(x) Establishment of a sugarcane research station for *Bhat* soil.

25.11. The major factor adversely affecting the economy of the region is the recurrence of floods. The rivers Gandak, Rapti, Ghaghra, Gomti and Ganga and a number of streams like Rohin, Kuawno, Chhoti Gandak, Ami and Sai flow through these districts and cause floods in one part or the other every year. An outlay of Rs.1.69 crores has been proposed during the Fourth Plan for flood control schemes for this region.

25.12. The pressure of population over land being heavy, there is a large concentration of landless workers in the area. The industrial sector of the region is also very inadequately developed. Therefore, the main problem in the area is of 'unemployment' and 'under-employment'. Besides diversification and intensification of agriculture, the other solution to this problem lies in the development of small scale and cottage industries. An outlay of Rs.5.38 crores

has been provided in the Fourth Plan for the development of village and small scale industries in the region. Loans amounting to Rs.2.17 crores, power subsidy worth Rs.3.05 lakhs and machines of the value of Rs.1.05 crores on hire-purchase system would be made available for small scale and cottage industries. Twenty-four training centres for improving rural skills would be opened. A training-cum-production unit of *Papier Machie* products and terracota design is proposed to be set up at Gorakhpur. For the development of handloom industry, 781 looms would be provided to the weavers' co-operatives and 4 warehouses, 1 design centre and 3 improved dye houses would be set up. For the development of sericulture, it is proposed to set up 3 nurseries having an area of 12 hectares.

25.13. An outlay of Rs.15.04 crores has been provided during the Fourth Plan for developing communication facilities in the region. It is proposed to construct 468 Kms. of new roads and reconstruct and improve 507 Kms. of existing roads. Besides, 52 bridges will also be constructed.

25.14. For providing better educational facilities, it is proposed to open 1,068 junior basic schools and to appoint 17,828 additional teachers in existing schools during the Fourth Plan. The enrolment in classes I-V is expected to increase from 38.86 lakhs in 1968-69 to 44.74 lakhs at the end of the Fourth Plan. The expansion of primary education has created a pressing demand for senior basic schools. To accommodate the vast moving bulge from the primary stage during the Fourth Plan, it is proposed to open 806 senior basic schools and to appoint 1,755 additional teachers in existing schools. The special scheme of continuation classes for girls would be expanded by opening 127 such classes. It is expected that the enrolment in the age group of 11-14 would rise from 5.60 lakhs in 1968-69 to 7.61 lakhs in 1973-74. Provision has also been made in the Fourth Plan for extending the facility of teaching of science in 413 senior basic schools. To improve the quality of education at the secondary stage, it is proposed to give efficiency grants to institutions which show good performance and non-recurring grants to suitable institutions for buildings, furnitures, equipments and laboratories. It is also proposed to provide facilities for teaching of science in all Government Inter Colleges and to give grants to the existing Higher Secondary Schools for the addition of science laboratories.

25.15. Under the medical and health programmes, it is proposed to establish four hospitals and fifty-six dispensaries and to provide 1,988 additional beds in the hospitals and dispensaries. Twelve T. B. clinics (up-grading), four V. D. clinics, three children clinics and eight Dental clinics would be opened. Thirty-eight Leprosy control/S. E. T. units, Seven Filaria control units and five family planning clinics would also be set up.

25.16. Mirzapur district and parts of Allahabad and Varanasi suffer from drinking water scarcity. It has been assessed that for providing drinking water facilities in the difficult and scarcity areas of the region about Rs.19.07 crores would be required. Due to limitation of resources, it has been possible

to provide only Rs.52.00 lakhs during the Fourth Plan for providing drinking water facilities to these areas. It is expected that 150 villages having a population of 35,000 would be benefited by these schemes.

Hill Region

25.17. (1) *Uttarakhand*—The districts of Pithoragarh, Chamoli and Uttarkashi were created in 1960 in order to accelerate the development of this area. For improving the economic condition of the people of this area, an amount of Rs.28.00 crores was provided for the development programmes during the Third Plan. During 1966-67 and 1967-68, an amount of Rs.6.56 crores was spent. For the Annual Plan of 1968-69 an outlay of Rs.3.40 crores had been provided. As against this, the anticipated expenditure is of the order of Rs.3.30 crores. During the last eight years emphasis was laid on the development of communication, horticulture, forestry, education, animal husbandry, minor irrigation and power. Agriculture and Co-operative activities were intensified. The Fourth Plan proposals for Uttarakhand involve an outlay of Rs.20 crores. Special stress will be laid on the development of communications, horticulture, cattle and poultry development, tourism, forest and power.

25.18. An outlay of Rs.64.00 lakhs is proposed for the agricultural programme including soil conservation. For increasing the agricultural production, it is proposed to bring an area of 0.33 lakh hectares under the high yielding varieties. Soil conservation measures will be taken up on an area of 5,342 hectares. For exploiting the vast horticulture potential of the region, it is proposed to bring an area of 945 hectares under horticulture. Further, plant protection measures will be taken in an area of 4,540 hectares. For horticulture programme an outlay of Rs.60.00 lakhs has been proposed for the Fourth Plan period.

25.19. For providing minor irrigation facilities and flood control measures, an amount of Rs.70.00 lakhs has been proposed. It is proposed to construct hill channels measuring 31.00 Kms. About 700 hectares of additional land will be brought under irrigation.

25.20. For the development of sheep and wool, it is proposed to purchase and distribute 433 exotic rams and ewes involving an expenditure of Rs.10.825 lakhs. Three sheep supervisory units will also be established. An amount of Rs.50.00 lakhs has been proposed for the Animal Husbandry Sector.

25.21. There is considerable scope for the development of forest in Uttarakhand. During the Fourth Plan, it is proposed to bring about 45.100 Sq. Kms. under the working plan and 21.55 thousand hectares under the quick growing and economic plantations. Under the scheme of exploitation of oleo Resin, which provides employment to a large number of local people, 94,000 quintals of oleo Resin are proposed to be extracted. To improve forest communications, 179 Kms. of motorable roads and 480 kms. of bridle roads are

proposed to be constructed. Further, existing motorable and bridle roads will be renovated and 110 buildings will be constructed. An outlay of Rs.200.00 lakhs has been proposed for forestry.

25.22. An outlay of Rs.175.00 lakhs is proposed for power schemes. The targets fixed for the Fourth Plan period are indicated below :

- (i) Installed capacity ('000 Kw.) 14.905.
- (ii) Electricity generated (lakh KWH) 525.774
- (iii) Electricity sold (lakh KWH) 394.328.

The power schemes, on completion, will supply electricity to places like Harsil, Dharchula, Joshimath and Badrinath, etc.

25.23. For the development of transport it is proposed to spend an amount of Rs.740.00 lakhs during the Fourth Plan period. 286 Kms. of new motor roads and 150 Kms. of bridle roads will be constructed. Besides, 61.2 Kms. of motor roads and 162.6 Kms. of bridle roads will be reconstructed. Grants-in-aid amounting to Rs.20.300 lakhs would be given to Zila Parishads for the improvement of roads under their charge.

25.24. For providing better educational facilities, it is proposed to open 63 new Government primary schools, 20 new Government Junior High Schools, three new Government High Schools, three Intermediate colleges and one new degree college. As a result of the added educational facilities, the enrolment by the end of the Fourth Plan would increase from 0.83 lakhs in 1968-69 to 1.01 lakhs in classes I to V, from 0.14 lakhs to 0.27 lakhs in classes VI to VIII, from 0.10 to 0.11 lakhs in classes IX to XII and from 0.003 lakhs to 0.006 lakh in University/Colleges.

25.25. The salient features of the programmes under Health and Family Planning programmes are opening of new six Allopathic dispensaries of four beds each in rural areas, three T. B. clinics and establishment of three V. D. clinics and 21 maternity and child welfare centres. Besides additional facilities in the existing hospitals and dispensaries will also be provided, with a view to making them better equipped. Drinking water facilities will be provided to one town with a population of 4,000 and 151 villages with a population of 55,000.

25.26. *Other Hill Districts*—The hill region has great potential for horticultural development. For exploiting the potential, substantial emphasis will be laid on horticulture development. It is proposed to bring an additional area of 16,000 hectares under fruit plantation during the Fourth Plan. Twenty-five progeny orchard-cum-nurseries will be established which will produce four lakh fruit plants and 12,500 Kgs. of vegetable seeds. In order to help growers in plantation of new orchards, an outlay of Rs.48.50 lakhs has been provided for long term horticultural loans. Forty-eight lakhs fruit plants,

86,000 Kgs. of vegetable seeds and 150 tonnes of pesticides will be distributed on subsidised rates. Control measures against pests and diseases would be undertaken over an area of 36,000 hectares. Grants-in-aid would be given to growers for encouraging them to establish nurseries of their own in remote areas. Training would be imparted to growers in horticulture practices and inter district-inter state tours would also be organised. In order to train the house-wives and cultivators, as also to help them in the preservation and utilisation of unmarketable, culled, damaged or surplus fruits and vegetables, four community canning-cum-training centres would be established.

25.27. For the development of agriculture a number of special schemes are proposed to be launched in the area during the Fourth Plan. The area is well suited for potato cultivation. Accordingly, programmes for increasing production of potato will be given priority. With the intensification of potato cultivation work, the production of potato is expected to increase by 8,400 tonnes. To popularise the use of fertilizers in inaccessible areas, the cost of transportation of fertilizers would be subsidized. A Regional Research Station would be established for evolving high yielding varieties of crops suited for the hill region. For controlling the menace of 'Kurmula' pest about 76,000 hectares of cultivated area would be treated.

25.28. An Indo-German Project has been taken up in Almora District on the pattern of Multi-Purpose Mandi Project of Himachal Pradesh. One of the main objectives of the project is to take up high yielding and other improved varieties programme for selected areas in 17 Blocks of the district, raising the coverage of intensive agriculture programme from the existing 2,428 hectares to 8,094 hectares in irrigated areas and from 850 to 4249 hectares in upland areas within a period of five years.

25.29. Soil conservation plays an important role in the development of agriculture in the hill areas. Accordingly, a special scheme for soil conservation was launched there during the Third Plan. At present nine Bhoomi Sanrakshan Adhikari Units are functioning in the area. During the Fourth Plan, 15 B. S. A. units are proposed to be added to the existing strength. An area of 32,000 hectares would be brought under soil conservation during the Fourth Plan.

25.30. In the field of Animal husbandry it is proposed to establish two A I centres, six A I sub-centres and nine natural breeding centres. Cattle development activities will be intensified around the milk shed area of the Haldwani Dairy Project in which three veterinary hospitals, three A I centres, 30 stockmen centres and eight natural breeding centres will be established. Besides, one veterinary hospital and 10 stockmen centres would be opened in other areas of this region. Two more sheep and wool extension centres are proposed to be opened and one sheep and wool extension centre would be expanded. Two hundred and fifty exotic sheep are also proposed to be

imported for cross breeding. To augment breeding facilities for goats, it is proposed to locate two bucks each at 40 selected veterinary hospitals. Under poultry development, provision has been made for the expansion of Regional Poultry Farm, Hawalbagh, by raising the strength of layers. A Diagnostic Laboratory would be established at Naini Tal for facilitating investigation of diseases reported from the field.

25.31. The hills abound in forest. With the development and conservation of forest wealth a steady source of income is assured to this region. It has, therefore, been proposed to undertake plantation of trees of economic and industrial importance over an area of 17,080 hectares and fast growing species would be planted over an area of 21,500 hectares. For providing communication facilities in the forest area, 375 Kms. of new roads and 46 bridges/culverts will be constructed and renovation of 814 Kms. of existing roads would be completed. Telephone lines would be extended over a length of 993 Kms.

25.32. For the development of village and small scale industries, loans amounting to Rs.44.20 lakhs would be distributed and Rs.14.50 lakhs would be provided for supply of machines on hire-purchase. Subsidy on power consumption would also be granted to small scale units. Twelve centres would be opened for improving skills and promotion of rural industries. For the development of local handicrafts, it is proposed to set up training-cum-production centres for Papri wood articles at Srinagar (Pauri). It is expected that goods worth Rs.3.81 lakhs would be produced and sold in these centres during the Fourth Plan. Sericulture industry has fairly good scope of development in this region due to suitable climatic conditions. It has, therefore, been proposed to establish two nurseries in an area of eight hectares and four farms in an area of eight hectares. Besides, distribution of 2.30 lakh plants, preparation of seven lakh grafts and improved sapplings, production of 1120 Kgs. of cocoons and training of 175 persons are also proposed.

25.33. Lack of transport and communication facilities and difficult terrain have largely been responsible for the slow economic growth of the region. Efforts have been made since the beginning of the first Plan to improve communication facilities in this region and these will be substantially augmented during the Fourth Plan. It is proposed to construct 446 Kms. of new roads and to complete reconstruction and improvement of 503 Kms. of existing roads. Eight bridges will also be constructed.

25.34. For the expansion of education, it is proposed to open 138 Junior basic schools in unserved areas and to appoint 1,637 additional teachers in the existing schools. The enrolment in classes I-V is expected to increase from 3.46 lakhs in 1968-69 to 4.22 lakhs at the end of the Fourth Plan. Ninety-four Senior Basic Schools would be opened and 332 additional teachers would be appointed in the existing schools. The special scheme of continuation classes for girls would be extended by opening 18 such classes. It is expected that the enrolment in the agegroup of 11-14 would rise from 0.85 lakh in 1968-69 to 1.18 lakhs in 1973-74. Provision has also

been made for extending facilities for the teaching of general science in 138 senior basic schools. Facilities would be provided for the teaching of science in all the Government Inter Colleges and grants would be given to the existing Higher Secondary Schools for science laboratory. To improve the quality of education, efficiency grants would be given to institutions, which show good performance and non-recurring grants to suitable institutions for buildings, furnitures, equipment and laboratories.

25.35. For providing better medical and health facilities, it is proposed to establish two hospitals/dispensaries, five T. B. Clinics (up-grading). One children clinic and one dental clinic and to provide 310 additional beds. For providing drinking water facilities in rural areas, an outlay of Rs.127.04 lakhs has been set apart. Five hundred sixty-one villages, having a population of 1.54 lakhs, would be benefited by these schemes.

Bundelkhand

25.36. The agricultural problems of Bundelkhand have some special features. The region is characterised by heavy soil erosion and lack of irrigation facilities. Large areas have only shallow soil and, therefore, remain uncultivated in the absence of adequate irrigation facilities. During the Fourth Plan, emphasis will be laid on large scale adoption of soil and water conservation measures, dry farming practices and minor irrigation programmes particularly construction of contour bundhies, deepening of existing tanks and installation of tube-wells wherever possible. A soil testing laboratory will be established at Banda and the existing laboratory at Jhansi would be strengthened. A scheme of ravine reclamation would be undertaken in the districts of Jhansi, Jalaun, and Hamirpur. The high yielding varieties programme would be extended in areas having assured irrigation facilities. The region has about four lakh hectares of culturable waste land, most of which is either rocky or has shallow soil. One survey unit has been located in this region so as to locate blocks with sufficient soil depth where crops can be raised. This work will be further intensified during the Fourth Plan.

25.37. The region suffers from severe soil erosion. Out of a total cultivated area of 17.44 lakh hectares, about 12.15 lakh hectares are subject to soil erosion. Thus, 70 per cent of the cultivated area suffers from soil erosion which shows the enormity of the problem in the region. The State Government is seized of the problem and has been taking measures to combat it. Sixteen Bhoomi Sanrakshan Adhikari Units are functioning in the region and it is proposed to add four more units during the Fourth Plan period. About 2.04 lakh hectares of land would be brought under soil conservation.

25.38. Construction of bundhies forms an important feature of the irrigation programme in this region. It is proposed to construct bundhies which will benefit an area of 0.89 lakh hectares during the Fourth Plan.

25.39. For the promotion of village and small scale industries, loans worth Rs.31.75 lakhs and power subsidy worth Rs.0.75 lakh are proposed to be disbursed. Machines worth Rs.24 lakhs would be supplied on hire-

purchase basis. Seventeen small scale industrial co-operatives will be organised and 8 centres would be set up for improving rural skills and promotion of rural industries. For the development of handloom industry, 208 looms would be brought into the co-operative fold which will produce 664 lakh metres of handloom cloth during the Fourth Plan. Share capital loan worth Rs.3 lakhs will be provided to handloom weavers' co-operative societies. One warehouse and one improved dye house would also be established. In the handicraft sector, a common facility centre for soft stone-ware is proposed to be set up at Gorahari in the district of Hamirpur.

25.40. For providing better transport and communication facilities, 506 kms. of new roads will be constructed and reconstruction of existing roads would be completed over 158 kms. One bridge will also be constructed.

25.41. For the expansion of primary education, it is proposed to open 170 junior basic schools in unserved areas and to appoint 1,954 additional teachers in the existing schools. The enrolment in classes I-V is expected to increase from 4.81 lakhs in 1968-69 to 5.00 lakhs at the end of the Fourth Plan. One hundred and eight Senior Basic Schools would be opened and 332 additional teachers would be appointed in the existing senior basic schools. The special scheme of continuation classes for girls would be expanded by opening 23 such classes. It is expected that the enrolment in the age group of 11-14 years would rise from 0.66 lakhs in 1968-69 to 1.30 lakhs in 1973-74. Facilities for the teaching of general science would be extended to 110 schools. For the expansion of science education at the secondary stage, it is proposed to provide facilities for science teaching in all the Government Inter Colleges and grants would be given to the existing Higher Secondary Schools for the addition of science laboratories. Efficiency grants would be given to institutions and non-recurring grants to suitable institutions for buildings, furniture, equipment and libraries. The additional enrolment visualised in the Fourth Plan at the secondary stage is proposed to be accommodated partly by providing additional sections and facilities in the existing schools and partly by opening new institutions.

25.42. For providing better medical and health facilities it is proposed to establish 20 hospitals/dispensaries and to provide 523 additional beds. Three T. B. clinics (upgrading), 2 V. D. clinics, 3 dental clinics and one children clinic are also proposed to be established. Twenty-one leprosy control/S. E. T. units, one Filaria clinic and 3 family planning clinics would be set up. An outlay of Rs.3.10 crores has been provided for the completion of the construction work, purchase of equipment and running cost of the medical college at Jhansi. In order to provide drinking water facilities in rural areas, an outlay of Rs.1.71 crores has been provided. The facilities of drinking water would be provided in 590 villages covering a population of 2.4 lakhs.

ADMINISTRATIVE AND ORGANISATIONAL PROBLEMS

26.1. With an increase in the range of Government's responsibilities and in the tempo of development work, the volume and complexity of administrative work have also grown. Planned development in a democratic set up and under severe constraints on resources and trained manpower involves serious problems of plan implementation. The administrative set-up, which the country inherited at the time of independence, was largely concerned with law and order and rudimentary welfare activities. The introduction of the Five Year Plans brought in its wake an entirely new set of responsibilities. It is through trial and error that the development administration has been evolving in the country. Certain aspects of administration, however, have attracted particular attention. These include the slow pace of execution in many fields; problems involved in the planning, construction and operation of projects, specially increase in costs and non-adherence to time-schedules; difficulties in securing personnel of requisite calibre and experience; co-ordination and synchronisation in the related sectors of economy, and above all, securing of people's participation in plan formulation and implementation.

26.2. On the eve of the launching of the Fourth Five Year Plan, it will be useful to examine administrative and organisational problems in so far as they have a bearing on plan implementation. In fact, such reviews will have to be undertaken periodically to remove the bottlenecks and difficulties that are likely to crop up in the course of the implementation of the plan. The broad strategy and objectives of the State's Fourth Five Year Plan have been dealt with in some detail in Chapter 3. Similarly, organisational problems having sectoral bearings have been dealt with in the sections concerned.

26.3. The State Government is committed to raise the standard of living of the people through a planned effort and optimum utilisation of resources. It is, therefore, the responsibility of all the departments and agencies of the Government to make total efforts for the successful implementation of the Fourth Plan. It is through team work and mutual co-operation of various agencies that the big challenge presented by the poverty, illiteracy and poor health of the people can be met.

26.4. It will be very helpful if various bottlenecks and shortcomings which hamper the efficient execution of schemes and projects are identified. The State plan has to be implemented at many levels — State, district, block and village. At each level there has to be a clear understanding of the objectives

of the plan and the means through which they are sought to be achieved. Panchayati Raj institutions have been established at various levels to provide a common meeting ground for the people and their elected representatives on the one hand and public servants on the other.

26.5. Inter-departmental co-operation is one of the chief requirements of efficient plan implementation. In the past, certain departments were re-organised to bring about greater co-ordination. Sometimes there is failure of communication even among the various sections of an organisation. Shared objectives and dynamic leadership of the top executives can improve matters considerably. There is still considerable scope for strengthening horizontal links between the functionaries of certain departments, particularly at the operational levels. Narrow loyalties negate the concept of mutual help. It has to be constantly borne in mind that the Government is one and indivisible and that the Departments have been organized for convenience of operation and not as exclusive entities. Mutual understanding and help will no doubt go a long way in avoiding duplication of efforts, hierarchies and institutions and consequent waste. It is not necessary to explain here how the work of Agriculture, Co-operation, Irrigation, Panchayati Raj, Power and Industries Departments, to name only a few, is inter-dependent in certain aspects. Any failure of communication between such departments leads to unco-ordinated activities and lack of synchronisation of related operations.

Accountability

26.6. For the execution of any programme or project it is necessary to fix specific responsibility on the agency concerned and within it on particular individuals. Within defined limits each individual should be given full responsibility and with it necessary measure of support and trust. If he fails in the discharge of his responsibility, he should be replaced. But so long as he holds office with which he is entrusted, he should be enabled to function effectively. For maintaining discipline in the offices it is necessary that any attempt at short circuiting the established channels of correspondence in service matters must be discouraged. The enforcement of Government Servant's Conduct Rules will help in checking the growing laxity. Transfers and other service matters should be handled by the prescribed authority. Any other course undermines the effectiveness of the person in charge, who has to take work from his subordinates. Frequent transfers make it difficult to fix responsibility for delay or failure in achieving results besides affecting the continuity of work. In assignments requiring execution of projects and programmes a period of less than five years is rarely sufficient for producing worthwhile results.

Personnel Policy and Efficiency

26.7. In the placement of staff, care has to be taken to ensure that the right man is at the right job. The academic background, professional training, aptitude and other relevant factors should be taken into consideration while giving assignments to persons. There is considerable scope in improving

the quality and output of work of public servants. In a period of rapid expansion of development activities, large scale recruitment and accelerated promotions were unavoidable. This, however, led to falling of standards. Determined efforts should continue to be made to improve performance and productivity. For raising general efficiency, an intensive programme of training not only in technical and professional aspects, but also in Organisation and Methods, should be launched. For each category there should be a comprehensive programme of in-service training and refresher courses.

Delegation of Powers and Decentralisation of Functions

26.8. The delays in decision making at various levels impede the progress of work and often result in upsetting the schedule of work. Delegation of powers and decentralisation of functions promote initiative and help in the expeditious disposal of work. Though efforts have been made from time to time to delegate the powers to lower levels, yet much remains to be done. Examination of cases at three or four levels in the offices of Heads of Departments and the Secretariat not only causes delay, but also involves waste of human effort besides blunting initiative. It should be possible to enable lower levels to take decisions. Such decision making will be facilitated if the delegation of powers and the decentralisation of functions travel all along the line.

26.9. In the present functioning of the Departments, consultation with other authorities is not always confined to broader aspects; instead it is too frequent and too concerned with details and, therefore, impedes effective action. Exercise of financial control is one important aspect of this problem. Obviously the question here is one of ensuring wide delegation of financial powers to the heads of administrative departments with Finance Department undertaking their principal scrutiny prior to the framing of annual budgets. This, however, pre-supposes that the schemes and programmes are formulated by the departments concerned with utmost care keeping in view the guidelines indicated in the Plan. Sometimes half-baked and ill-conceived schemes are sought to be pushed through. An element of self-discipline on the part of administrative departments is necessary before large scale financial delegations can be made. The main pre-occupation of Secretariat departments should be with matters of policy, general supervision and enforcement of standards. The executive tasks have to be carried out by field departments and agencies specially designated for the purpose.

Evaluation

26.10. A necessary condition of placing specific responsibility and providing means of fulfilling it is that success or failure should be judged by the test of results. As far as possible, care should be taken in the planning stage itself to specify the tasks to be undertaken, the means to be employed, the obligation of the agency or individuals concerned and the time sequence

in which different operations must flow and dovetail into another. Periodical evaluation of performance is absolutely necessary. In the first instance, evaluation has to be a built-in process in an organisation or a department. Such an evaluation can serve as an effective instrument in the hands of Heads of Departments and offices to keep a check on the performance of different persons both individually and collectively. It will also be possible to apply timely correctives. In addition to the aforesaid internal evaluation, it will also be necessary to undertake independent evaluation of various programmes through the Directorate of Evaluation.

Economies in Construction

26.11. Construction costs account for a substantial part of plan outlays. Works must be completed in time if the listed outputs are to be achieved. A number of studies have been made in recent years of various processes involved in the construction of public works. They point to the fact that planning is often hurried and inadequate and, as a consequence, costs rise and estimates are exceeded. Sometimes a deliberate attempt is made to keep the initial estimates low to prove the economic viability of a project and to improve the chances of its acceptance. Such a practice has to be put down with a strong hand by taking disciplinary action against all those, who are found responsible for it. Any increase in efficiency in the construction industry as a whole and a marked reduction in the cost of construction will no doubt increase the overall efficiency of plan implementation.

Revision of Rules and Procedures

26.12. Rules and regulations are means to an end and not an end in themselves. It will be necessary to make modifications in them to suit the changing conditions and to help in expeditious disposal of Government work.

Public Co-operation and Participation

26.13. Planned development in a democratic country has necessarily to be a co-operative endeavour between the official and non-official agencies. In the successive plans public co-operation has been recognised as an essential condition for their success. For accelerating the pace of development local resources have to be mobilized to the full, progress towards self-reliance speeded up and managerial and organisational capability created.

26.14. A recent study conducted by the Indian Institute of Public Administration revealed that nearly 75 per cent of the respondents displayed a high degree of impersonality implying a formal and standardised treatment meted out to the citizens with whom they deal even in developmental fields. It was also found that public servants who most often come into contact with the public were more impersonal in their behaviour. Some were not found sufficiently concerned with achieving specific results in their work. The difficulties that are faced by the people in getting prompt, honest and efficient service from Government departments, agencies and local bodies condition the

people's response to developmental programmes. A welfare and democratic State can expect to secure people's participation largely on the basis of a relationship of trust and confidence. The Heads of Departments and Offices have to take energetic steps to improve the image of administration through prompt and honest service to the people. Cases of harassment to the people must be enquired into with utmost despatch and remedial action taken with promptitude.

Schools, Co-operatives and Panchayats

26.15. The efforts of individuals need to be supplemented by the collective strength of institutions. Three basic institutions, namely, schools, co-operatives and panchayats are the essential needs of the rural community. School has to function as a community centre also. School teacher has a traditional role to play in educating not only the limited circle of his pupils, but also in motivating the masses to adopt a progressive and scientific attitude towards life. This organic relationship between the school and its staff on the one hand and the village community on the other would be of great mutual benefit.

26.16. Co-operatives and panchayats play a vital role in the economic and social development of the rural community. Through self-help and mutual aid most of the local problems can be solved. All those factors which are impeding the effective functioning of the co-operative and the panchayats or which are responsible for making them as pocket boroughs of certain interests, will have to be identified and remedied.

26.17. Without encouraging thrift and saving among members and increasing their owned capital, the co-operatives will not be able to discharge their functions properly. They will also not be in a position to draw substantial funds from the all-India financial institutions for the benefit of their members. Panchayati Raj institutions have so far failed in raising adequate local resources for executing self-help schemes. Maintenance of community assets already created also leaves much to be desired. Those Panchayats which are free from factionalism and where the village leadership is motivated towards constructive activities have shown very encouraging results. All possible efforts have to be made to activate panchayats and co-operatives particularly because the effective functioning of these basic village institutions alone can ensure a self-sustained and rising tempo of developmental activities which will simultaneously enrich a welfare democracy at the grass-roots.

WELFARE AND DEVELOPMENT OF VULNERABLE SECTIONS

27.1. The economic and social problems of backward classes, small farmers, landless labourers, village artisans and other vulnerable sections of the population must continue to receive utmost attention of all the Government and semi-Government agencies and departments. While there has been progress in several directions, the urgency of rapid economic and social advance among these groups must be fully recognised. The success of development programmes to be undertaken on their behalf during the Fourth Plan period is crucial to national integration and progress of the society as a whole. Factors which have accounted for slow progress in the past, have to be identified and remedial measures taken for effective implementation. It is true that a large majority of people come in the category of vulnerable sections, therefore, the problem of their welfare and development assumes gigantic proportions, and it becomes difficult to create a significant impact in a short period. Even so, what is more important is the earnestness and the totality of efforts for improving the economic and social conditions of these groups. Several measures have been taken by the Government to ameliorate their conditions. In this chapter an attempt has been made to summarise at one place information relating to those measures which have been taken in the past or are proposed to be taken during the Fourth Plan period. For details reference is invited to the relevant chapters of this volume.

27.2. Among the backward classes, scheduled castes and tribes and denotified tribes form a major group. There are 66 communities recognised as scheduled castes in this State and their population according to the Census of 1961 was 155.5 lakhs. The tribal population is largely concentrated in the hills, the Tarai and the southern regions. In June, 1967, the Central Government declared five of these communities, *viz.* Tharus, Bhoksas, Bhotias, Jaunsaris and Rajis as scheduled tribes. The total population of the tribes is estimated to be over 5.5 lakhs. Out of this, 1.4 lakhs are scheduled tribes. There are 55 communities totalling approximately 20 lakhs, which are known as denotified communities. Among the backward classes are included 37 Hindu and 21 Muslim communities.

27.3. The welfare schemes undertaken by the Government in connection with the amelioration of the conditions of the above categories of backward classes can be broadly classified into three groups, *viz.* (i) Education, (ii) Economic Development, and (iii) Health, Housing and other schemes. A total sum of Rs.2,573.36 lakhs including Rs.1,042.56 lakhs in the Central sector was spent on these schemes during the last 17 years.

27.4. Education is free to all scheduled caste students from the Primary to post-Graduate Classes and the losses sustained by non-Government educational institutions due to exemption granted to scheduled caste students from the payment of the fees is reimbursed by the Government. In addition to this, stipends and non-recurring assistance are given on the basis of merit, poverty, etc. to 15 per cent of the scheduled caste students in pre-Matric Classes. In post-Matric Classes all scheduled caste students are given scholarship under a Centrally Sponsored programme. Government is giving aid to various educational institutions run by non-official agencies for spreading education and literacy among the scheduled castes. Stipends and non-recurring assistance are also given to students belonging to denotified communities and other backward classes. There are 13 Ashram type schools in which students belonging to denotified communities and tribals are given free education and all other expenses on account of lodging, boarding and clothing are borne by the Government. These schemes are proposed to be continued during the Fourth Plan period also.

27.5. About 95 per cent of the scheduled castes and tribes live in the rural areas and are largely dependent on agriculture. Many of them belong to the landless labour class. Those of them, who are in possession of land, get Government assistance for reclamation and improvement of land and purchase of seeds, fertilizers, bullocks, agricultural implements, etc. Assistance is also given for developing village and cottage industries.

27.6. Nine Industrial Estates have been established for the benefit of Harijans. Industrial training is also imparted to scheduled castes and other backward communities, with a view to providing them part-time and full-time employment. Refresher courses and training in traditional cottage industries to improve their efficiency and earnings are organised. Government is running three technical training centres at Lucknow, Naini Tal and Gorakhpur, in which certificate courses in various trades are offered. Besides, one Polytechnic has been established at Lucknow in which diploma courses in Civil, Mechanical and Electrical Engineering have been started. In all these institutions 70 per cent seats are reserved for scheduled castes, 15 per cent for backward classes and 15 per cent for other students. Stipends are given to scheduled caste candidates receiving training in other technical institutions and industrial training centres in the State.

27.7. A special programme for the rehabilitation of the denotified communities on agricultural land has been undertaken by the Government. Colonies have been set up for their resettlement and the inmates have been given five acres each of agricultural land, houses and grants for the purchase of agricultural implements.

27.8. The welfare schemes under the group Health, Housing, etc. relate to drinking water wells, construction of houses, purchase of house sites, work sites, etc. Two special schemes for the welfare of the Sweepers have been undertaken under a Centrally Sponsored programme.

27.9. According to the existing Government instructions, 18 per cent of the total number of posts in all categories of Government services are reserved for scheduled castes. A committee was appointed in March, 1967, to look after the implementation of the orders of the Government regarding the representation of scheduled castes in services under the State Government. There will be reservation in services for the scheduled tribes also.

27.10. During the Fourth Plan it is proposed to spend a sum of Rs.720 lakhs on the welfare of scheduled castes and tribes and backward classes. Out of this Rs.417.40 lakhs are to be spent on education, Rs.153.60 lakhs on economic development and Rs.149.00 lakhs on Health, Housing, etc. An additional provision of Rs.7 crores has been made in the Supplementary Plan. The availability of funds, however, will depend on the mobilisation of additional resources for the Plan. If this additional provision is included, the total outlay for Harijan welfare will increase to Rs.14.20 crores for the Fourth Plan period. Further details can be seen in the portion dealing with "Harijan and Social Welfare".

27.11. Special programmes have been launched in Uttarakhand for the rehabilitation and economic development of the Bhotias, who have also been declared as a scheduled tribe. These programmes cover a very wide range.

27.12. Efforts have been made right from the inception of the First Plan to provide land to landless labourers. They continue to be accorded priority in the allotment of Gaon Sabha land. 25,322 hectares of land was allotted to landless labourers during the First Plan; 79,457 hectares during the Second Plan; and 1,24,171 hectares during the Third Plan out of the Gaon Sabha land. During the Fourth Plan it is expected that an area of about 2.02 lakh hectares of Gaon Sabha land would be allotted to the landless labourers. Provision has been made under the U. P. Imposition of Ceilings on Land Holdings Act, 1960, to grant permanent pattas only to Co-operative Societies of landless agricultural labourers in respect of the land taken over by the State Government as a result of the Imposition of Ceiling on the Holdings. It is proposed to amend the Act, to enable the allotment of land to individual landless labourers. Out of 1.76 lakh hectares of land donated under Bhudan till the end of March, 1968, about 0.85 lakh hectares have been allotted to small farmers and landless labourers.

27.13. To provide additional employment opportunities to landless labour, an outlay of Rs.5 crores has been proposed in the "Supplementary Plan". Their dependence on wages can be reduced by enabling them to take to agriculture, poultry, animal husbandry, village and cottage industries, etc. In order to prepare a practical and effective programme, a Working Group has been constituted comprising of the officers of the Industry, Agriculture, Animal Husbandry, Labour, Co-operative and Revenue Departments as members and the Agriculture Production Commissioner as Chairman. The Secretary, Harijan and Social Welfare Department, is the Convener of the Group.

27.14. The Notification issued by Government in October, 1966, fixes the minimum rates of wages for the agricultural labourers in Uttar Pradesh. This step will give statutory protection to a large number of backward classes. In fact the operation of the Minimum Wages Act in 18 other scheduled employments directly helps the poorer sections of the community.

27.15. As regards artisans and craftsmen, vocational training is being imparted under the Craftsmen Training Scheme. Forty-eight Industrial Training Institutes having 24,784 seats have been established. Village artisans are also being imparted training in the workshop wings attached to the Gram Sewak Training Centres. A number of schemes launched since the First Five Year Plan under the Village and Small Scale Industries Programme, have helped the artisans and craftsmen. Handloom industry is the largest cottage industry of the State. It provides employment to more than one million persons and produces nearly 33 per cent of the requirement of cloth in the State.

27.16. Some of the cottage industries and handicrafts which are mostly in the hands of the poorer sections of the population, are leather and leather goods, oil ghani, pottery, metalware, woodwork, stonework, making of dolls, ivory articles, papier mache, horn and bone articles, cane and bamboo articles, etc. Financial assistance, training and marketing facilities, new designs, etc. are being made available to promote handicrafts.

27.17. There are special schemes for the welfare of the handicapped persons, beggars, destitute women, etc. Schools for handicapped children, workhouses for beggars and protective and After-care Homes for women are functioning in the State. The U. P. Children Act was introduced for the reformation of juvenile delinquents and young offenders. Besides continuing these schemes, it is proposed to establish hostels for working women, Braille Libraries, Bal Niketan, Sheltered Workshops for the Blinds and Home-cum-Sheltered Workshop-cum-Training Centre for the physically disabled persons. A special scheme known as the Applied Nutrition Programme is in operation to look after the nutritional requirements of the expectant and nursing mothers and children.

27.18. More than 77 per cent of the holdings in the State are of less than 2.02 hectares (5 acres). Thus an overwhelming majority of the farmers falls in the category of small farmers. It is realised that if the subsistence farming of the small farmers could be converted into commercial farming, it would create a much greater total impact than the contribution of a new progressive big farmers. Even a marginal increase achieved by each of the millions of these farmers would add up to a very impressive total. The credit limits of the small farmers have already been liberalised. It will be ensured that they get credit and supplies for raising agricultural production. The ultimate solution, however, lies in self-help and mutual aid through the co-operatives.

STATEMENTS

STATEMENT I

Outlays and Expenditure 1966-1969

(Rupees in lakhs)

Head / Sub-Head	1966-67		1967-68		1968-69	
	Approved Outlay	Actual expenditure	Approved Outlay	Likely Actual	Approved Outlay	Antici- pated expenditure
1	2	3	4	5	6	7
1. AGRICULTURAL PROGRAMMES						
1.1. Agricultural Production	777.32	753.60	874.59	907.12	1040.00	977.41
1.2. Minor Irrigation	2640.00	2813.79	2471.21	2603.76	2070.00	1940.63
1.3. Soil Conservation	256.00	184.89	297.70	242.74	263.00	259.73
1.4. Ayacut Development .. .. .	..	..	0.001	..	0.001	..
Total 1. Agricultural Programmes ..	3673.32	3752.28	3643.501	3753.62	3373.001	3177.77
2. ALLIED PROGRAMMES						
2.1. Animal Husbandry	160.39	98.18	109.80	85.20	98.00	91.59
2.2. Dairying and Milk Supply	100.00	71.27	65.19	58.38	60.00	50.47
2.3. Forests	133.00	119.92	85.59	85.20	113.00	103.35
2.4. Fisheries	30.00	15.22	24.05	14.76	20.00	16.27
2.5. Warehousing	4.00	..	1.00	..	..	..
Total 2. Allied Programmes ..	427.39	304.59	285.63	243.54	291.00	261.68
Total for 1 and 2. Agricultural and Allied Programmes ..	4100.71	4056.87	3929.131	3997.16	3664.001	3439.45

STATEMENT I—(concl.d.)

(Rupees in lakhs)

Head/Sub-Head	1966-67		1967-68		1968-69		
	Approved Outlay	Actual expenditure	Approved Outlay	Likely Actual	Approved Outlay	Anticipated expenditure	
1	2	3	4	5	6	7	
3. CO-OPERATION AND COMMUNITY DEVELOPMENT							
3.1. Co-operation		128.00	128.00	93.79	57.16	80.00	60.92
3.2. Community Development		572.55	572.55	303.46	291.02	300.00	296.05
3.3. Panchayats		18.23	18.23	19.25	11.87	17.00	14.26
Total 3. Co-operation and Community Development ...		718.78	718.78	416.50	360.05	397.00	371.23
4. IRRIGATION AND POWER							
4.1. Irrigation		1434.06	1434.06	1519.88	1520.00	1560.00	1863.00
4.2. Flood Control		115.87	115.87	125.00	124.44	125.00	74.00
4.3. Power		5802.00	5802.00	6190.00	6344.00	5453.00	6246.00
Total 4. Irrigation and Power ...		7351.93	7351.93	7834.88	7988.44	7138.00	8183.00
5. INDUSTRY AND MINING							
5.1. Large and Medium Industries		403.21	403.21	499.91	486.00	400.00	424.89
5.2. Mineral Development		9.25	9.25	8.96	9.90	10.00	15.52
5.3. Village and Small Industries		154.00	154.00	123.73	127.00	143.00	112.65
Total 5. Industry and Mining		566.46	566.46	632.60	622.90	553.00	553.06

6. TRANSPORT AND COMMUNICATIONS

6.1. Roads	..	..
6.5. Tourism	..	..

Total 6. Transport and Communications

7. SOCIAL SERVICES

7.1. General Education	..	..
7.2. Technical Education	..	..
7.4. Health and Family Planning	..	..
7.5. Water Supply	..	..
7.6. Housing and Urban Development	..	..
7.7. Welfare of Backward Classes	..	..
7.8. Social Welfare	..	..
7.9. Craftsmen Training and Labour Welfare	..	..
7.10. Public Co-operation	..	..

Total 7. Social Services ..

8. MISCELLANEOUS

8.1. Statistics	..	..
8.2. Information and Publicity	..	..
8.4. Hill and Border Areas	..	..
8.5. Evaluation	..	..
8.6. Others	..	..

Total 8. Miscellaneous ..

GRAND TOTAL (HEADS 1—8) ..

..	585.00	585.00	500.00	487.51	600.00	552.75
..	1.79	1.79	3.04	1.50	13.00	5.22
..	586.79	586.79	503.04	489.01	613.00	557.97

249.58	249.58	437.01	444.23	551.00	560.58
146.45	146.45	174.29	135.40	180.00	162.97
478.66	478.66	517.12	481.00	525.00	547.85
366.09	366.09	297.87	297.87	400.00	405.75
54.00	54.00	49.38	49.42	40.00	46.01
58.74	58.74	66.25	63.22	65.00	66.83
2.20	2.20	4.44	3.21	10.00	7.40
87.27	87.27	160.00	129.00	118.00	73.84
0.45	0.45	0.09	0.33	..	..

353

1443.44	1443.44	1706.45	1603.68	1889.00	1871.23
----------------	----------------	----------------	----------------	----------------	----------------

0.79	0.79	1.51	0.82	1.00	0.89
3.39	3.39	4.58	2.73	4.00	3.74
336.72	336.72	320.00	312.04	340.00	333.79
2.26	2.26	2.43	2.15	3.00	2.95
1.91	1.91	2.88	1.94	2.00	1.61

345.07	345.07	331.40	319.68	350.00	342.98
---------------	---------------	---------------	---------------	---------------	---------------

15113.18	15069.34	15354.00	15380.92	14604.00	15318.92
-----------------	-----------------	-----------------	-----------------	-----------------	-----------------

STATEMENT II

Summary statement showing head-wise break-up of State's Fourth Five-Year Plan outlay

(Rupees in lakhs)

Head of Development	Fourth Plan Outlay			1969-70			1970-71	1971-72	1972-73	1973-74
	Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange	Total	Total	Total	Total
							8	9	10	11
1	2	3	4	5	6	7	8	9	10	11
1. AGRICULTURAL PROGRAMMES										
1.1 Agricultural Production ..	5710.00	1144.02	5.12	937.64	201.69	1.00	1175.80	1266.25	1237.59	1092.72
1.2 Minor Irrigation ..	9600.00	8178.00	110.00	1810.00	1468.80	32.00	1945.00	1961.00	1965.00	1919.00
1.3 Soil Conservation ..	2140.00	135.00	..	324.00	10.00	..	431.78	448.88	461.85	473.49
1.4 Ayacut Development ..	..	..	..	..	..	..	..	..	..	..
Total 1. Agricultural Programmes ..	17450.00	9457.02	115.12	3071.64	1680.49	33.00	3552.58	3676.13	3664.44	3415.21
2. ALLIED PROGRAMMES										
2.1 Animal Husbandry ..	550.00	194.59	6.64	100.00	36.69	..	121.77	117.84	106.99	103.40
2.2 Dairying and Milk Supply ..	400.00	303.41	12.00	70.00	50.56	..	88.44	95.54	92.67	53.35
2.3 Forests ..	1300.00	..	54.00	198.00	..	12.00	234.55	263.60	286.90	316.95
2.4 Fisheries ..	90.00	58.01	..	20.00	15.83	..	29.00	17.62	13.29	10.09
2.5 Warehousing ..	130.00	130.00	..	..	..	..	32.50	32.50	32.50	32.50
Total 2. Allied Programmes	2470.00	683.01	72.64	388.00	103.08	12.00	506.26	527.10	532.35	516.29
TOTAL 1 AND 2 AGRICULTURAL AND ALLIED PROGRAMMES	19920.00	10140.03	187.76	3459.64	1783.57	45.00	4,058.84	4203.23	4196.79	4001.50

3. CO-OPERATION AND COMMUNITY DEVELOPMENT

3.1 Co-operation ..	900.00	274.95	..	57.00	16.23	..	174.67	236.85	206.09	225.39
3.2 Community Development ..	1015.00	81.95	..	283.00	28.20	..	273.00	223.00	178.00	58.00
3.3 Panchayats ..	100.00	26.92	..	20.00	13.96	..	13.57	16.74	21.54	28.15
Total 3. Co-operation and Community Development	2015.00	383.82	..	360.00	58.39	..	461.24	476.59	405.63	311.54

4. IRRIGATION AND POWER

4.1 Irrigation ..	9000.00	9000.00	871.00	1700.00	1700.00	304.80	1900.00	1900.00	1800.00	1700.00
4.2 Flood Control ..	800.00	800.00	..	130.00	130.00	..	175.00	175.00	170.00	150.00
4.3 Power ..	37500.00	37500.00	2455.00	6800.00	6800.00	386.00	7795.00	8219.00	7318.00	7368.00
Total 4. Irrigation and Power	47300.00	47300.00	3326.00	8630.00	8630.00	690.80	9870.00	10294.00	9288.00	9218.00

5. INDUSTRY AND MINING

5.1 Large Scale Industry ..	2372.50	2372.50	215.00	460.20	460.20	23.00	488.50	539.00	443.00	441.80
5.2 Mineral Development ..	95.00	6.00	3.83	12.00	..	0.75	20.00	21.00	23.00	19.00
5.3 Village and Small Industries	2010.00	1338.87	1.00	205.00	114.75	1.00	450.50	469.94	473.00	411.56
Total 5. Industry and Mining	4477.50	3717.37	219.83	677.20	574.95	24.75	959.00	1029.94	939.00	872.36

STATEMENT II—(concl'd).

(Rupees in lakhs)

Head of Development	Fourth Plan Outlay			1969-70			1970-71	1971-72	1972-73	1973-74
	Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange	Total	Total	Total	Total
1	2	3	4	5	6	7	8	9	10	11
6. TRANSPORT AND COMMUNICATIONS										
6.1 Roads	5000.00	5000.00	4.00	625.60	625.00	0.50	775.00	1000.00	1200.00	1400.00
6.2 Road Transport ..	500.00	500.00	3.00	100.00	100.00	1.00	125.00	125.00	100.00	50.00
6.3 Tourism	50.00	..	..	16.78	..	..	16.12	9.56	6.81	6.73
Total 6. Transport and Communications ..	5550.00	5500.00	7.00	735.78	725.00	1.50	916.12	1134.56	1306.81	1456.73
7. SOCIAL SERVICES										
7.1 General Education ..	5294.69	691.26	16.92	571.08	62.05	7.48	833.30	1027.95	1267.87	1594.49
7.2 Technical Education ..	1048.00	239.46	88.50	180.00	48.49	12.40	206.28	220.58	223.43	217.31
7.4 Health and Family Planning	3550.00	1655.03	24.40	380.00	147.39	6.50	691.75	880.09	834.82	763.34
7.5 Water Supply and Sanitation	1800.00	1074.62	20.00	400.00	139.85	4.00	350.00	350.00	350.00	350.00
7.6 Housing and Urban Development ..	700.00	554.50	..	60.00	42.00	..	130.00	175.00	175.00	160.00
7.7 Welfare of Backward Classes	720.00	19.50	..	62.00	2.50	..	146.59	161.00	169.83	180.18
7.8 Social Welfare	100.00	12.00	..	11.00	..	..	19.28	23.79	24.96	20.97
7.9 Craftsmen Training and Labour Welfare	363.53	177.36	..	117.83	60.82	..	135.35	55.87	25.34	29.14
7.10 Public Co-operation ..	..	..	..	..	..	..	..	..	..	..
Total 7. Social Services ..	13576.22	4334.13	149.82	1781.91	503.10	30.38	2512.95	2894.68	3071.25	3315.43

8. MISCELLANEOUS

8.1	Statistics	..	..	20.30	..	..	1.00	..	..	4.35	4.80	5.08	4.98
8.2	Information and Publicity	..	..	20.00	..	..	4.00	..	..	4.13	3.76	3.79	4.32
8.4	Hill and Border Area	..	..	2000.00	1430.17	11.48	349.96	251.60	1.45	467.15	426.66	391.87	364.36
8.5	Evaluation	..	..	2.81	..	..	0.77	..	..	0.51	0.49	0.51	0.53
8.6	Others	..	..	218.17	..	..	99.74	..	..	103.38	6.00	5.55	3.50
Total 8. Miscellaneous		..	..	2261.28	1430.17	11.48	455.47	251.60	1.45	579.52	441.80	406.80	377.69
GRAND TOTAL (Heads):		..	..	95100.00	72085.52	3901.89	16100.00	12526.61	793.88	19357.67	20474.80	19614.28	19553.25

STATEMENT II-A

Distribution of outlays under the State's Supplementary Fourth Five-Year Plan

(Rupees in lakhs)

Head of Development/Sector	Rs. 951 Crores Plan	Additional outlay of Rs.127.50 crores	Rs.1,078 Crores Plan
1	2	3	4
1.1. Agricultural Production	5,710.00	500.00*	6,210.00
1.2. Minor Irrigation	9,600.00	..	9,600.00
1.3. Soil Conservation	2,140.00	..	2,140.00
1.4. Ayacut Development .. ..	..	..	..
Total 1. Agricultural Programmes	17,450.00	500.00	17,950.00
2.1. Animal Husbandry	550.00	150.00	700.00
2.2. Dairying and Milk Supply	400.00	..	400.00
2.3. Forests	1,300.00	..	1,300.00
2.4. Fisheries	90.00	..	90.00
2.5. Warehousing	130.00	..	130.00
Total 2. Allied Programmes	2,470.00	150.00	2,620.00
Total 1 and 2. Agricultural and Allied programmes	19,920.00	650.00	20,570.00
3.1. Co-operation	900.00	500.00	1,400.00
3.2. Community Development	1,015.00	..	1,015.00
3.3. Panchayats	100.00	..	100.00
Total 3. Co-operation and Community Development	2,015.00	500.00	2,515.00
4.1. Irrigation	9,000.00	3,550.00	12,550.00
4.2. Flood Control	800.00	..	800.00
4.3. Power	37,500.00	3,350.00	40,850.00
Total 4. Irrigation and Power	47,300.00	6,900.00	54,200.00
5.1. Large Scale Industry	2,372.50	..	2,372.50
5.2. Mineral Development	95.00	..	95.00
5.3. Village and Small Industries	2,010.00	..	2,010.00
Total 5. INDUSTRY AND MINING	4,477.50	..	4,477.50

*For Landless Labour.

STATEMENT II A—(Concl'd.)

(Rupees in lakhs)

Head of Development/Sector	Rs. 951 Crores Plan	Additional outlay of Rs. 127.50 crores	Rs. 1,078 Crores Plan
1	2	3	4
6.1. Roads	5000.00	500.00	5500.00
6.2. Road Transport	500.00	..	500.00
6.3. Tourism	50.00	..	50.00
Total 6. Transport and Communications ..	5550.00	500.00	6050.00
7.1. General Education	5294.69	500.00	5794.69
7.2. Technical Education	1048.00	..	1048.00
7.4. Health and Family Planning	3550.00	200.00	3750.00
7.5. Water Supply	1800.00	1200.00	3000.00
7.6. Housing and Urban Development	700.00	500.00	1200.00
7.7. Welfare of Backward Classes	720.00	700.00	1420.00
7.8. Social Welfare	100.00	..	100.00
7.9. Labour and Labour Welfare	363.53	..	363.53
7.10. Public Co-operation .. .. .	..	..	..
Total 7. Social Services	13576.22	3100.00	16676.22
8.1. Statistics	20.30	..	20.30
8.2. Information and Publicity	20.00	..	20.00
8.4. Hill and Border Areas	2000.00	..	2000.00
8.5. Evaluation	2.81	..	2.81
8.6. Others—			
(1) Rural Manpower	163.00	300.00	463.00
(2) Additional outlay for Backward areas .. .. .	..	450.00	450.00
(3) Youth and Child Programmes .. .. .	..	350.00	350.00
(4) Others	55.17	..	55.17
Total 8. Miscellaneous	2261.28	1100.00	3361.28
GRAND TOTAL (HEADS 1—8)	95100.00	12750.00	107850.00

Serial number	Head/Sub-Head	1969-70			1970-71		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
I. AGRICULTURE AND ALLIED PROGRAMMES							
(i) Agricultural Production							
1	Improved Seed Programme	40.02	11.01	..	61.23	8.63	..
2	Manures and Fertilizers ..	136.46	133.46	1.00	133.49	98.19	1.00
3	Plant Protection ..	103.32	..	..	145.53	..	..
4	Agricultural Implements ..	10.00	10.00	..	27.17	16.44	..
5	Commercial Crops ..	96.26	41.94	..	109.88	45.79	..
6	Agricultural Education ..	50.37	1.50	..	62.35	5.51	..
7	Agricultural Research ..	13.86	1.37	..	33.70	1.63	0.03
8	Extension, Training and Farmer's Education ..	41.32	1.00	..	39.24	1.00	..
9	Agricultural Statistics ..	1.72	..	..	1.66	..	..
10	Intensive Cultivation Programme (I.A.D.P., I.A.A.P., H.V.P., etc.)	6.07	..	..	59.97	..	..
11	Land Development ..	..	..	..	..	..	..
12	Consolidation of Holdings ..	410.00	..	..	410.00	..	..
13	Others ..	28.24	1.41	..	91.58	51.34	..
	Total ..	937.64	201.69	1.00	1,175.80	228.53	1.03
(ii) Minor Irrigation							
1	Lift Irrigation from streams, reservoirs etc. ..	240.00	240.00	..	235.00	235.00	..
2	Installation of electric pumps	30.00	30.00	..	35.00	35.00	..
3	Installation of diesel pumps	35.00	35.00	..	40.00	40.00	..
4	Others ..	1,505.00	1,163.00	32.00	1,635.00	1,316.80	33.00
	Total ..	1,810.00	1,468.00	32.00	1,945.00	1,626.80	33.00

MENT III

Plan Outlays

(Rupees in lakhs)

1971-72			1972-73			1973-74			Fourth Plan Outlay		
Total	Capital	Foreign	Total	Capital	Foreign	Total	Capital	Foreign	Total	Capital	Foreign
		Exchange			Exchange			Exchange			Exchange
9	10	11	12	13	14	15	16	17	18	19	20
57.76	8.01	..	53.72	3.50	..	48.71	2.81	..	261.44	33.96	..
155.50	114.74	1.00	148.88	96.64	1.00	146.77	115.48	1.00	721.10	558.51	5.00
147.66	..	..	153.40	..	..	157.29	..	..	707.20	..	..
26.33	17.12	..	19.99	16.44	..	19.92	16.25	..	103.41	76.25	..
132.80	64.39	..	158.75	77.69	..	102.58	34.05	..	600.27	263.86	..
66.52	7.34	..	58.40	2.11	..	41.53	..	..	279.17	16.46	..
39.02	1.26	0.03	29.88	0.47	0.03	22.87	..	0.03	139.33	4.73	0.12
45.27	1.00	..	46.08	1.00	..	46.89	1.00	..	218.80	5.00	..
1.69	..	..	1.72	..	..	1.76	..	..	8.55	..	..
90.19	..	..	70.85	..	..	71.41	..	..	298.49	..	..
..
414.00	..	..	405.00	..	..	361.00	..	..	2,000.00	..	..
89.51	49.31	..	90.92	51.16	..	71.99	32.03	..	372.24	185.25	..
1,266.25	263.17	1.03	1,237.59	249.01	1.03	1,092.72	201.62	1.03	5,710.00	1,144.02	5.12
260.00	260.00	..	280.00	280.00	..	310.50	310.50	..	1,325.50	1,325.50	..
40.00	40.00	..	40.00	40.00	..	40.00	40.00	..	185.00	185.00	..
45.00	45.00	..	50.00	50.00	..	45.00	45.00	..	215.00	215.00	..
1,616.00	1,332.80	25.00	1,595.00	1,341.80	20.00	1,523.50	1,297.30	..	7,874.50	6,452.50	110.00
1,961.00	1,677.80	25.00	1,965.00	1,711.80	20.00	1,919.00	1,692.80	..	9,600.00	8,178.00	110.00

STATEMENT

Serial number	Head/Sub-head	1969-70			1970-71		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
(iii) Co-operation							
1	Credit	24.98	..	..	43.09	2.50	..
2	Marketing	6.64	3.90	..	60.90	44.76	..
3	Processing other than Sugar Factories and Larger Processing units.						
4	Co-operative Sugar Factories ..	10.00	10.00	..	20.00	20.00	..
5	Co-operative Farming	1.00	0.59	..	4.30	3.88	..
6	Co-operative Training and Education ..	5.05	..	..	11.09	..	..
7	Administration	5.60	..	..	14.69	..	..
8	Others	3.73	1.74	..	20.60	16.26	..
Total		57.00	16.23	..	174.67	87.40	..
II. IRRIGATION AND POWER							
(i) Irrigation and Flood Control							
1 Irrigation—							
	(a) Continuing	1,563.00	1,563.00	303.80	1,768.00	1,768.00	250.70
	(b) New	118.00	118.00	..	111.00	111.00	..
2	Flood Control, Drainage Anti-water-logging and Anti-Sea erosion ..	124.54	124.54	..	165.00	165.00	..
3	Investigation and Research	24.46	24.46	1.00	31.00	31.00	1.00
	(a) Irrigation	19.00	19.00	1.00	21.00	21.00	1.00
	(b) Flood Control	5.46	5.46	..	10.00	10.00	..
Total		1830.00	1830.00	304.80	2075.00	2075.00	251.70
(ii) Power							
1	Generation	3,490.00	3490.00	82.00	4,160.00	4,160.00	153.00
2	Transmission and Distribution ..	1,975.00	1,975.00	300.00	2,240.00	2,240.00	300.00
3	Rural Electrification	1,300.00	1,300.00	4.00	1,300.00	1,300.00	4.00
4	Investigation	15.00	15.00	..	50.00	50.00	..
5	Miscellaneous (Small Hill Schemes) ..	20.00	20.00	..	45.00	45.00	..
Total		6,800.00	6,800.00	386.00	7,795.00	7,795.00	457.00

III—(contd.)

(Rupees in lakhs)

1971-72			1972-73			1973-74			Fourth Plan Outlay		
Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
9	10	11	12	13	14	15	16	17	18	19	20
67.40	3.00	..	69.90	3.25	..	90.45	3.50	..	295.82	12.25	..
96.98	44.16	..	84.25	28.59	..	86.22	28.76	..	334.99	150.17	..
20.00	20.00	..	..	..	..	..	..	..	50.00	50.00	..
4.72	4.30	..	4.72	4.30	..	4.89	4.46	..	19.63	17.53	..
12.99	..	..	14.36	..	..	15.61	..	..	59.10	..	..
16.51	..	..	23.78	..	..	19.42	..	..	80.00	..	..
18.25	14.60	..	9.08	6.35	..	8.80	6.05	..	60.46	45.00	..
236.85	86.06	..	206.09	42.49	..	225.39	42.77	..	900.00	274.95	..
1,582.00	1,682.00	189.50	1,342.00	1,342.00	75.00	1,077.00	1,077.00	50.00	7,432.00	7,432.00	869.00
195.00	195.00	..	435.00	435.00	..	593.00	593.00	..	1,452.00	1,452.00	..
150.00	160.00	..	150.00	150.00	..	128.00	128.00	..	727.54	727.54	..
38.00	38.00	..	43.00	43.00	..	52.00	52.00	..	188.46	188.46	2.00
23.00	23.00	..	23.00	23.00	..	30.00	30.00	..	116.00	116.00	2.00
15.00	15.00	..	20.00	20.00	..	22.00	22.00	..	72.46	72.46	..
2,075.00	2,075.00	189.50	1,970.00	1,970.00	75.00	1,850.00	1,850.00	50.00	9,800.00	9,800.00	871.00
4,314.00	4,314.00	154.00	3,068.00	3,068.00	31.00	2,741.00	2,741.00	15.00	17,773.00	17,773.00	435.00
2,500.00	2,500.00	400.00	2,750.00	2,750.00	400.00	3,062.00	3,062.00	600.00	12,527.00	12,527.00	2,000.00
1,300.00	1,300.00	4.00	1,400.00	1,400.00	4.00	1,500.00	1,500.00	4.00	6,800.00	6,800.00	20.00
50.00	50.00	..	50.00	50.00	..	35.00	35.00	..	200.00	200.00	..
55.00	55.00	..	50.00	50.00	..	30.00	30.00	..	200.00	200.00	..
8,219.00	8,219.00	558.00	7,318.00	7,318.00	435.00	7,368.00	7,368.00	619.00	37,500.00	37,500.00	2,455.00

STATEMENT

Serial number	Head/Sub-head	1969-70			1970-71		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
III. INDUSTRY AND MINING							
(i) Large and Medium Industries:							
1	State Industrial Projects ..	105.20	105.20	23.00	136.00	136.00	48.00
2	Industrial Areas ..	98.50	98.50	..	81.50	81.50	..
3	Industrial Development Corporation ..	80.00	80.00	..	120.00	120.00	..
4	State Finance Corporation ..	40.00	40.00	..	55.00	55.00	..
5	Others ..	136.50	136.50	..	96.00	96.00	..
	Total ..	460.20	460.20	23.00	488.50	488.50	48.00
(ii) Village and Small Industries:							
1	Handloom Industry ..	30.49	8.87	..	99.79	55.14	..
2	Powerlooms ..	3.00	3.00	..	..	..	..
3	Small Scale Industries ..	136.70	87.28	..	305.75	252.80	..
4	Industrial Estates—						
	(a) Rural ..	..	..	..	..	..	..
	(b) Semi-urban, and ..	14.70	13.75	..	14.83	13.75	..
	(c) Urban ..	..	..	..	..	..	..
5	Handicrafts ..	9.41	0.85	..	15.08	9.50	..
6	Sericulture ..	6.20	1.00	1.00	10.30	5.50	..
7	Coir Industry ..	..	..	..	..	..	..
8	Khadi and Village Industries (State share only) ..	4.50	..	..	4.75	..	..
	Total ..	205.00	114.75	1.00	450.50	336.69	..
IV. ROADS							
1	Spill-over schemes ..	581.50	581.50	..	563.50	563.50	..
2	New schemes ..	43.50	43.50	0.50	211.50	211.50	0.75
	Total ..	625.00	625.00	0.50	775.00	775.00	0.75
Of which							
	(a) Rural Roads ..	190.00	190.00	..	180.00	180.00	..
	(b) Others ..	435.00	435.00	0.50	595.00	595.00	0.75
	Total ..	625.00	625.00	0.50	775.00	775.00	0.75

III—(contd.)

(Rupees in lakhs)

1971-72			1972-73			1973-74			Fourth Plan Outlay		
Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
9	10	11	12	13	14	15	16	17	18	19	20
223.00	223.00	48.00	173.00	173.00	48.00	173.80	173.80	48.00	811.00	811.00	215.00
70.00	70.00	..	50.00	50.00	..	50.00	50.00	..	350.00	350.00	..
100.00	100.00	..	100.00	100.00	..	100.00	100.00	..	500.00	500.00	..
60.00	60.00	..	70.00	70.00	..	75.00	75.00	..	300.00	300.00	..
86.00	86.00	..	50.00	50.00	..	43.00	43.00	..	411.50	411.50	..
539.00	539.00	48.00	443.00	443.00	48.00	441.80	441.80	48.00	2372.50	2372.50	215.00
91.77	44.79	..	84.56	31.66	..	74.38	31.68	..	381.00	172.14	..
..	..	..	..	..	..	7.25	7.25	..	10.25	10.25	..
337.15	288.00	..	347.14	299.40	..	297.01	133.38	..	1423.75	1060.86	..
10.10	9.00	..	6.13	5.00	..	4.24	3.00	..	50.00	44.50	..
15.22	8.08	..	16.32	8.69	..	13.98	10.15	..	70.00	37.27	..
10.70	3.50	..	13.60	3.35	..	9.20	0.50	..	50.00	13.85	1.00
..
5.00	..	..	5.25	..	..	5.50	..	..	25.00	..	..
469.94	353.37	..	473.00	348.10	..	411.56	185.96	..	2010.00	1338.87	1.00
459.50	459.50	..	422.50	422.50	..	407.00	407.00	..	2434.00	2434.00	..
540.50	540.50	0.75	777.50	777.50	1.00	993.00	993.00	1.00	2566.00	2566.00	4.00
1000.00	1000.00	0.75	1200.00	1200.00	1.00	1400.00	1400.00	1.00	5000.00	5000.00	4.00
170.00	170.00	..	180.00	180.00	..	222.00	222.00	..	942.00	942.00	..
830.00	830.00	0.75	1020.00	1020.00	1.00	1178.00	1178.00	1.00	4058.00	4058.00	4.00
1,000.00	1000.00	0.75	1200.00	1200.00	1.00	1400.00	1400.00	1.00	5000.00	5000.00	4.00

STATEMENT

Serial number	Head/Sub-head	1969-70			1970-71		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
V. General Education							
1	Elementary Education	377.38	8.32	..	483.59	24.52	..
2	Secondary Education	83.54	33.08	..	174.66	72.61	..
3	University Education	59.00	3.00	..	93.59	14.01	..
4	Teachers's Training—						
	(a) Elementary	15.58	11.00	..	31.51	23.21	..
	(b) Secondary	6.01	1.00	..	12.70	5.40	..
5	Social Education	4.50	..	..	7.26	..	..
6	Other Education Programmes	9.07	0.20	..	17.59	0.77	..
7	Cultural Programmes	16.00	5.45	7.48	12.40	0.44	8.68
	Total	571.08	62.05	7.48	833.30	140.96	8.68
VI. Health							
1	Medical Education	164.90	100.80	..	270.84	176.70	..
2	Training Programme	8.72	2.45	..	22.10	15.53	..
3	Hospitals and Dispensaries	108.13	29.27	6.50	206.77	75.11	9.00
4	Primary Health Centres	30.97	3.80	..	85.07	44.80	..
5	Control of Communicable Diseases	13.43	4.60	..	31.42	14.70	..
6	Family Planning	..	..	..	..	..	..
7	Indigenous System of Medicines	18.01	1.23	..	19.59	1.52	..
8	Other Programmes	35.84	5.24	..	55.96	13.60	..
	Total	380.00	147.39	6.50	691.75	341.96	9.00
VII. Water Supply and Sanitation							
1	<i>Urban</i>						
	(a) Water Supply	59.60	59.60	..	89.60	89.60	..
	(b) Sewerage and Drainage	90.00	67.50	4.00	130.00	97.50	4.00
	(c) Environmental sanitation and water supply.	0.40	..	..	0.40	..	..
2	<i>Rural</i>						
	(a) Piped	148.00	11.25	..	128.00	11.25	..
	(b) Wells	..	..	..	..	..	..
	(c) Sewerage	2.00	1.50	..	2.00	1.50	..
	(d) Drinking Water Supply in Hill Region.	100.00	..	..	..	..	..
	Total	400.00	139.85	4.00	350.00	199.85	4.00

III—(contd.)

(Rs. in lakhs)

1971-72			1972-73			1973-74			Fourth Plan Outlay		
Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
9	10	11	12	13	14	15	16	17	18	19	20
614.02	27.51	...	825.42	11.91	...	1,146.38	...	...	3,446.79	72.26	...
216.46	96.35	...	225.94	93.71	...	223.40	65.29	—	924.00	361.04	—
119.62	9.50	...	140.76	9.50	..	140.54	5.00	...	553.51	41.01	...
30.57	21.25	...	27.89	15.14	...	36.53	22.97	...	142.08	93.57	—
11.54	5.00	...	10.01	2.62	...	7.34	2.00	...	47.60	16.02	...
10.00	1.50	...	9.99	...	...	11.52	...	...	43.27	1.50	—
18.84	1.00	...	20.81	2.00	...	21.13	1.40	...	87.44	5.37	—
6.90	1.47	0.49	7.05	1.58	0.05	7.65	1.55	0.22	50.00	10.49	16.92
1027.95	163.58	0.49	1267.87	136.46	0.05	1594.49	98.21	0.22	5,294.69	601.26	16.92
296.53	192.18	..	277.30	172.36	..	290.43	184.15	..	1,300.00	826.19	..
50.89	37.63	..	58.54	34.07	..	44.75	9.43	..	185.00	99.07	—
311.63	161.67	8.50	325.93	166.74	..	249.71	66.09	..	1,202.17	498.88	24.00
94.81	50.15	..	61.42	10.96	..	63.43	2.55	..	335.70	112.26	—
35.09	20.12	..	24.47	9.82	..	24.71	2.75	..	129.12	51.99	—
..
24.41	2.55	..	25.21	1.15	..	27.78	0.70	..	115.00	7.15	..
66.73	20.47	0.40	61.95	14.20	..	62.53	5.98	..	283.01	59.49	0.40
880.09	484.77	8.90	834.82	409.30	..	763.34	271.61	..	3550.00	1655.03	24.40
89.60	89.60	} 4.00	109.60	109.60	} 4.00	109.60	109.60	} 4.00	458.00	458.00	} 20.00
160.00	120.00		200.00	150.00		200.00	150.00		780.00	585.00	
0.40	..	..	0.40	..	..	0.40	..	..	2.00	—	—
98.50	5.00	..	40.00	..	..	40.00	..	..	454.50	27.50	..
..	—
1.50	1.12	..	..	..	..	..	..	..	5.50	4.12	..
..	..	..	..	..	..	..	..	..	100.00	..	..
350.00	215.72	4.00	350.00	259.60	4.00	350.00	259.60	4.00	1800.00	1074.62	20.00

Serial no.	Head/Sub-head	1969-70			1970-71		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
VIII. Housing and Urban Development							
1	Subsidised Industrial Housing	27.00	21.00	...	66.00	55.00	...
2	Low Income-Group Housing	16.00	16.00	...	40.00	40.00	...
3	Village Housing Projects	...	...	...	...	...	...
4	Plantation Labour Housing	...	...	...	...	...	...
5	Slum Clearance	7.00	5.00	...	12.00	7.50	...
6	Others	10.00	...	...	12.00	...	...
	Total	60.00	42.00	...	130.00	102.50	...
IX. Town Planning and Urban Development—							
1	Town Planning	...	...	...	...	...	...
2	Urban Development	...	...	...	...	...	...
	Total	...	...	...	...	...	...
X. Welfare of Backward Classes—							
<i>I. Scheduled Tribes—</i>							
(a)	Education	5.51	0.50	...	12.12	3.20	...
(b)	Economic Uplift	5.40	...	...	5.40	...	...
(c)	Health, Housing and other schemes	4.97	...	...	4.28	...	...
	Total	15.88	0.50	...	21.80	3.20	...
<i>II. Scheduled Castes—</i>							
(a)	Education	34.22	...	...	60.30	...	...
(b)	Economic Uplift	5.00	2.00	...	28.95	5.50	...
(c)	Health, Housing and other schemes	3.29	...	...	26.30	...	...
	Total	42.51	2.00	...	115.55	5.50	...
<i>III. Other Backward Classes—</i>							
(a)	Education	3.61	...	...	9.64	...	...
(b)	Economic Uplift	...	...	...	...	...	...
(c)	Health Housing and other schemes	...	...	...	...	...	...
	Total	3.61	...	...	9.64	...	...
	GRAND TOTAL	62.00	2.50	...	146.99	8.70	...

III--(contd.)

(Rupees. in lakhs)

1971-72			1972-73			1973-74			Fourth Plan outlay		
Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
9	10	11	12	13	14	15	16	17	18	19	20
86.00	72.00	..	85.00	71.00	..	76.00	64.00	..	340.00	283.00	..
60.00	60.00	..	60.00	60.00	..	54.00	54.00	..	230.00	230.00	..
..
..
16.00	10.00	..	15.00	9.50	..	15.00	9.50	..	65.00	41.50	..
13.00	..	..	15.00	..	..	15.00	..	..	65.00	..	..
175.00	142.00	..	175.00	140.50	..	160.00	127.50	..	700.00	554.50	..
..
..
..
13.88	2.95	..	13.30	1.35	..	12.79	..	..	57.60	8.00	..
5.40	..	..	5.40	..	..	5.40	..	..	27.00	..	..
4.36	..	..	4.41	..	..	4.48	..	..	22.50	..	..
23.64	2.95	..	23.11	1.35	..	22.67	..	..	107.10	8.00	..
66.26	..	..	71.77	..	..	77.25	..	..	309.80	..	..
30.55	4.40	..	30.40	..	..	31.70	..	..	126.60	11.90	..
29.30	..	..	32.30	..	..	35.31	..	..	126.50	..	..
126.11	4.40	..	134.47	..	..	144.26	..	..	562.90	11.90	..
11.25	..	..	12.25	..	..	13.25	..	..	50.00	..	..
..
..
11.25	..	..	12.25	..	..	13.25	..	..	50.00	..	..
161.00	7.35	..	169.83	1.35	..	180.18	..	..	720.00	19.90	..

STATEMENT

Serial no.	Head/Sub-Head	1969-70			1970-71		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8
XI. Social Welfare—							
1	Family and Child Welfare Project	..	..	..	..	..	..
2	Women Welfare	..	0.24	..	..	1.23	..
3	Child Welfare	..	0.05	..	..	1.06	1.00
4	Eradication of Beggary	..	1.50	..	..	1.80	..
5	Social Defence	..	3.65	..	..	7.52	2.00
6	Rehabilitation of Handicapped	..	2.93	..	..	5.72	1.00
7	Grant-in-aid to Voluntary organizations	..	1.82	..	..	0.97	..
8	Training Research and administration	..	0.81	..	..	0.98	..
	Total	..	11.00	..	..	19.28	4.00
XII. Craftsmen Training and Labour Welfare							
1	Craftsmen Training	..	106.75	60.56	..	118.50	80.00
2	Apprenticeship Training	..	3.25	..	..	3.80	..
3	Part-time classes for industrial workers	..	..	..	..	1.00	..
4	Rural Training Institute	..	..	..	..	..	..
5	Employment services scheme	..	2.00	..	..	3.48	..
6	Labour Welfare/Administration	..	5.83	0.26	..	8.57	1.40
7	Employees State Insurance*	..	..	..	..	..	..
	Total	..	117.83	60.72	..	135.35	81.40
XIII. Information and Publicity—							
1	Community Listening Scheme	..	0.50	..	..	0.33	..
2	Others	..	3.50	..	..	3.80	..
	Total	..	4.00	..	..	4.13	..

*Forms part of

III—(concl.)

(Rupees in lakhs)

1971-72			1972-73			1973-74			Fourth Plan Outlay		
Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
9	10	11	12	13	14	15	16	17	18	19	20
..
1.49	..	..	1.51	..	..	1.53	..	..	6.00	..	..
2.16	1.00	..	2.32	1.00	..	1.47	..	..	7.06	3.00	..
1.90	..	..	1.95	..	..	2.00	..	..	9.15	..	..
9.99	2.00	..	10.24	2.00	..	8.39	..	..	39.79	6.00	..
6.11	1.00	..	6.31	1.00	..	5.43	..	..	26.50	3.00	..
1.05	..	..	1.15	..	..	1.51	..	..	6.50	..	..
1.09	..	..	1.48	..	..	0.64	..	..	5.00	..	..
23.79	4.00	..	24.96	4.00	..	20.97	..	..	100.00	12.00	..
36.03	34.45	..	1.60	..	..	1.65	..	..	264.50	175.00	..
5.10	..	..	6.22	..	..	7.63	..	..	26.00	..	..
..	..	..	..	..	..	..	..	..	1.00	..	..
..
4.67	..	..	5.26	..	..	5.59	..	..	21.00	..	..
10.10	0.92	..	12.26	0.10	..	14.27	..	..	51.03	2.68	..
..
55.87	35.37	..	25.34	0.10	..	29.14	..	..	363.53	777.68	..
0.36	..	..	0.39	..	..	0.92	..	..	2.50	..	..
3.40	..	..	3.40	..	..	3.40	..	..	17.50	..	..
3.76	..	..	3.79	..	..	4.32	..	..	20.00	..	..

Health Sector.

Summary Statement IV – Centrally Sponsored Schemes

(Rupees in lakhs)

Head of Development/Sector	Fourth Plan Outlay	1969-70 Outlay
1	2	3
1.1 Agricultural Production	440.34	68.96
1.3 Soil Conservation	250.00	36.60
1.4 Ayacut Development	17.02	7.02
Total 1. Agricultural Programmes	707.36	112.58
2.1 Animal Husbandry	13.30	1.41
2.3 Forests	7.50	1.50
Total 2. Allied Programmes	20.80	2.91
Total, Agricultural and Allied Programmes	728.16	115.49
3.1 Co-operation	356.00	82.00
Total 3. Co-operation and Community Development	356.00	82.00
4.3 Power	175.00	25.00
Total 4. Irrigation and Power	175.00	25.00
5.3 Village and Small Industries	304.15	49.62
Total 5. Industry and Mining	304.15	49.62
6.1 Roads	1719.11	504.26
Total 6. Transport and Communications	1719.11	504.26
7.1 General Education	161.74	28.44
7.2 Technical Education	150.00	31.00
7.4. Health and Family Planning	8657.66	1407.03
7.5 Water Supply and Sanitation	110.00	18.60
7.7 Welfare of Backward Classes	1025.65	184.43
Total 7. Social Services	10105.05	1669.50
8.1 Statistics	5.00	0.85
Total 8. Miscellaneous	5.00	0.85
GRAND TOTAL	13392.47	2446.72

STATEMENT V
Physical Programmes

Item	Unit	Estimated level of achievement							
		1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	
1	2	3	4	5	6	7	8	9	
J. Agriculture and Forestry									
<i>Area under Forests</i>									
(i) Area under work plans	Sq. Km.	33,145	33,145	33,145	33,970	35,500	37,000	37,000
(ii) Area under quick-growing/economic plantations	Do.	1,028	1,238	1,458	1,678	1,898	2,118	2,338
(iii) Area under fuel plantations	Do.	13	26	39	52	65	78	91
(iv) Others (including ravines, etc.)	Do.	1,538	1,630	1,726	1,873	1,952	2,061	2,222
(v) Area not under work plans	Do.	6,173	6,173	6,173	5,348	3,818	2,318	2,318
Total area under Forests (i) and (v)*		.. ..	39,318	39,318	39,318	39,318	39,318	39,318	39,318
<hr/>									
Area under Orchards (Fruits)	'000 hectares.	133.55	145.69	157.83	169.97	182.11	194.25	206.39
Net cropped area	Do.	17,353	17,402	17,450	17,499	17,547	17,596	17,645
Gross cropped area	'000 hectares.	22,726	23,433	23,811	24,238	24,629	25,076	25,487
Irrigated area	Do.	7,413	8,049	8,801	9,628	10,508	11,501	12,311

* Note—Areas under (ii), (iii) and (iv) above are already included under (i) and (v) above.

STATEMENT V—(contd.)

Item	Unit	Estimated level of achievement						
		1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
1	2	3	4	5	6	7	8	9
Area under important Food Crop								
<i>A—Kharif</i>								
<i>Rice (Cereals)</i>								
(a) Area	Lakh hectares	41.77	43.99	44.60	45.32	46.01	46.62	47.23
(b) Irrigated area	Do.	7.06	8.30	9.71	11.33	13.15	14.97	16.30
(c) Production	Lakh tonnes	30.78	32.60	35.43	39.72	44.00	48.27	52.57
<i>Juar</i>								
(a) Area	Lakh hectares	9.21	9.31	9.31	9.21	9.11	9.00	8.90
(b) Irrigated area	Do.	0.10	0.20	0.24	0.29	0.34	0.39	0.45
(c) Production	Lakh tonnes	4.84	5.00	5.09	5.15	5.21	5.27	5.34
<i>Bajra</i>								
(a) Area	Lakh hectares	10.58	10.93	10.52	10.42	10.32	10.22	10.12
(b) Irrigated area	Do.	0.06	0.20	0.24	0.29	0.34	0.39	0.45
(c) Production	Lakh tonnes	4.85	5.00	4.90	4.96	5.02	5.08	5.14

<i>Maize</i>			
(a) Area	..	..	... Lakh hectares.
(b) Irrigated area		..	... Do.
(c) Production	..	...	... Lakh tonnes.
<i>B. Rabi (Cereals)</i>			
<i>Wheat</i>			
(a) Area	..	...	... Lakh hectares.
(b) Irrigated area		...	... Do.
(c) Production	..	...	... Lakh tonnes.
<i>Barley</i>			
(a) Area	..	..	... Lakh hectares.
(b) Irrigated area		...	... Do.
(c) Production	..	...	... Lakh tonnes.
<i>C. Total Pulses</i>			
<i>(Kharif and Rabi)</i>			
(a) Area	..	...	... Lakh hectares.
(b) Irrigated area		...	... Do.
(c) Production	..	...	... Lakh tonnes.
<i>Area under Commercial Crops</i>			
<i>Oilseeds</i>			
(a) Area	..	...	... Lakh hectares.
(b) Irrigated area		...	... Do.
(c) Production	..	..	... Lakh tonnes.

14.72	16.19	16.39	16.84	17.30	17.75	18.21
1.70	2.31	2.63	2.91	3.23	3.75	4.55
11.67	12.00	13.04	14.16	15.28	16.40	17.52
50.46	47.18	47.78	48.47	49.00	49.81	50.46
26.87	29.74	31.97	34.40	36.62	39.05	40.44
59.53	64.00	70.06	77.51	84.96	92.41	98.24
15.77	16.19	16.59	16.81	17.03	17.25	17.47
7.98	9.81	10.25	11.06	11.85	12.65	13.35
17.00	17.38	17.68	18.23	18.76	19.30	18.86
40.65	42.49	43.91	45.53	44.52	48.76	50.38
11.66	14.09	14.50	15.43	16.33	17.61	18.57
34.71	36.47	37.46	38.90	40.36	41.80	43.24
7.12	7.45	7.57	7.73	7.93	8.09	8.26
0.40	0.42	0.44	0.46	0.48	0.50	0.52
15.84	17.68	18.83	19.62	20.42	21.08	22.00

STATEMENT V—(contd.).

Items	Unit	Estimated level of achievement						
		1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
1	2	3	4	5	6	7	8	9
<i>Cotton</i>								
(a) Area	Lakh hectares	0.66	0.81	0.81	0.81	0.81	0.81	0.81
(b) Irrigated area	Do.	0.59	0.62	0.66	0.70	0.74	0.82	0.81
(c) Production	Lakh bales	0.30	0.60	0.65	0.70	0.75	0.85	1.00
<i>Sugarcane</i>								
(a) Area	Lakh hectares	9.93	14.23	14.47	14.71	14.95	15.19	15.43
(b) Irrigated area	Do.	6.66	8.71	9.55	10.49	11.70	12.92	13.71
(c) Production (Gur)	Lakh tonnes	40.00	50.00	50.00	55.88	59.76	63.64	67.50
<i>Jute—</i>								
(a) Area	Lakh hectares	0.23	0.23	0.24	0.24	0.24	0.24	0.24
(b) Irrigated area	„	..	..	..	..	..	..	..
(c) Production	Lakh bales	1.87	2.04	2.07	2.10	2.13	2.16	2.20
<i>Area under high yielding varieties—</i>								
<i>(a) Exotic varieties and Hybrids :</i>								
Mexican wheat	Lakh hectares	8.88	12.14	14.57	17.00	19.42	22.66	26.30
Paddy T.N.I.	„	1.32	3.44	4.86	6.88	10.12	11.33	12.14
Hybrid Maize	„	0.53	1.42	2.02	2.43	2.83	3.24	4.05

Hybrid Jowar	..	..	..	..	0.07	0.20	0.24	0.28	0.32	0.36	0.40
Hybrid Bajra	..	..	..	..	0.27	0.20	0.24	0.28	0.32	0.36	0.40
Total (a)	..	..	..	..	11.07	17.40	21.93	26.87	33.01	37.95	43.29
(b) Area under improved varieties (State High yielding) :											
U.P. Paddy	..	..	..	Lakh hectares	1.65	3.24	4.05	4.86	5.67	6.47	8.09
U.P. Maize	..	..	..	..	2.01	2.02	4.05	4.86	5.26	5.67	6.07
U.P. Wheat	..	..	..	..	6.99	8.09	8.09	9.71	11.33	12.95	14.16
Total (b)	..	..	..	..	10.65	13.35	16.19	19.43	22.26	25.09	28.32
Total High Yielding Varieties	..	..	..	..	21.72	30.75	38.12	46.30	55.27	63.04	71.61
Other Local Improved State varieties	..	..	..	..	97.94	100.29	97.50	93.81	85.46	86.31	82.30
Total area under improved seed	..	..	..	..	119.66	131.04	135.62	140.21	140.73	149.35	153.91
A. High yielding varieties—seed distributed	..	..	..	Lakh qtls.	0.90	0.94	0.73	0.86	1.00	1.16	1.38
B. Improved varieties—Seed distributed	..	..	..	..	0.96	0.47	1.38	1.48	1.61	1.68	1.75
Total	..	..	..	..	1.86	1.41	2.11	2.34	2.61	2.84	3.13
Fertilizer distributed											
Nitrogenous (N)	..	..	..	Lakh tonnes	1.16	2.00	3.86	4.77	5.68	6.59	7.50
Phosphatic (P ₂ O ₅)	..	..	..	..	0.34	0.50	1.98	2.46	2.94	3.42	3.90
Potassic (K ₂ O)	..	..	..	..	0.18	0.36	1.44	1.76	2.07	2.38	2.70
Area under green manures	..	..	..	Lakh hectares	6.28	6.88	6.69	8.50	9.71	10.93	12.14

Item	Unit	Estimated level of achievement						
		1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
1	2	3	4	5	6	7	8	9
Area covered by Plant Protection—								
(i) Food Crops	Lakh hectares	35.18	35.64	45.38	55.19	64.99	74.78	84.60
(ii) Commercial Crops	„	0.40	3.65	3.95	4.18	4.41	4.65	4.88
(iii) Horticulture	„	0.09	1.18	1.26	1.33	1.42	1.51	1.57
	Total ..	35.67	40.47	50.59	60.70	70.82	80.94	91.05
Soil Conservation on agricultural land (Additional).	Lakh hectares	1.27	1.30	1.87	1.99	2.13	2.24	2.35
Soil Conservation in catchment area of River Valley Project.	„	0.28	0.34	0.42	0.51	0.60	0.70	0.79
Area Consolidated	Lakh hectares	83.01	98.08	93.49	97.81	104.63	111.17	115.38
Number of Regulated Markets—								
(a) Self supporting	No.	14	19	10	7	..	..	..
(b) Non-self-supporting	„	15	68	60	57	..	..	..
Storage capacity available :								
(a) For fertilizers—Agri. Deptt.	Lakh tonnes	1.30	1.40	1.83	1.99	2.18	2.29	2.48
Co-op. Deptt.	„	2.32	3.15	3.15	3.26	3.66	4.11	4.15
	Total ..	3.62	4.55	4.98	5.25	5.84	6.40	6.63

<i>(b) For Foodgrains</i>										
Co-operative Department	..	..	Lakh tonnes	1.67	2.22	2.28	2.41	2.58	2.77	2.94
Food and Civil Supplies	..	..	..	0.52	0.73	0.90	1.10	1.10	1.10	1.10
		Total	..	2.19	2.95	3.18	3.51	3.68	3.87	4.04

<i>Animal Husbandry</i>										
Veterinary Hospital/Dispensaries (Additional)	..	No.		993	..	8	8	5	9	5
Artificial Insemination Centres (Additional)	..	No.		616	..	18	16	12	15	12
Stockmen Centres (Additional)	..	No.		1,396	2	140	72	72	108	100
Area under fodder crops for which seed at subsidised rate is supplied by the department	..	Hectares		7,682	14,080	11,320	11,250	11,492	11,590	11,908
Key Village Blocks	..	No.		76	..	..	..	..	..	..
Cattle Breeding Farms	..	No.		14	..	..	..	..	..	..
Sheep Breeding Farms	..	No.		8	..	..	..	..	..	..
Sheep and Wool Extension Centre	..	No.		86	..	2	2	2	2	2
Wool Grading	..	No.		..	..	..	1	..	..	..
Marketing Centres	..	No.		1	..	..	8	..	..	..
Production of Animal Products										
(a) Milk/Milk products	..	Lakh quts.		483.50	495.46	507.50	519.80	532.40	545.33	558.52
(b) Meat	..	Lakh kg.		1,184.20	1,225.52	1,268.30	1,312.65	1,358.50	1,405.50	1,454.97
(c) Wool	..	Lakh kg.		20.52	20.96	21.40	21.85	22.30	22.75	23.24
Number of Government Poultry Farms	..	No.		45	..	1	..	..	..	..
Number of Poultry Co-operative Societies	..	"		264	..	1	..	2	2	..

STATEMENT V—(Contd.)

Item	Unit	Estimated level of achievement						
		1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
1	2	3	4	5	6	7	8	9
Number of Poultry Farmers trained:								
(a) Short term course	No.	..	..	..	..	..	..	..
(b) Long term course	No.	49	80	..	..	..	..	..
Intensive Egg and Poultry Production-cum-Marketing Centre	No.	..	..	..	..	..	..	..
Intensive Poultry Development Blocks	No.	5	..	2	..	..	..	..
<i>Fisheries</i>								
1. Mechanisation of boats	No.	..	..	..	..	..	..	..
2. Cold storages for storage of fish	No.	..	..	..	..	..	..	..
3. Co-operative Marketing Societies	No.	..	..	..	..	..	..	..
4. Landing and berthing facilities provided in harbours	..	..	..	..	..	..	..	..
5. Loan advanced to fishermen's co-operatives	Rs. lakhs	0.10	..	0.30	0.20	0.20	0.20	0.20
6. Fingerlings distributed	Lakh no.	177.52	273.00	86.00	139.00	176.00	204.50	204.50
7. Number of fish seed farms	No.	..	8	8	14	7	3	..
2. CO-OPERATION								
(i) Primary Co-operative Societies (Agricultural Credit)								
Number	No.	28,890	25,493	1,500	1,500	1,500	1,500	1,500
Membership	Lakh no.	55.99	51.00	61.0	64.50	63.00	71.50	75.00

Share Capital of members	Rs. crores	0.98	1.23	2.23	3.73	5.23	6.73	8.23	
Deposits of members	Do.	1.26	2.46	2.96	3.46	3.96	4.46	4.96	
(ii) Agricultural Credit									
(a) Short term advances during the year	Do.	43.16	45.00	50.00	57.50	65.00	72.50	80.00	
Amount outstanding at the end of the year	Do.	63.08			No targets fixed.				
(b) Medium term advances during the year	Rs. crores	3.71	6.00	6.00	6.00	6.00	6.00	6.00	
Amount outstanding at the end of the year		No targets fixed.							
(c) Long term advances during the year	Do.	10.77	27.00	27.00	27.00	28.00	29.00	29.00	
Amount outstanding at the end of the year	Do.	23.12	45.96		No targets fixed.				
(iii) Primary Marketing Societies									
Business handled during the year	Nos.	203	203	203	208	213	213	213	
	Rs. crores	18.00	19.00		No targets fixed.				
(iv) Processing Societies (Small sized)—									
<i>I—Type of Societies—</i>									
(a) Rice Mills									
(b) Sugar factories (open pan)	No.	104	104	104	106	108	110	112	
(c) Others (Groundnut decorticating etc.)									
(d) Cotton ginning	Do.	..	..	..	..	..	..	..
(e) Manure mixing	Do.	25	25	25	25	25	25	25	
<i>II—Business handled—</i>									
(a) Rice mills	Rs. lakhs	54.00	60.00		No targets fixed.				
(b) Sugar factories (open pan)	Do.	11.40	13.00		No targets fixed.				
(c) Others	Do.	32.00	35.00		No targets fixed.				
(v) Processing Societies (Large-sized) —									
(i) Hydrogenation Factory	No.	..	..	1	1	1	1	1	
(i) Fertilizer Granulating Unit	Do.	..	..	..	..	1	1	1	

STATEMENT V—(Contd.)

Item	Unit	Estimated level of achievement						
		1967-58	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
1	2	3	4	5	6	7	8	9
3. MAJOR AND MEDIUM IRRIGATION								
Estimated area under Irrigation—								
(a) Potential	'000 hectares.	3,568.79	3,608.48	3,693.86	3,815.27	3,955.69	4,432.66	4,890.91
(b) Utilization	Do.	3,490.20	3,539.61	3,584.13	3,644.83	3,730.62	3,968.94	4,270.08
4. POWER								
(i) Installed capacity	'000kw	1,186.64	1,310.04	1,507.12	1,586.99	1,866.99	2,276.99	2,479.49
(ii) Electricity generated	Lakh KWH.	37,540	53,020	59,520	66,650	73,050	87,800	1,01,300
(iii) Electricity sold	Do.	29,020	41,400	47,000	52,600	57,500	69,400	79,000
(iv) <i>Rural Electrification</i> —								
(a) Village electrified	Nos.	4,812	4,852	5,272	5,692	6,112	6,532	6,952
(b) Pump sets energised (including private tube-wells)	Do.	43,356	65,513	89,513	1,13,513	1,40,513	1,74,513	2,08,513
Under normal programme	Do.	40,380	58,049	74,049	90,049	1,08,049	1,33,049	1,58,049
Under Consumer Deposit Scheme	Do.	2,976	7,464	15,464	23,464	32,464	41,464	50,464
5. TRANSPORT								
I. Surfaced roads	'000 km.	28.83	29.21	29.46	29.71	30.10	30.91	31.90
II. Unsurfaced	Do.	N.A.	N.A.	..	..	..	..	..
III. Villages not connected by roads .. .. .	..	Information not available.						

6. GENERAL EDUCATION

Enrolment—

(i) Classes I—V—Total	..	In lakhs	96.85	99.35	102.11	104.94	106.85	108.76	110.68
Percentage of the population of this age-group	..	Per cent	85	85	85	85	85	85	85
Girls .. .. .	..	In lakhs	35.18	36.45	37.48	38.53	39.29	40.05	40.82
Percentage of the population in this age-group	..	Per cent	64	65	65	65	65	65	65
(ii) Classes VI—VIII—Total	..	In lakhs	15.39	16.59	17.40	18.22	19.06	19.92	20.81
Percentage of the population in this age-group	..	Per cent	25.82	26.77	27.01	27.23	27.86	28.51	29.16
Girls .. .. .	..	In lakhs	2.78	3.19	3.44	3.69	3.95	4.22	4.51
Percentage of the population in this age-group	..	Per cent	9.64	10.33	11.14	11.55	12.06	12.58	13.14
(iii) Classes IX—XII—Total	..	In lakhs	8.80	9.30	9.90	10.50	11.10	11.70	12.30
Percentage of the population in this age-group	..	Per cent	12.42	12.78	13.25	13.68	13.91	14.13	14.33
Girls .. .. .	..	In lakhs	1.43	1.59	1.79	1.99	2.19	2.39	2.59
Percentage of the population in this age-group	..	Per cent	4.18	4.52	4.89	5.36	5.69	5.99	6.28
(iv) University/College Total (Arts, Science and Commerce)	..	In lakhs	1.43	1.50	1.58	1.66	1.74	1.82	1.90
Science only .. .. .	..	Do.	0.31	0.33	0.35	0.37	0.39	0.41	0.43
Teachers in (—) Elementary schools	..	No.	2,30,132	2,38,277	2,51,470	2,61,62	2,29,639	2,82,132	3,00,255
Percentage trained	..	Per cent	80	87	90	93	97	98	99
Secondary Schools	..	No.	37,311	39,311	41,311	43,311	45,311	47,311	49,311
Percentage trained	..	Per cent	85	88	90	92	94	96	96

STATEMENT V—(Contd.).

Item	Unit	Estimated level of achievement						
		1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
1	2	3	4	5	6	7	8	9
<i>Technical Education</i>								
I. Engineering Colleges								
(a) Number of Institutions	No.	7	7	7	7	7	7	7
(b) Sanctioned annual admission capacity	Do.	1,565	930	1,565	1,565	1,565	1,565	1,565
(c) Outturn	Do.	754	778	826	1,356	1,260	740	1200
2. Diploma Institutions								
(a) Number of Institutions	No.	33	34	34	34	34	36	36
(b) Sanctioned annual admit capacity	Do.	5,690	5,750	5,970	6,200	6,310	6,420	6,550
(c) Outturn	Do.	2,214	2,916	3,400	3,400	3,500	3,50	3,500
7. HEALTH								
(i) Hospitals and Dispensaries								
(a) Urban	No.	933	938	943	947	952	964	972
(b) Rural	Do.	2,102	2,119	2,136	2,158	2,150	2,222	2,254
(ii) Beds								
(a) Urban Hospitals and Dispensaries	Do.	26,483	26,761	27,845	28,205	29,075	29,495	33,350
(b) Rural Hospitals and Dispensaries	Do.	5,959	5,981	6,117	6,295	6,473	6,651	6,847
(iii) Primary Health Centres	Do.	875	875	875	875	875	875	875

304

(iv) Training of Nurses

Institutions	..	..	..	No.
Annual intake	..	..	..	No.
Annual outturn	..	..	..	No.

(v) Control of diseases

T. B. Clinics	..	..	..	No.
Leprosy Control, Units	..	..	..	No.
S. E. T. Units	..	..	..	No.
V. D. Clinics	..	..	..	No.
Filaria Units (up-grading)	..	..	..	No.
Filaria Clinics	..	..	..	No.

(vi) Maternity and Child Welfare Centres

(vii) Medical Colleges—

(a) Medical Colleges	..	..	..	No.
(b) Annual Admissions	..	..	..	No.
(c) Annual outturn	..	..	..	No.

8. WATER SUPPLY AND SANITATION

(a) Urban

Corporation Towns—

(i) Augmentation of protected water supply	..	..	..	Million gallons.
(ii) Population covered	..	..	..	Millions

Other Towns—

(i) Towns covered	..	..	..	No.
(ii) Population covered	..	..	..	Millions

11	11	11	11	11	12	12
1,085	1,085	1,085	1,085	1,085	1,285	1,685
192	160	190	200	200	200	200
10	22	29	36	43	50	5
14	14	16	20	24	24	24
30	55	65	80	105	105	105
10	10	12	14	16	18	208
10	10	12	12	12	12	12
..	...	4	8	12	14	16
3500	3,500	3500	3,500	3,500	[3,500	3,500

7	8	8	8	8	8	9
786	874	874	924	924	924	974
382	502	502	522	522	522	522

140	150	160	170	175	180	185
3.03	3.03	3.03	3.03	3.03	3.03	3.03

74	74	74	74	74	75	76
7.486	7.486	7.486	7,486	7.486	8.176	8.576

STATEMENT V--(Contd.)

Item	Unit	Estimated level of achievement						
		1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
1	2	3	4	5	6	7	8	9
<i>(b) Rural</i>								
Piped Water Supply—								
(i) Villages covered	No.	2,494	3,214	3,314	3,539	3,854	4,104	4,354
(ii) Population covered	Millions	0.89	1.22	1.28	1.43	1.68	1.82	1.97
Simple Wells—								
(i) Villages covered	No.	--	--	--	--	--	--	--
(ii) Population covered	Millions	--	--	--	--	--	--	--
9. HOUSING								
(i) Subsidised Industrial Housing	No. of houses.	362	480	432	1,056	1,376	1,360	1,216
(ii) Slum Clearance	Do.	51	160	140	240	320	300	300
(iii) Low Income Group Housing	Do.	385	112	128	320	480	480	432
(iv) Village Housing	Do.	--	--	--	--	--	--	--
(v) Land Acquisition and Development					N. A.			
10. TRAINING OF CRAFTSMEN								
Institutions—								
(a) Existing	No.	48	48	49	49	49	49	49
(b) New		--	1	--	--	--	--	--

Intake			
Existing	..	..	No.

11. WELFARE OF BACKWARD CLASSES

(i) T. D. Blocks	..	..	No.
(ii) Training Staff by Categories	..	..	No.
(iii) Post-Matric Scholarships—			
(a) General Courses	..	..	No.
(b) Technical and Professional Courses	..	..	No.

22,580	24,784	24,784	24,784	24,784	24,784	24,784
...	—	—	—
...
20,931	22,000	24,449	26,136	27,786	29,436	31,081
9,000	10,000	11,000	12,000	13,000	14,000	15,000

STATEMENT VI

Check list in respect of principal projects costing Rs.5 crores and above

IRRIGATION

1. RAMGANGA RIVER PROJECT

Name of project with brief description and location—The project envisages construction of earth dam and appurtenant works for storage of water, a power station at the main dam for generation of power and a diversion system and extension and remodelling of irrigation channels on Upper and Lower Ganga Canal, Agra Canal and Ramganga Canal systems. The main earth dam and appurtenant works of the project are located on river Ramganga two miles upstream of Kalagarh in district Garhwal. The main dam will be 125 metres high and provide gross storage of 1.78 m. cft. and utilisable storage of 1.58 m. cft. Water will be released from the reservoir through a power house having an installed capacity of 180 MW, the annual average generation being 404×10^6 KWH. The released water will be diverted at Hareoli, about 16 m. downstream into feeder channel by means of a weir 1,124 ft. long. The feeder channels about 50 miles long will discharge into river Ganga near Garhmukteshwar and discharge will be picked up at Narora Head Work for utilisation in Lower Ganga Canal system. The supplies now being passed on from Upper Ganga Canal to Lower Ganga Canal will then be saved and utilised on this system, and on Agra Canal through Jani escape.

2. *Gestation period in years*—12 years.

3. *Cost estimates and outlays (Rupees in round lakhs)*—

(a) *Total estimated cost*—

(i) *Total*—6,800.

(ii) *Foreign Exchange*—1,690.

(b) *Outlay and expenditure.*

Expenditure up to 1968-69		Outlay Proposed 1969-74		1969-70 Approved		1970-71 Proposed		Three years Total (1971-74)		Balance after 1973-74, if any	
Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12
4,523	1,080	2,277	610	600	300	600	197	1,077	113		

4. Programme of output/benefits—

Item	Unit	Progress up to 1968-69	Target for Fourth Plan	Phasing		
				1969-70	1970-71	End of 1973-74
1. Irrigation Potential ..	'000 hectares.	89.03	655.99			655.99
2. Utilisation ..	..	89.03	287.32			287.32

5. Training of technical and managerial personnel—

	1966-67	1967-68	1968-69	1969-70	1970-71
Technical ..	2	1	3	..	..
Managerial ..	1	1	1	1	..

6. Employment (Man-years)—

	1966-67	1967-68	1968-69	Fourth Plan				
				1969-70	1970-71	1971-72	1972-73	1973-74
I. Additional requirements:								
<i>Skilled—</i>								
(a) Technical ..	180	110	30	130	30	10	..	..
(b) Non-Technical ..	270	170	50	200	50	15	..	..
Unskilled ..	6,000	2,000	12,000	4,000	1,000	..	..	..
II. Staff required on continuing basis:								
						1968-69	End of Fourth Plan	
<i>Skilled—</i>								
(a) Technical ..	..	..	..	..	..	..	10	250
(b) Non-technical ..	..	..	..	..	..	..	25	1,700
Unskilled ..	..	..	..	..	..	..	200	8,000

2. GANDAK CANAL PROJECT

1. *Name of project with brief description and location*—This is a joint venture of U. P. and Bihar. It involves the construction of a barrage (by Bihar Government) across the Great Gandak River in Nepal territory about 11 miles north of U. P./Nepal border. The State of U. P. is concerned with the construction of Main Western Gandak Canal in U. P. from mile 11.6, 81.5–295 along with its distribution system. The head discharge of the main Western Gandak Canal is 15,800 cusecs only and U. P.'s share is about 7,300 cusecs. The channel is proposed to be lined from mile 11.6 to 81.5–295 to prevent seepage and consequent waterlogging.

The length of channels of the distribution system in U. P. is about 1,347.50 miles (including remodelling of Naraini Canal System). The project envisages irrigation of 2.64 lakh hectares annually in district Deoria and Gorakhpur.

2. *Gestation period in years*—12 years.

3. *Cost estimates and outlays (Rupees in round lakhs)*—

(a) *Total estimated cost*—

(i) *Total cost*—3,335 (U. P. share).

(ii) *Foreign Exchange*—34.

(b) *Outlays and expenditure*—

Expenditure up to 1968-69		Outlay Proposed 1969-70		1969-70 Approved		1970-71 Proposed		Three years Total (1971-74)		Balance after 1973-74, if any	
Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12
2,073	34	1,262	..	400	..	400	..	462	..	..	..

4. *Programme of output/benefits*—

Item	Unit	Progress up to 1968-69	Target for Fourth Plan	Phasing		
				1969-70	1970-71	End of 1973-74
1. Irrigation Potential ..	'000 hectares.	..	264.16	..	80.94	264.16
2. Utilisation ..	..	..	174.01	..	20.23	174.01

5. Training of technical and managerial personnel—Nil.

6. Employment (Man-years)—

	1966-67	1967-68	1968-69	Fourth Plan				
				1969-70	1970-71	1971-72	1972-73	1973-74
I. Additional requirements†								
<i>Skilled—</i>								
(a) Technical ..	110	70	130	30	20	10	..	..
(b) Non-Technical	150	150	180	50	30	15	..	..
Unskilled ..	8,000	8,000	12,000	4,000	4,000	1,000	..	..
II Staff required on continuing basis†								
<i>Skilled—</i>								
							1968-69	End of Fourth Plan
(a) Technical ..							10	85
(b) Non-technical							25	620
Unskilled ..							300	1,500

6. Employment (Man-years) —

	1966- 67	1967- 68	1968- 69	Fourth Plan				
				1969- 70	1970 71	1971- 72	1972- 73	1973- 74
I. Additional requirements:								
<i>Skilled—</i>								
(a) Technical	110	230	120	160	110	50
(b) Non-Technical	150	300	180	220	125	75
Unskilled	150	6,000	6,000	8,000	6,000	2,000
II. Staff required on continuing basis—					1968-69	End of Fourth Plan		
<i>Skilled—</i>								
(a) Technical					..	10		
(b) Non-Technical					..	15		
Unskilled					..	100		

POWER

I. YAMUNA HYDEL SCHEME STAGE I AND II

1. *Name of project with brief description and location :*

Yamuna Hydel Stage I.

Under this scheme two power stations have been constructed, one at Dhakrani and the other at Dhalipur on a 8.9 miles (14 Km.) long lined power channel of 7,000 cusecs (198.22 cumecs) capacity utilizing a drop of 65 ft. (19.8 m.) and 100 ft. (34.48 m.) respectively. The water of river Yamuna is diverted into the power channel by a 1,696 ft. (517 m.) long barrage constructed across Yamuna at Dakpathar. Three units of 11.25 MW at Dhakrani and three units of 17 MW at Dhalipur are to be installed ultimately. The first two units at both these power stations were commissioned in the last year of the Third Plan and are in commercial operation.

Yamuna Hydel Stage II.

This scheme envisages construction of two power stations—an underground power station at Chhibro (4×60 MW) and a conventional surface power station at Khodri (4×30 MW)—utilizing the water of river Tons, a major tributary of river Yamuna. From the diversion dam at Ichari, the Tons water will be carried through a 21 ft. (7 m.) dia. and 4 miles (6.28 Km.) long head race tunnel to the under ground power station at Chhibro where a drop of 407 ft. (124 m.) will be harnessed for developing 200 MW peak power. Another head race tunnel of the same diameter and about 3.23 miles (5.2 Km.) long will carry the water discharged from Chhibro across the intervening hills to surface power station at Khodri, where a drop of 210 ft. (64 m.) shall be utilized to generate 100 MW peak power.

Power generated at these two power stations will be carried through single circuit 220 KV transmission lines to the U. P. Grid at Roorkee and Muradnagar from where it will be distributed to the whole of western Uttar Pradesh for industrial, agricultural and domestic uses.

2. *Gestation period in years : 5 to 6 years.*

3. *Cost estimates and outlays (Rs. in round lakhs).*

(a) Total estimated cost—

(i) Total 8,700

(ii) Foreign Exchange : 710

(b) Outlay and expenditure :

Expenditure up to 1968-69		Outlay Proposed 1969-74		1969-70 Approved		1970-71 Proposed		Three years Total (1971-74)		Balance after 1973-74 if any	
Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12
4,290	625	4,410	85	806	40	1,150	30	2,454	15	..	..

4. Programme of output/benefits :

Item	Unit	Progress up to 1968-69	Target for Fourth Plan	Phasing			
				1969-70	1970-71	End of 1973-74	
Installed capacity—							
Stage I	.. MW	56.50	28.25	28.25	..	28.25	
Stage II	.. MW	..	360	..	..	360

5. Training of technical and managerial personnel :

Some of the engineers will be trained abroad under various technical training aid programmes viz. Colombo Plan, Indo-French, U. N., etc. Besides, engineers will also undergo training against specific projects in manufacturer's works both in India and abroad. In addition engineers will also be trained on similar works under construction in the country.

6. Employment (Man-years) :

	1966-67	1967-68	1968-69	Fourth Plan				
				1969-70	1970-71	1971-72	1972-73	1973-74

I. Additional requirements :

Skilled—

(a) Technical .. 200 250 300 400 540 500 500 400

(b) Non-Technical .. 200 250 300 350 400 400 400 350

Unskilled .. 1,000 1,500 2,000 3,000 4,000 6,000 6,000 5,000

II. Staff required on continuation :

Skilled—

(a) Technical .. 300 400

(b) Non-Technical .. 300 350

Unskilled .. 2,000 5,000

2. OBRA HYDEL SCHEME

1. Name of project with brief description and location :

The Obra Hydel scheme envisages construction of an earth and rock fill dam on the river Rihand 20 miles (32 km.) downstream of Rihand Dam for storage of tail race water from Rihand power station to develop 99 MW of power potential. The power house located at the toe of the dam will have three machines of 33 MW each and will pass a peak discharge of about 6,000 cusecs (170 cumecs) through one unit at a design head of 66.93 feet (20.4 metres).

This scheme which is scheduled for completion in 1969-70 will generate annually 279 million units. The cost of the generation will be 8.10 paise per unit.

2. Gestation period in years : 4 to 5 years.

3. Cost estimates and outlays (Rs. in round lakhs).

(a) Total estimated cost—

(i) Total : 2424

(ii) Foreign Exchange : 130

(b) Outlay and expenditure :

Expenditure up to 1963-69		Outlay proposed 1969-74		1969-70 Approved		1970-71 Proposed		Three years Total (1971-74)		Balance after 1973-74, if any	
Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12
1874	122	596	8	350	5	140	..	106	..	44	..

4. Programme of output/benefits :

Item	Unit	Progress up to 1968-69	Target for Fourth Plan	Phasing		
				1969-70	1970-71	End of 1973-74
Installed Capacity	.. MW	..	99	99	..	99

5. Training of technical and managerial personnel :

Some of the engineers will be trained abroad under various technical training aid programmes, viz. Colombo Plan, Indo-French, U. N. etc. Besides,

engineers will also undergo training against specific projects in manufacturer's works both in India and abroad. In addition engineers will also be trained on similar works under construction in the country.

6. *Employment (Man-years)* :

	1966-67	1967-68	1968-69	Fourth Plan					
				1969-70	1970-71	1971-72	1972-73	1973-74	
I. Additional requirements :									
<i>Skilled—</i>									
(a) Technical ..	125	150	175	175	150	100	75	75	
(b) Non-Technical ..	150	175	200	200	200	150	60	60	
Unskilled ..	1,000	1,500	2,000	2,000	1,000	250	125	125	
II. Staff required on continuing basis :									
									<u>End of Fourth Plan</u>
<i>Skilled—</i>									
(a) Technical ..	..	..	..	..	175				75
(b) Non-Technical ..	..	..	..	..	200				60
Unskilled ..	..	..	..	..	2,000				125

3. RAMGANGA HYDEL SCHEME

1. Name of project with brief description and location :

The Ramganga Hydel project is a multipurpose scheme and envisages construction of a 412 ft. (125.6 m.) high earth and rock fill dam across river Ramganga near Kalagarh along with a power station at the toe of the dam on the right bank of the river. Three units of 60 MW each shall be installed at the power station. This will be the second storage scheme in Uttar Pradesh—the first being Rihand. A pondage of about 5,000 a-cft. will be provided about 16 miles (25.7 Km.) down stream of the main reservoir to enable Ramganga Power Station to work as a peaking station.

The generating plant for this scheme has been ordered with Messrs. Heavy Electricals Ltd., Bhopal. The scheme is scheduled to be completed by 1973-74. On completion it will generate 404 million units. The cost of the generation will be about 6.5 paise per unit.

2. Gestation period in years : 6 to 7 years.

3. Cost estimates and outlays (Rs. in round lakhs).

(a) Total estimated cost—

(i) Total : 2764

(ii) Foreign Exchange : 10

(b) Outlay and expenditure :

Expenditure up to 1968-69		Outlay proposed 1969-74		1969-70 Approved		1970-71 Proposed		Three years Total (1971-74)		Balance after 1973-74, if any	
Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12
719	8	2,040	2	500	2	500	..	1,040	..	5	..

4. Programme of output/benefits :

Item	Unit	Progress up to 1968-69	Target for Fourth Plan	Phasing		
				1969-70	1970-71	End of 1973-74
Installed capacity	MW	..	180	..	..	180

5. Training of technical and managerial personnel :

Some of the engineers will be trained abroad under various technical training aid programmes, viz. Colombo Plan, Indo-French, U. N. etc. Besides, engineers will also undergo training against specific projects in manufacturer's

works both in India and abroad. In addition engineers will also be trained on similar works under construction in the country.

6. *Employment (Man-years) :*

	1966-67	1967-68	1968-69	Fourth Plan				
				1969-70	1970-71	1971-72	1972-73	1973-74
I. Additional requirements:								
<i>Skilled—</i>								
(a) Technical ..	300	350	400	400	450	500	500	400
(b) Non-technical ..	250	300	400	450	450	450	450	400
Unskilled	1,500	3,000	3,000	5,000	5,000	6,000	5,000	4,000
II. Staff required on continuing basis:								
<i>Skilled—</i>								
(a) Technical ..				400			400	
(b) Non-technical ..				400			400	
Unskilled ..				3,000			4,000	

4. MANERI—BHALI HYDEL SCHEME STAGE I

1. Name of project with brief description and location :

Maneri—Bhali Hydel Project envisages the utilization of a drop of about 1,100 feet available in river Bhagirathi between villages Maneri and Bhali, the former being 10 miles upstream of Uttarkashi and the other 10 miles downstream for generation of power. The scheme has two stages. Stage 1, consists of 134.5 feet high concrete gravity diversion dam at Maneri, a 15.5 ft. dia. concrete lined tunnel of 4.85 miles in length from Maneri to Uttarkashi and a 105 MW surface power station with three units of 35 MW each opposite Uttarkashi operating under a gross head of 575 ft. The project on completion will have a peak capacity of 99 MW and will generate annually 550 million units. The cost of the generation will be 3.34 paise.

2. Gestation period in years : 5 to 6 years.

3. Cost estimates and outlays (Rs. in round lakhs) :

(a) Total estimated cost—

(i) Total : 2,000.

(ii) Foreign Exchange : 190.

(b) Outlay and expenditure :

Expenditure up to 1968-69		Outlay proposed 1969-74		1969-70 approved		1970-71 proposed		Three years total (1971-74)		Balance after 1973-74, if any	
Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12
..	..	1,700	190	20	..	300	70	1,380	120	300	..

4. Programme of output/benefits :

Item	Unit	Progress up to 1968-69	Target for Fourth Plan	Phasing		
				1969-70	1970-71	End of 1973-74
Installed capacity	MW	..	..	..	..	..

5. Training of technical and managerial personnel :

Some of the engineers will be trained abroad under various technical training aid programmes, viz. Colombo Plan, Indo-French, U. N. etc. Besides, engineers will also undergo training against specific projects in manufacturer's works both in India and abroad. In addition engineers will also be trained on similar works under construction in the country.

6. *Employment (Man-years) :*

	1966-	1967-	1968-	Fourth Plan				
	67	68	69	1969-	1970-	1971-	1972-	1973-
				70	71	72	73	74
I. Additional requirements :								
<i>Skilled—</i>								
(a) Technical	75	175	200	250	200
(b) Non-technical	75	125	175	175	150
Unskilled	700	1,500	2,00	2,500	2,000
II. Staff required on continuing basis :								
				1968-69		End of Fourth Plan		
<i>Skilled—</i>								
(a) Technical					200
(b) Non-Technical					150
Unskilled					2,000

5. HARDUAGANJ STAGE III

1. *Name of project with brief description and location :*

Harduaganj Stage III envisages installation of two 50 MW machines as extension of Harduaganj Power Station. The plant for the scheme has been received from USSR. The project has a generating capacity of 700 million K.W.H. The cost of generation is about 7 paise per unit.

2. *Gestation period in years: 3 to 4 years.*3. *Cost estimates and outlays (Rs. in round lakhs).*

(a) Total estimated cost—

(i) Total : 2,000.

(ii) Foreign Exchange : Nil.

(b) Outlay and expenditure :

Expenditure up to 1968-69		Outlay proposed 1969-70		1969-70 approved		1970-71 proposed		Three years total (1971-74)		Balance after 1973-74, if any	
Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12
1,894	..	106	..	100	..	6	..	..	..	..	..

4. *Programme of output/benefits :*

Item	Unit	Progress up to 1968-69	Target for Fourth Plan	Phasing		
				1969-70	1970-71	End of 1973-74
Installed capacity	MW	100	..	..	..	-

5. *Training of technical and managerial personnel : Nil.*

6. *Employment (Man-years)* :

	1966- 67	1967- 68	1968- 69	Fourth Plan				
				1969- 70	1970- 71	1971- 72	1972- 73	1973- 74
I. Additional requirements:								
<i>Skilled—</i>								
(a) Technical		100	300	500	500	300	250	250
(b) Non-technical		100	150	200	200	100	70	70
Unskilled		300	750	1,500	500	150	150	150
II. Staff required on continuing basis:								
				1968-69		End of Fourth Plan		
<i>Skilled—</i>								
(a) Technical				300		250		
(b) Non-Technical				150		70		
Unskilled				750		150		

6. HARDUAGANJ—STAGE IV

1. *Name of project with brief description and location :*

As further extension of Harduaganj Power Station, two machines of 55 MW each are envisaged to be installed under this project. Machines are being supplied by Messrs. Bharat Heavy Electricals. The project on completion will generate 722 million K. W. H. annually and the generating cost is estimated to be 7.5 paise per unit.

2. *Gestation period in years : 3 to 4 years.*3. *Cost estimates and outlays : (Rs. in round lakhs).*

(a) Total estimated cost—

(i) Total : 2,156.

(ii) Foreign Exchange : Nil.

(b) Outlay and expenditure :

Expenditure up to 1968-69		Outlay proposed 1969-74		1969-70 approved		1970-71 proposed		Three years total (1971-74)		Balance after 1973-74, if any	
Total Foreign Exchange		Total Foreign Exchange		Total Foreign Exchange		Total Foreign Exchange		Total Foreign Exchange		Total Foreign Exchange	
1	2	3	4	5	6	7	8	9	10	11	12
1,225	..	931	..	500	..	300	..	131	..	..	..

4. *Programme of output/benefits :*

Item	Unit	Progress up to 1968-69	Targets for Fourth Plan	Phasing		
				1969-70	1970-71	End of 1973-74
Installed capacity	MW	..	110	..	110	110

5. *Training of technical and managerial personnel :*

Some of the engineers will be trained abroad under various technical training aid programmes, viz. Colombo Plan, Indo-French, U. N., etc. Besides, engineers will also undergo training against specific projects in manufacturer's works both in India and abroad. In addition engineers will also be trained on similar works under construction in the country.

6. *Employment (Man-years) :*

	1966- 67	1967- 68	1968- 69	Fourth Plan				
				1969- 70	1970- 71	1971- 72	1972- 73	1973- 74
I. Additional requirements—								
<i>Skilled—</i>								
(a) Technical	300	500	300	250	250	250	250	250
(b) Non-Technical	150	200	200	150	100	70	70	70
Unskilled	500	1,500	750	450	150	150	150	150
II. Staff required on continuing basis ;								
				1968-69	End of Fourth Plan			
<i>Skilled—</i>								
(a) Technical				300	250			
(b) Non-technical				200	70			
Unskilled				750	150			

7. OBRA THERMAL

1. *Name of project with brief description and location :*

On account of many important reasons Obra has been found to be a very suitable site for creating a big centre for thermal generation. Consequently it has been decided to develop thermal power generation at Obra in various stages. Under Obra Thermal scheme five machines of 50 MW each have been proposed to be installed. This plant is being procured from USSR. The project has a generating capacity of 1,533 million K. W. H. and the cost per unit is estimated to be 7 paise per unit.

2. *Gestation period in years : 4 to 5 years.*3. *Cost estimates and outlays (Rs. in round lakhs).*

(a) Total estimated cost—

(i) Total : 4057.

(ii) Foreign Exchange : Nil.

(b) Outlay and expenditure :

Expenditure up to 1968-69		Outlay proposed 1969-74		1969-70 approved		1970-71 proposed		Three years total (1971-74)		Balance after 1973-74, if any	
Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12
4,109	..	(—)52	..	20	..	(—)72	..	..	..	..	..

4. *Programme of output/benefits :*

Item	Unit	Progress up to 1968-69	Target for Fourth Plan	Phasing		
				1969-70	1970-71	End of 1973-74
Installed capacity	MW	150	100	100	..	100

5. *Training of technical and managerial personnel : Nil.*

6. *Employment (Man-years) :*

	1966- 67	1967- 68	1968- 69	Fourth Plan				
				1969- 70	1970- 71	1971- 72	1972- 73	1973- 74
I. Additional requirements:								
<i>Skilled—</i>								
(a) Technical	1,500	2,500	2,500	2,000	1,500	1,000	600	500
(b) Non-technical	400	600	600	500	400	400	200	150
Unskilled	1,500	3,000	3,000	2,000	1,500	1,000	800	250
II. Staff required on continuing basis :								
				1968-69	End of Fourth Plan			
<i>Skilled—</i>								
(a) Technical				2,500	500			
(b) Non-Technical				600	1,500			
Unskilled				3,000	250			

8. OBRA THERMAL EXTENSION STAGE I

1. *Name of project with brief description and location :*

Under Obra Thermal Extension Stage I, it is envisaged to create an additional installed capacity of 300 MW. It will comprise of three machines of 100 MW. each. First two units will be obtained from Bharat Heavy Electricals Ltd., from amongst 5×100 MW being obtained by them from USSR. Boiler parts are being manufactured in Tiruchy units of Bharat Heavy Electricals Ltd. The project on completion will have a generating capacity of 1971 million K. W. H. The per unit cost will be about 6.25 paise.

2. *Gestation period in years : 4 to 5 years.*3. *Cost estimates and outlays (Rs. in round lakhs) :*

(a) Total estimated cost—

(i) Total : 5000.

(ii) Foreign Exchange : 60.

(b) Outlay and expenditure—

Expenditure up to 1969-69		Outlay proposed 1969-74		1969-70 Approved		1970-71 Proposed		Three years Total (1971-74)		Balance after 1973-74, if any	
Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12
586	..	4,414	60	1,117	30	1,500	20	1,797	10	..	..

4. *Programme of output/benefits :*

Item	Unit	Progress up to 1968-69	Target for Fourth Plan	Phasing		
				1969-70	1970-71	End of 1973-74
Installed capacity	MW	..	300	..	..	300

5. *Training of technical and managerial personnel :*

Some of the engineers will be trained abroad under various technical training aid programmes, viz. Colombo Plan, Indo-French, U. N., etc. Besides, engineers will also undergo training against specific projects in manufacturer's works both in India and abroad. In addition engineers will also be trained on similar works under construction in the country.

6. *Employment (Man-years) :*

	1966-67	1967-68	1968-69	Fourth Plan				
				1969-70	1970-71	1971-72	1972-73	1973-74
<i>I. Additional requirements:</i>								
<i>Skilled—</i>								
(a) Technical	..	500	1,000	1,500	2,000	2,000	1,000	600
(b) Non-technical	..	100	250	300	400	400	300	200
Unskilled	..	500	1,000	1,500	2,000	1,500	1,200	500
<i>II. Staff required on continuing basis :</i>								
<i>Skilled—</i>								
				1968-69	End of Fourth Plan			
(a) Technical				1,000	600			
(b) Non-technical				250	200			
Unskilled				1,000	500			

9. YAMUNA HYDEL SCHEME STAGE IV (PART I)

1. Name of project with brief description and location :

Yamuna Hydel Stage IV (Part I) would utilize the drop of 20.8 m. available in the river Yamuna between Dhalipur where the tail race waters of Yamuna Hydel Scheme Stage I joins the river Ahsan and Ponta Saheb. The river flow would be diverted into the 4 km. long, 5,600 cusecs (159 cumecs) capacity lined power channel by a barrage across the river Ahsan which has already been constructed under Yamuna Hydel Scheme Stage II works. A power station having 3 units of 10 MW each would be constructed on the power channel opposite Ponta Saheb. The project will contribute annually 162.82 million units. The generating cost is estimated to be 3.68 paise per unit.

2. Gestation period in years : 4 to 5 years.

3. Cost estimates and outlays : (Rs. in round lakhs).

(a) Total estimated cost—

(i) Total : 651.

(ii) Foreign Exchange : 40.

(b) Outlay and expenditure—

Expenditure up to 1968-69		Outlay proposed 1969-74		1969-70 Approved		1970-71 Proposed		Three years Total (1971-74)		Balance after 1973-74, if any	
Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12
8	..	592	40	40	5	160	25	392	10	51	..

4. Programme of output/benefits :

Item	Unit	Progress up to 1968-69	Target for Fourth Plan	Phasing		
				1969-70	1970-71	End of 1973-74
Installed capacity	MW	..	30	..	..	30

5. Training of technical and managerial personnel :

Some of the engineers will be trained abroad under various technical training aid programmes, viz. Colombo Plan, Indo-French, U. N. etc. Besides, engineers will also undergo training against specific projects in manufacturer's works both in India and abroad. In addition engineers will also be trained on similar works under construction in the country.

6. *Employment (Man-years) :*

	1966-67	1967-68	1968-69	Fourth Plan				
				1969-70	1970-71	1971-72	1972-73	1973-74
<i>I. Additional requirements—</i>								
<i>Skilled—</i>								
(a) Technical	30	100	200	200	150
(b) Non-technical	20	100	150	150	100
Unskilled	300	1,000	1,500	1,500	500
<i>II. Staff required on continuing basis—</i>								
					1968-69		End of Fourth Plan	
(a) Technical					..		150	
(b) Non-technical					..		100	
Unskilled					..		500	

10. OBRA THERMAL EXTENSION STAGE II

1. *Name of project with brief description and location :*

Obra Thermal Power Station is proposed to be extended to the second stage by installing five machines of 120 MW each. The project will contribute about 3,600 million units annually. The generating cost will be about 6 paise per unit.

2. *Gestation period in years : 4 to 5 years.*3. *Cost estimates and outlays (Rs. in round lakhs) :*

(a) Total estimated cost—

(i) Total : 8,500.

(ii) Foreign Exchange : 50.

(b) Outlay and expenditure :

Expenditure up to 1968-69		Outlay proposed 1969-74		1969-70 Approved		1970-71 Proposed		Three years Total (1971-74)		Balance after 1973-74, if any	
Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12
..	..	2,705	50	..	..	100	5	2,605	45	5,795	..

4. *Programme of output/benefits :*

Item	Unit	Progress up to 1968-69	Target for Fourth Plan	Phasing		
				1969-70	1970-71	End of 1973-74
Installed capacity	MW	..	..	..	..	..

5. *Training of technical and managerial personnel :*

Some of the engineers will be trained abroad under various technical training aid programmes, viz. Colombo Plan, Indo-French, U. N. etc. Besides, engineers will also undergo training against specific projects in manufacturer's works both in India and abroad. In addition engineers will also be trained on similar works under construction in the country.

6. *Employment (Man-years) :*

	1966- 67	1967- 68	1968- 69	Fourth Plan				
				1969- 70	1970- 71	1971- 72	1972- 73	1973- 74
I. Additional requirements—								
<i>Skilled—</i>								
(a) Technical	400	800	1,000	1,000
(b) Non-technical	200	400	400	400
<i>Unskilled</i>	1,000	2,000	2,000	2,000
II. Staff required on continuing basis—								
				1968-69	End of Fourth Plan			
<i>Skilled—</i>								
(a) Technical					..	1,000		
(b) Non-Technical					..	400		
<i>Unskilled</i>					..	2,000		

INDUSTRIES

1. Name of project with brief description and location :

Expansion of New Cement Factory at Dalla (Mirzapur).

2. Gestation period in years—5 years.

3. Cost estimates and outlays (Rs. in round lakhs) :

(a) Total estimated cost—

(i) Total: 600.

(ii) Foreign Exchange: 100.

(b) Outlay and expenditure :

Expenditure up to 1968-69		Outlay Proposed 1969-74		1969-70 Approved		1970-71 Proposed		Three years Total (1971-74)		Balance after 1973-74 if any	
Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12
..	..	600	100	..	..	100	25	500	75	..	..

4. Programme of output/benefits :

Item	Unit	Progress upto 1968-69	Target for Fourth Plan	Phasing		
				1969-70	1970-71	End of 1973-74
1	2	3	4	5	6	7
Cement production	.. In lakh tonnes.	..	4	..	..	4

5. Training of technical and managerial personnel: Nil.

6. Employment (Man-years) :

	1966-67	1967-68	1968-69	Fourth Plan				
				1969-70	1970-71	1971-72	1972-73	1973-74
I. Additional requirements—								
<i>Skilled:</i>								
(a) Technical	120	130	130	130
(b) Non-Technical	12	20	20	20
<i>Unskilled</i>								
..				..	40	50	50	50
II. Staff required on continuing basis—								
<i>Skilled:</i>								
(a) Technical	400
(b) Non-Technical	210
<i>Unskilled</i>								
..	320

N. B.—These employment estimates are based on the experience gained in setting up the C. C. F., Churk and the New Cement Factory at Dalla.

APPENDICES

Growth of irrigation potential and utilization during

Name of Scheme	Total potential envisaged in the Project	Potential expected by 1968-69	Potential proposed by the end of Fourth Plan	Potential at the end of		
				1969-70	1970-71	1971-72
1	2	3	4	5	6	7
<i>Major-Medium Irrigation Schemes</i>						
A. Pre-Plan Schemes	2,552.96	2,552.96	2,552.96	2,552.96	2,552.96	2,552.96
B. Plan Schemes completed by 1968-69 in respect of which full potential is expected to be utilized by 1968-69	686.85	686.85	686.85	686.85	686.85	686.85
C. <i>Plan Schemes completed by 1968-69 whose partial benefit will be achieved during Fourth Plan—</i>						
1. Naraini Gandak Canal	23.86	23.86	23.86	23.86	23.86	23.86
2. Lalitpur Dam	7.57	7.57	7.57	7.57	7.57	7.57
3. Tanda Pumped Canal	27.48	27.48	27.48	27.48	27.48	27.48
4. Upper Khajuri Reservoir	7.28	7.28	7.28	7.28	7.28	7.28
5. Kwano Pumped Canal	8.59	8.59	8.59	8.59	8.59	8.59
6. Jirgo Reservoir	25.90	25.90	25.90	25.90	25.90	25.90
7. Tumaria Reservoir	16.19	16.19	16.19	16.19	16.19	16.19
8. Balmiki Reservoir	6.27	6.27	6.27	6.27	6.27	6.27
9. Meja Reservoir	21.21	21.21	21.21	21.21	21.21	21.21
10. Jahangirganj Branch	13.81	13.81	13.81	31.81	31.81	31.81
11. Tumaria Extension	18.21	18.21	18.21	18.21	18.21	18.21
12. Pili Reservoir	11.48	11.48	11.48	11.48	11.48	11.48
13. Baur Reservoir	18.89	18.89	18.89	18.89	18.89	18.89
14. Moosakhand Dam	22.29	22.29	22.29	22.29	22.29	22.29
15. Gularia Dam	1.28	1.28	1.28	1.28	1.28	1.28
16. Barwa Dam	5.46	5.33	5.46	5.46	5.46	5.46
17. East Baigul Reservoir	7.24	2.92	7.24	7.24	7.24	7.24
18. Belan and Tones Canal	41.08	41.08	41.08	41.08	41.08	41.08
Total	284.09	279.64	284.09	284.09	284.09	284.09

DIX I

Fourth Plan through major-medium irrigation schemes

('000 hectares)

of the year		Utiliza- tion expected by 1968-69-	Utilization proposed by the end of Fourth Plan	Utilization at the end of the year				
1972-73	1973-74			1969-70	1970-71	1971-72	1972-73	1973-74
8	9	10	11	12	13	14	15	16
2,552.96	2,552.96	2,552.96	2,552.96	2,552.96	2,552.96	2,552.96	2,552.96	2,552.96
686.85	686.85	686.85	686.85	686.85	686.85	686.85	686.85	686.58
23.86	23.86	17.00	23.86	17.00	17.00	18.75	21.31	23.86
7.57	7.57	6.79	7.57	7.05	7.31	7.57	7.57	7.57
27.48	27.48	23.37	27.48	24.06	24.65	25.86	27.07	27.48
7.28	7.28	6.61	7.28	6.78	6.95	7.28	7.28	7.28
8.59	8.59	6.22	8.59	6.69	7.17	7.64	8.11	8.59
25.90	25.90	23.75	25.90	24.28	24.81	25.90	25.90	25.90
16.19	16.19	12.19	16.19	13.25	14.57	16.19	16.19	16.19
6.27	6.27	4.84	6.27	5.10	5.87	6.27	6.27	6.27
21.21	21.21	10.23	21.21	10.92	12.01	13.71	17.11	21.21
13.81	31.81	11.61	13.81	11.94	12.67	13.41	13.81	13.81
18.21	18.21	9.79	18.21	10.23	11.10	12.35	14.47	18.21
11.48	11.48	8.03	11.48	8.59	9.46	10.27	11.48	11.48
18.89	18.89	11.70	18.89	12.49	13.69	14.88	16.15	18.89
22.29	22.29	13.94	22.29	14.77	15.60	16.87	18.97	22.29
1.28	1.28	0.34	1.28	0.65	0.96	1.28	1.28	1.28
5.46	5.46	2.65	5.46	2.95	3.65	4.35	5.05	5.46
7.24	7.24	1.45	7.24	1.45	2.49	3.53	4.75	7.24
41.08	41.08	40.26	41.08	40.67	41.08	41.08	41.08	41.80
284.09	284.09	210.77	284.09	218.87	231.01	247.19	263.85	284.09

Name of Scheme	Total potential envisaged in the project	Potential expected by 1968-69	Potential proposed by the end of Fourth Plan	Potential at the end of		
				1969-70	1970-71	1971-72
1	2	3	4	5	6	7
D. Schemes included in Fourth Plan						
<i>*Major Schemes</i>						
1. Ramganga River Project	745.02	89.03	745.02	89.03	89.03	89.03
2. Gandak Canal Project*	264.16	..	264.16	..	80.94	182.10
3. Project Assist	1,173.57	..	..	..	..	..
Total	2,182.75	89.03	1,009.18	89.03	169.97	271.13
<i>Medium Irrigation Schemes</i>						
1. Jamni Dam	12.48	..	12.48	..	..	..
2. Chandrawal Dam	4.31	..	4.31	..	..	2.43
3. Haripura Reservoir	19.99	..	19.99	..	..	..
4. Kosi Irrigation Scheme	19.13	..	19.13	..	..	..
5. Dalmau Pumped Canal	62.32	..	62.32	148.55	62.32	62.32
6. Bhopauli Pumped Canal	24.28	..	24.28	16.19	24.28	24.28
7. Zamania Pumped Canal	24.28	..	24.28	16.19	24.28	24.28
8. Ren Pumped Canal	55.04	..	55.04	..	..	..
9. Ora Pumped Canal	6.56	..	6.56	..	..	..
10. Tons Pumped Canal	52.61	..	52.61	..	10.52	30.76
11. Sahurapur Pumped Canal	13.44	..	13.44	..	..	..
12. Augasi Pumped Canal	7.28	..	7.28	..	..	..
13. Kishanpur Pumped Canal	16.59	..	16.59	..	..	16.59
14. Bhitaura Pumped Canal	39.52	..	39.52	..	..	..
Total	357.83	..	357.83	80.93	121.40	160.66
Total, (D)	2,540.58	89.03	1,367.01	169.96	291.37	431.79
GRAND TOTAL	6,064.48	3,608.48	4,890.91	3,693.85	3,815.27	3,955.05

*Potential has been reduced from 2.8802 lakh hectares to 2.6416 lakh hectares as it will cover

I—(Contd.)

('000 hectares)

of the year		Utiliza- tion expected by 1968-69	Utilization proposed by the end of Fourth Plan	Utilization, at the end of the year				
1972-73	1973-74			1969-70	1970-71	1971-72	1972-73	1973-74
8	9	10	11	12	13	14	15	16
412.77	745.02	89.03	376.35	89.03	89.03	89.03	214.48	376.35
242.81	264.16	..	174.01	..	20.23	60.70	121.40	174.01
..
655.58	1,009.18	89.03	550.36	89.03	109.26	149.73	335.88	550.36
8.09	12.48	..	4.98	..	..	..	2.43	4.98
4.31	4.31	..	2.59	..	..	0.81	1.62	2.59
12.14	19.99	..	7.99	..	..	..	3.94	7.99
..	19.13	..	3.82	..	..	..	..	3.82
62.32	62.32	..	48.56	20.24	40.47	48.56	48.56	48.56
24.28	24.28	..	16.19	8.09	12.14	16.19	16.19	16.19
24.28	24.28	..	16.19	8.09	12.14	16.19	16.19	16.19
40.47	55.04	..	27.52	..	..	..	12.14	27.52
..	6.56	..	3.28	..	..	..	..	3.28
52.61	52.61	..	26.30	..	..	8.09	18.21	26.30
..	13.44	..	6.72	..	..	..	..	6.72
..	7.28	..	3.63	..	..	..	..	3.63
16.59	16.59	..	8.30	..	..	4.05	6.07	8.30
8.09	39.52	..	19.75	..	..	..	4.05	19.75
253.18	357.83	..	195.82	36.42	64.75	93.89	129.40	195.82
908.76	1,367.01	89.03	746.18	125.25	174.01	243.62	465.28	746.18
4,432.66	4,890.91	3,539.61	4,270.08	3,584.13	3,644.83	3,730.62	3,968.94	4,270.08

the existing potential of 0.2386 hectares of Naraini Gandak Canal.

APPENDIX II

Growth of Installed Capacity and Firm Capacity during Fourth Five Year Plan

(MW)

Sl. no.	Name of Scheme	Installed capacity envisaged in the Project	Achievement by the end of		Programme during Fourth Five Year Plan						Installed capacity by the end of Fourth Plan	Spill-over to Fifth Plan
			Third Plan	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	Total 1969-74		
1	2	3	4	5	6	7	8	9	10	11	12	13
<i>Spillover Schemes—</i>												
1	Schemes completed by the end of 1968-69	982.64	793.64	982.64	...	...	...	...	...	...	982.64	...
2	Yamuna Hydel Stage I	84.75	56.50	56.50	28.25	...	...	...	...	28.25	84.75	...
3	Yamuna Hydel Stage II	360.00	...	...	...	...	180.00	60.00	120.00	360.00	360.00	...
4	Matatila Hydel	30.00	30.00	30.00	...	...	...	...	...	...	30.00	...
5	Harduaganj Thermal Stage II	30.00	30.00	30.00	...	...	...	...	...	...	30.00	...
6	Harduaganj Thermal Stage III	100.00	...	100.00	...	...	...	...	...	...	100.00	...
7	Obra Hydel	99.00	...	...	99.00	...	...	...	...	99.00	99.00	...
8	Ramganga	180.00	...	...	...	...	...	120.00	60.00	180.00	180.00	...
9	Harduaganj Stage IV	110.00	...	...	...	110.00	...	...	...	110.00	110.00	...
10	Obra Thermal	250.00	...	150.00	100.00	...	...	...	...	100.00	250.00	...

11	Obra Thermal Extension Stage I ..	300.00	...	..	..	..	100.00	200.00	...	300.00	300.00	..
12	Yamuna Hydrel Stage IV Part I ..	30.00	...	..	..	..	...	30.00	..	30.00	30.00	...
13	Maneri Bhali Hydrel Part I ..	105.00	...	...	...	...	...	...	...	...	...	105.00
14	Dhukwan HdyeI ..	22.50	...	...	...	...	...	...	22.50	22.50	22.50	..
	Total ..	2,683.89	910.14	1,349.14	227.25	110.00	280.00	410.00	202.50	1,229.75	2,578.89	105.00

New Schemes

15	Obra Thermal Extension Stage II ..	600.00	...	..	...	...	...	..	..	..	...	600.00
	Total installed capacity ..	3,283.89	910.14	1,349.14	227.75	110.00	280.00	410.00	202.50	1,229.75	2,578.89	705.00
	Retirement of old-sets ..	99.40	..	39.10	30.17	30.13	...	...	..	60.30	99.40	..
	Net installed capacity	3,184.49	910.14	1,310.04	197.08	79.87	280.00	410.00	202.50	1,169.45	2,479.49	705.00
	Firm capacity ..	...	600.00	870.00	110.00	150.00	130.00	265.00	225.00	880.00	1,750.00	...

APPENDIX III

Growth of Transmission and Distribution Lines

(Circuit km)

		1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1973-74
	1	2	3	4	5	6	7	8	9	10	11
1. 400 kV	-
2. 220 kV	1055	1459	1789	
3. 132kV	346	831	831	937	1760	2153	2693	3347	3979
4. 66 kV	1654	1654	1654	1654	1881	2114	2439	2446	2611
5. Total 66kV and above	..	2000	2485	2485	2591	3641	4267	6187	7252	8379	12879
6. 44kV	162	162	162	162	162	162	162	162	162
7. 37.5 kV	2337	2346	2392	2551	3206	3714	3981	4080	4354
8. 33kV	963	1192	1367	1690	1691	2860	3864	4538	5312
9. Total 33 to 66kV	..	3462	3700	3921	4403	5059	6736	8007	8780	9828	22828
10. 11kV	17759	19742	20823	22800	28804	34475	39680	46745	54745
11. 6.6./3.3. kV	352	316	323	323	323	427	565		
12. Total 11/6.6./3.3. kV	..	18111	20058	21146	23123	29127	34902	40245	46745	54745	114244
13. Low tension lines	..	2285	2816	3279	4425	7074	9869	12499	14999	17499	
14. GRAND TOTAL	..	25885	29059	30831	34542	44901	55774	66938	77776	90451	149951
14. GRAND TOTAL	..	25885	29059	30831	34542	44901	55774	66938	77776	90451	149951
14. GRAND TOTAL	..	25885	29059	30831	34542	44901	55774	66938	77776	90451	149951

APPENDIX IV
Proposed Sectorwise Outlay for Uttarakhand

(Rupees in lakhs)

Head of Development/Sector	Fourth Plan Outlay			1969-70			1970-71	1971-72	1972-73	1973-74
	Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange	Total outlay	Total outlay	Total outlay	Total outlay
1	2	3	4	5	6	7	8	9	10	11
1.1. Agricultural Production	104.000	36.224	..	22.500	7.840	..	25.158	18.533	18.700	19.109
1.2. Minor Irrigation ..	70.000	70.000	..	14.000	14.000	..	14.745	14.745	13.745	12.765
1.3. Soil Conservation ..	20.000	..	..	3.750	..	..	3.972	4.032	4.084	4.162
Total 1 : Agricultural Programmes ..	194.000	106.224	..	40.250	21.840	..	43.875	37.310	36.529	36.036
2.1 Animal Husbandry ..	50.000	23.936	11.025	10.000	6.009	1.450	15.739	15.649	5.212	3.400
2.3 Forests ..	200.00	80.810	..	36.000	13.000	..	41.250	40.210	40.220	42.320
Total 2 : Allied Programmes ..	250.000	104.746	11.025	46.000	19.009	1.450	56,989	55.859	45.432	45.720
Total 1 and 2 : Agricultural and Allied Programmes ..	444.000	210.970	11.025	86.250	40.849	1.450	100.864	93.169	81.961	81.756
3.1. Co-operation ..	25.000	11.833	..	5.960	2.763	..	8.052	6.414	2.874	1.700
3.2. Community Development ..	7.750	..	..	7.750	..	..	..	..	..	..
Total 3 : Cooperation and Community Development.	32.750	11.833	..	13.710	2.763	..	8.052	6.414	2.874	1.700
4.3 Power ..	175.000	175.00	..	25.800	25.800	..	48.060	40.470	37.720	22.950

(Rupees in lakhs)

Head of Development/Sector	Fourth Plan Outlay			1969-70			1970-71	1971-72	1972-73	1973-74
	Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange	Total outlay	Total outlay	Total outlay	Total outlay
1	2	3	4	5	6	7	8	9	10	11
5.2. Mineral Development ...	2.500	..	0.450	0.900	..	..	0.800	0.400	0.200	0.200
5.3 Village and Small Industries	54.000	8.660	..	9.600	3.400	..	11.370	11.350	11.190	10.490
Total 5 : Industry and Mining ..	56.500	8.660	0.450	10.500	3.400	..	12.170	11.750	11.390	10.690
6.1 Roads	740.000	679.430	..	112.000	109.730	..	150.000	150.000	157.000	171.000
6.5 Tourist	63.070	63.070	..	19.500	19.500	..	21.850	14.500	7.220	..
Total 6 : Transport and Communications.	803.070	742.500	..	131.500	129.230	..	171.850	164.500	164.220	171.000
7.1 General Education ...	225.000	134.860	..	32.000	18.340	..	60.441	61.015	45.546	25.998
7.4 Health and Family Planning ..	100.000	50.964	..	18.000	11.823	..	33.218	16.532	15.342	16.908
7.5 Water Supply	130.000	95.386	..	27.000	19.395	..	26.000	26.000	25.500	25.500
7.7 Welfare of Backward Classes..	25.000	..	..	3.500	..	..	4.799	5.181	5.554	5.966
7.8 Social Welfare	4.580	..	..	0.800	..	..	0.930	0.940	0.950	0.960
Total 7 : Social Services ..	484.580	281.210	..	81.300	49.558	..	125.388	109.668	92.892	75.332
8.2 Information and Publicity ..	4.100	..	..	0.900	..	..	0.773	0.688	0.809	0.930
GRAND TOTAL (Heads 1—8) ..	2000.000	1430.173	11.475	349.960	251.600	1.450	467.157	426.659	391.866	364.358

424