



**DRAFT**

**ANNUAL PLAN**

**1989-90**

**Vol. II**

**UTTAR PRADESH**

# **Draft Annual Plan**

## **1989-90**

### **Vol. II**

### **SECTORAL PROFILE**

NIEPA DC



D04538

**GOVERNMENT OF UTTAR PRADESH, PLANNING DEPARTMENT**

*December, 1988*

*Published by :*

SECRETARY TO GOVERNMENT OF  
UTTAR PRADESH,  
PLANNING DEPARTMENT,  
LUCKNOW.

Sub. National Systems Unit,  
National Institute of Educational  
Planning and Administration  
17-B, Sri Aurobindo Marg, New Delhi-110016  
DOC. No. D-4536  
Date 5.12.88

*Printed by :*

DIRECTOR, PRINTING AND STATIONERY, U. P.,  
AT THE GOVERNMENT PRESS, AISHBAGH,  
LUCKNOW.

## CONTENTS

	<i>Page no.</i>
<b>CHAPTER I</b>	<b>Agriculture and Allied Activities</b>
1.1 Crop Husbandry .. .. .	1
1.2 Soil and Water Conservation .. .. .	12
1.3 Animal Husbandry .. .. .	23
1.4 Dairy Development .. .. .	27
1.5 Fisheries .. .. .	31
1.6 Forestry and Wild Life .. .. .	33
1.7 Food, Storage and Warehousing .. .. .	43
1.8 Agriculture, Research and Education .. .. .	44
1.9 Agricultural Financial Institutions .. .. .	47
1.10 Co-operation .. .. .	48
1.11 Other Agricultural Programmes .. .. .	52
<b>CHAPTER II</b>	<b>Rural Development</b>
2.1 Special Programme for Rural Development .. .. .	60
2.2 Rural Employment .. .. .	63
2.3 Land Reforms .. .. .	67
2.4 Other Rural Development Programmes .. .. .	70
<b>CHAPTER III</b>	<b>Special Area Programmes</b>
3.1 Other Special Area Programmes .. .. .	77
<b>CHAPTER IV</b>	<b>Irrigation and Flood Control</b>
4.1 Major and Medium Irrigation .. .. .	82
4.2 Minor Irrigation .. .. .	89
4.3 Command Area Development Programme .. .. .	101
4.4 Flood Control and Drainage .. .. .	104
<b>CHAPTER V</b>	<b>Energy</b>
5.1 Power .. .. .	120
5.2 Non-conventional Sources of Energy .. .. .	149
<b>CHAPTER VI</b>	<b>Industry and Minerals</b>
6.1 Village and Small Industries .. .. .	164
6.2 Industries .. .. .	182
6.3 Mining .. .. .	193
<b>CHAPTER VII</b>	<b>Transport</b>
7.1 Civil Aviation .. .. .	199
7.2 Roads and Bridges .. .. .	201
7.3 Road Transport .. .. .	204
7.4 Inland Water Transport .. .. .	212



( II )

<b>CHAPTER VIII</b>	<b>Communication</b>	..	..	:	217
<b>CHAPTER IX</b>	<b>Science, Technology and Environment</b>				
	9.1 Scientific Research	..	..	..	218
	9.2 Ecology and Environment	..	..	..	222
<b>CHAPTER X</b>	<b>General Economic Services</b>				
	10.1 Secretariat Economic Services	..	..	..	227
	10.2 Tourism	..	..	..	241
	10.3 Surveys and Statistics	..	..	..	244
	10.4 Civil Supplies	..	..	..	246
	10.5 Other General Economic Services (Weights and Measures)	..	..	..	247
<b>CHAPTER XI</b>	<b>Education</b>				
	11.1 General Education	..	..	..	248
	11.2 Technical Education	..	..	..	258
	11.3 Sports and Youth Services	..	..	..	261
	11.4 Art and Culture	..	..	..	265
<b>CHAPTER XII</b>	<b>Medical and Public Health</b>				
	12.1 Medical and Public Health	..	..	..	269
<b>CHAPTER XIII</b>	<b>Water Supply, Sanitation, Housing and Urban Development</b>				
	13.1 Water Supply and Sanitation	..	..	..	284
	13.2 Housing	..	..	..	291
	13.3 Urban Development	..	..	..	298
<b>CHAPTER XIV</b>	<b>Information and Publicity</b>				
	14.1 Information and Publicity	..	..	..	304
<b>CHAPTER XV</b>	<b>Welfare of Scheduled Castes, Scheduled Tribes and Other Backward Classes</b>				
	15.1 Welfare of Scheduled Castes, Scheduled Tribes and Other Backward Classes	..	..	..	305
<b>CHAPTER XVI</b>	<b>Labour and Employment</b>				
	16.1 Labour and Employment	..	..	..	310
<b>CHAPTER XVII</b>	<b>Social Security &amp; Welfare and Nutrition</b>				
	17.1 Social Security and Welfare	..	..	..	315
	17.2 Nutrition	..	..	..	319
<b>CHAPTER XVIII</b>	<b>General Services</b>				
	18.1 Jails	..	..	..	321
	18.2 Stationery and Printing	..	..	..	321
	18.3 Public Works	..	..	..	322

# CHAPTER I

## AGRICULTURE AND ALLIED ACTIVITIES

### 1.1. CROP HUSBANDRY

The economy of Uttar Pradesh is largely dependent upon agriculture, which employs about 78 per cent of State's total working force. The corresponding figure for the country is 72 per cent. The growth of employment opportunities in non-agricultural activities is not very encouraging in the state. This together with comparatively higher growth of population in rural areas makes it very important that agriculture grows at a higher rate and provides not only fuller employment to the people engaged in it but is also able to absorb additional manpower which has no other avenues of employment

TABLE 1—Cropwise physical achievement for Seventh Plan ('000 tonnes)

Crop	Seventh Plan ('000 tonnes)			
	1984-85	1985-86	1986-87	1987-88
(1)	(2)	(3)	(4)	(5)
1. Rice	7157	8315	7260	7348
2. Jowar	566	420	445	440
3. Bajra	949	640	742	657
4. Maize	1775	1462	1502	1325
5. Kharif pulses	177	145	149	150
6. Other Cereals	346	364	369	321
Total, Kharif production	10970	11346	10467	10241

1.1.3. However, the following year 1988-89, fortunately had very good monsoon and the estimates of production during this year are 334 lakh tonnes against

TABLE 2—Estimates of crop-wise production in 1988-89 ('000 tonnes)

Name of the Crop	1988-89	
	Target	Achievement (Anticipated)
(1)	(2)	(3)
1. Rice	..	8900
2. Jowar	..	540
3. Bajra	..	740
4. Maize	..	1600
5. Others	..	520
Total, Kharif Foodgrains		12300

### FOOD GRAIN PRODUCTION

1.1.2. Against a production of 299.18 lakh tonnes of foodgrains in 1984-85, production of 314.25 lakh tonnes of foodgrains were produced in 1985-86, the first year of Seventh Plan. However, the production came down sharply to 298.54 and 299.42 lakh tonnes in the succeeding two years (1986-87 and 1987-88) against the targets of 334.00 lakh and 367.00 lakh tonnes respectively. The decline was due to inadequate rains and the worst drought witnessed by the state in 1987-88. The following table gives crop-wise achievements :

Table 1—(Contd.) ('000 tonnes)

Crop	Table 1—(Contd.) ('000 tonnes)			
	1984-85	1985-86	1986-87	1987-88
(1)	(2)	(3)	(4)	(5)
7. Wheat	15675	16559	16078	16419
8. Barley	742	835	760	798
9. Gram	1272	1326	1268	1212
10. Peas	242	312	291	307
11. Arhar	842	738	672	662
12. Masur	232	309	318	303
Total, Rabi Production	19005	20079	19387	19701
Total, Foodgrain Production	29975	31425	29854	29942

299.00 lakh tonnes of 1987-88 and the record production of 314.00 lakh tonnes of 1985-86

Table 2—(Contd.) ('000 tonnes)

Name of the crop	1988-89	
	Target	Achievement (Anticipated)
(1)	(2)	(3)
6. Wheat	..	17500
7. Barley	..	800
8. Gram	..	1330
9. Peas	..	380
10. Arhar	..	740
11. Lentil	..	350
Total, Rabi Food-grains		21100
Total, Foodgrains ..		33400

1.1.4. The figures of distribution of inputs and area under high yielding programme given in the following table will

show that substantial increases are anticipated in 1988-89.

TABLE 3—Distribution of inputs and area under HYP

Programme	Unit	Achievement		1988-89	
		1986-87	1987-88	Target	Anticipated achievement
(1)	(2)	(3)	(4)	(5)	(6)
1. Seed distribution .. ..	'000 qtl.	523.41	522.71	672.70	537.64
2. Chemical fertilizer .. ..	'000 m. tonnes	1772	1599	2150	1900
3. Plant protection .. ..	'000 m. tonnes	6.65	6.92	9.00	9.00
4. Area under High yielding varieties ...	'000 ha.	11494	10508	12120	12628

#### ANNUAL PLAN 1989-90

1.1.5. The main objectives of agricultural development continue to be as follows :

(1) to accelerate growth in agriculture particularly in rice, wheat pulses and oil seeds,

(2) to increase productivity per unit of land through better technology and management,

(3) to propagate use of improved implements for augmenting crop production,

(4) to expend the benefits of new techniques of crop production to more farmers, and

(5) to promote scientific land water use pattern based on consideration of ecology economic energy.

#### TARGETS OF FOODGRAINS PRODUCTION

1.1.6. Even though, the State's Seventh Plan had fixed a target of 425.00 lakh tonnes of foodgrains in 1989-90 the present trends would appear to show that the target is now not capable of achievement. The setback which agriculture production suffered during 1986-87 and 1987-88 as a result of inadequate and the

worst drought ever witnessed by the state seriously crippled the capacity of farmers to invest in agriculture. This is amply borne out by slow and modest growth in fertilizer consumption and short term cooperative credit. Assuming that the anticipated achievement of 334.00 lakh tonnes of foodgrains will be realized in 1988-89, the target of foodgrains production for 1989-90 has now been revised to 363 lakh tones. The following talbe gives a picture of targets and achievements for the five years of Seventh Plan :

TABLE 4—Target and Achievement of Foodgrain production

Year	Unit	Target	Achievement
(1)	(2)	(3)	(4)
1984-85 (base year)	.. Lakh tonnes	280.00	299.18
1985-86	.. Lakh tonnes	318.00	314.25
1986-87	.. Lakh tonnes	334.00	298.54
1987-88	.. Lakh tonnes	367.00	281.19
1988-89	.. Lakh tonnes	334.00	334.00
1989-90	.. Lakh tonnes	363.00 (revised)	..

1.1.7. The following table shows the distribution of fertilizers and seeds :

TABLE 5—The position of distribution of Fertilizers and seeds

Programme	Unit	Level of 1984-85	Achievement			1988-89 Anticipated	1989-90 Target
			1985-86	1986-87	1987-88		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Fertilizer consumption	Lakh tonnes	16.00	19.72	17.72	15.99	19.00	23.00
2. Availability of seeds	Lakh Qtl.	5.62	5.83	5.23	5.22	5.37	8.36

1.1.8. The targets of crop-wise production for 1989-90 are as under :

TABLE 6—Cropwise details

			(000 M. tonnes)		
Name of the crop	Triennium production ending 1987-88	Proposed target 1989-90	Name of crop	Triennium production ending 1987-88	Proposed target 1989-90
(1)	(2)	(3)	(1)	(2)	(3)
1. Rice	7348	9700	7. Wheat	16419	18800
2. Jowar	440	600	8. Barley	798	800
3. Bajra	657	800	9. Gram	1212	1520
4. Maize	1325	1800	10. Peas	307	435
5. Kharif pulses	150	200	11. Arhar	662	845
6. Others	321	400	12. Masoor	303	400
Total, Kharif Foodgrains	10241	13500	Total, Rabi production	19701	22800
			Total, Foodgrains	29942	36300

1.1.9. The following table shows targets of some important inputs for attain-

ing the production target for 1989-90 :

TABLE 7—Targets of inputs

Item	Actual		1988-89		1989-90 Target
	1986-87	1987-88	Target	Anticipated achievement	
(1)	(2)	(3)	(4)	(5)	(6)
1. Seed distribution ('000 Qtl.)	523.41	522.71	672.70	537.64	836.24
2. Chemical fertilizers ('000 M. tonnes)					
(a) Nitrogenous(N--)	1330	1188	1575	1290	1600
(b) Phosphatic(P--)	344	331	450	450	520
(c) Potassic(K--)	98	80	125	160	180
Total	1772	1599	2150	1900	2300

TABLE—7—(Concl.d.)

Item	Actual		1988-89		1989-90 Target
	1986-87	1987-88	Target	Anticipated achievement	
(1)	(2)	(3)	(4)	(5)	(6)
3. Plant Protection :					
(a) Technical grade material ('000 M. tons)	6.65	6.92	9.00	9.00	10.00
(b) Area covered ('000 ha.) .. ..	25460	25790	25800	25800	26000
4. Area under high yielding varieties ('000 ha.) :					
(a) Paddy .. .. .	3701	2612	3800	4359	4000
(b) Wheat .. .. .	7431	7691	8000	8000	8000
(c) Bajra .. .. .	191	76	140	88	150
(d) Maize .. .. .	171	129	170	181	175
(e) Jowar .. .. .	..	..	10	..	10
Total .. .. .	11494	10508	12120	12628	12335

## SPECIAL PROGRAMMES

1.1.10. *Training and Visit System*—The main thrust of the scheme is to convey the latest location and time specific agricultural production technology to farmers of the project area through professionally trained village level extension workers i.e. Kisan Sahayaks. Besides this, the system also envisages dissemination of technology through a two way process i.e. from Agricultural Universities/Research Institutions to the cultivators as well as technological problems from field to laboratories.

1.1.11. The scheme is being implemented in four Divisions of the State, covering 21 districts in a phased manner. During the first year (1985-86) of the scheme 8 districts (two from each of the four divisions) viz. Lucknow, Rae Bareilly, Sultanpur, Faizabad, Deoria, Azamgarh, Jaunpur and Varanasi were taken up. In the second year (1986-87) of the scheme 6 more district viz. Unnao, Lakhimpur-Kheri, Sitapur, Barabanki, Gonda and Mirzapur are being taken up. The remaining districts are being taken up in 1987-88.

1.1.12. *Special Rice Production Programme*—The special Rice Production Programme in U. P. was launched in 1985-86 in 102 selected block of 24 district to remove regional imbalances in productivity of rice through increases of yield per hectare in the project area. The main programmes were distribution of improved seeds, zinc sulphate, pyrite, plant protection chemicals, plant protection equipments, farm implements and subsidy for demonstrations. In addition to those training of farmers and their educational tours were also arranged. On the basis of experiences gained during last 3 years. Project proposals for 1988-89 were incorporated with following innovations with an allocation of Rs. 7.00 lakh per block :

- (i) Greater emphasis on plant protection chemicals.
- (ii) Subsidy on phosphate and potassic fertilizers to optimise the yield.
- (iii) Seed production by registration of farmers in demonstration and its purchase by TDC.

- (iv) Effective monitoring system for taking timely remedial measure and implementation as per time schedule.

#### SPECIAL FOODGRAINS PRODUCTION PROGRAMME

1.1.13. *Rice*—The special foodgrains production programme for rice was launched in 1988-89 in the remaining 380 blocks of 24 districts selected for SRPP with a view to raise production and productivity of rice in the State. The allocation per block under this programme is Rs.2.00 lakh. The programme includes distribution of seed, zinc sulphate, pyrite, plant protection chemicals, plant protection equipments and agriculture implements on subsidy.

1.1.14. *Maize*—With a view to increase production and productivity of the special foodgrains production programme for maize was sanctioned from Kharif 1988-89. The programme includes distribution of seed and weedicides at subsidized rates. The following 9 districts of the state have been selected for this programme:

- |                  |              |
|------------------|--------------|
| (1) Jaunpur,     | (2) Hardoi,  |
| (3) Bahraich,    | (4) Meerut,  |
| (5) Bulandshahr, | (6) Aligarh, |
| (7) Mainpuri,    | (8) Badaun,  |
| (9) Farrukhabad. |              |

1.1.15. *Arhar*—The special foodgrain production programme (Pulses) for Arhar and Gram has also been started from 1988-89. Six districts namely Allahabad, Banda, Azamgarh, Aligarh, Hamirpur and Mirzapur have been selected for Arhar crop and five district viz Hamirpur, Banda, Jalaun, Jhansi and Allahabad for Gram.

1.1.16. *Wheat*—The SFPP for wheat has also been taken up from the ensuing rabi. The following 24 districts of the state have been selected for this programme.

- |                   |                        |
|-------------------|------------------------|
| (1) Meerut,       | (2) Bulandshahr,       |
| (3) Bijnor,       | (4) Moradabad,         |
| (5) Shahjahanpur, | (6) Bareilly,          |
| (7) Fatehpur,     | (8) Jhansi, (9) Banda, |

- |                 |                  |
|-----------------|------------------|
| (10) Varanasi,  | (11) Jaunpur,    |
| (12) Ghazipur,  | (13) Ballia,     |
| (14) Gorakhpur, | (15) Deoria,     |
| (16) Basti      | (17) Azamgarh,   |
| (18) Unnao      | (19) Rae Bareli, |
| (20) Sitapur,   | (21) Hardoi,     |
| (22) Kheri,     | (23) Faizabad,   |
| (24) Nainital.  |                  |

#### TECHNOLOGY MISSION ON OILSEEDS

1.1.17. In order to increase oilseed production in the state a Technology Mission on Oilseeds was set up in May, 1987. The National Oilseeds Development Project (NODP) is in operation in 23 districts of the state and Oilseeds Production Thurst Project (OPTP) is operating in 30 districts of the state with a view to increase production and productivity of different Oilseed crops. OPTP was introduced in the state in the year 1987-88 which has been extended to 30 districts during 1988-89. Keeping in view the oilseeds production of last 20 years and the potentials for increase, production of 18 lakh M.T. was envisaged by the end of Seventh Plan under the mission. But instead of showing any increase in the preceding years, oilseeds production in the State has considerably gone down in the recent past. The production of oilseeds from 1981-82 to date is given below:

Year			Production in lakh M.T.
1. 1981-82	..	..	14.81
2. 1982-83	--	--	12.18
3. 1983-84	--	..	10.52
4. 1984-85	--	--	9.64
5. 1985-86	..	..	8.71
6. 1986-87	..	..	8.36
7. 1987-88	--	--	8.29

Keeping in view the achievements of the last few years, the targets are now proposed to be as shown below:

Remaining years Seventh Plan	Proposed target of production in lac. M.T.	
1988-89	10.00	a working target of 13.50 lakh M.T. has already been fixed.
1989-90	10.50	

1.1.18. For effective implementation and monitoring of different activities the Technology Mission on oilseeds has been divided into four micro missions.

1.1.19. *Crop-production technology*—Under this micro mission the State Agriculture Universities of Kanpur, Faizabad and Pant Nagar have been made responsible to evolve economic crop production technology for various location specific conditions. The assigned activities are as under:

(i) To evolve new varieties with higher yield production shorter crop-rotation, highest oil content and pest and disease resistant.

(ii) Screening of new mustard varieties suited to saline/alkaline soil conditions.

(iii) Studies on intercropping/mixed cropping.

(iv) Scaling up production of breeder and foundation seed.

1.1.20. *Farmers Support and Input Services*—Under this micro-mission, farmers are provided timely and adequate supply of agriculture inputs i.e. seed, fertilizer, plant nutrition facilities, plant protection, agriculture implements and credit.

1.1.21. *Price Support, storage, marketing and Processing*—Under this mission timely declaration of support prices, procurement arrangement through cooperative and creation and expansion of integrated storage, marketing and processing facilities have been envisaged. The state Provincial Co-operative Federation has been made nodal agency for this purpose.

1.1.22. *Post harvest Technology*—Development of modern integrated technology for major oilseeds i.e., increasing exploitation of minor and unconventional oil bearing material for edible use, efficient recovery of oils from oil bearing materials and up gradation of oils to edible grade, Oil bearing material (Rice, gram and oil cakes and salvent) extration technology are the main objective envisaged under this mission.

1.1.23. *National Pulses Development Programme*—In order to have a break through in pulses production 'National pulses Development Project was launched in U. P. in 1986-87 in 21 selected districts with selected crops.

1.1.24. *Small and Marginal Farmers Programme*—S.M.F. Programme is a centrally sponsored scheme which was started in 1983-84 in the state. Its main features are as follows :

(1) The expenditure in this scheme is borne by the State/Central Government in the ratio of 50:50.

(2) There are three components in this scheme Minor Irrigation, Land Development and Minikits.

(3) Central Government in its guidelines stipulated that an amount of Rs.5.00 lakh would be released for each block.

(4) Subsidy to the extent of Rs.3000.00 is given for boring.

(5) Subsidy is also given for pump-set by the State Government.

1.1.25. Owing to the limited financial resources of State Government, it has been decided to reduce the unit cost of pumpsets to Rs.6000.00 for computation of subsidy which has been made admissible at the rate of 25 per cent 33 per cent to small and marginal farmers respectively. This scheme will be continued in 1989-90 also. In the year 1988-89 and 1989-90 a target of 2.12 lakh shallow tubewells/dugwells each under special foodgrain programme (SEPP) has been fixed. The amount sanctioned under Special Foodgrains Production Programme is on a pattern similar to that of Small and Marginal Farmers Programme (SMFP) and therefore this amount is being clubbed with that of SMFP. It has been decided that the current year subsidy on 1,50,000 pumpsets would be given under IRDP and on another 62,000 under the Small and Marginal Farmers Programme. During the current year no funds are being released for minikits.

For the Land Development Component, Rs.128.00 lakh will be required for 128 blocks where no free boring is being done.

1.1.26. In the Seventh Five Year Plan (1985-90), an outlay of Rs.22024.00 lakh was allotted for this scheme. During 1985-86 and 1986-87, Rs.3629.28 lakh and Rs.4189.47 lakh respectively were spent, in 1987-88 Rs.3122.48 lakh spent as a result of which 65047 free borings were completed an irrigation potential of 4.38 lakh hectares was created. During the current year (1988-89), an outlay of Rs.6256.00 lakh has been provided. In this year, 1 lakh free borings are proposed to be completed in first phase and 2.12 lakh free borings will be completed in the whole year ending March, 1989. The State's share in the outlay for this scheme in 1989-90 is Rs.5258.00 lakh.

#### FARMING COOPERATIVES

1.1.27. There are 501 Cooperative Farming Societies. In first phase one seed plant is proposed to be set up at Rampur under the supervision of District Cooperation Federation. The farming societies will be member of this enterprise. An outlay of Rs.12.23 lakh is proposed for 1989-90.

#### HORTICULTURE (PLAINS)

1.1.28. Planned development of Horticulture is a matter of vital importance for the progress and prosperity of

any Nation, Uttar Pradesh is among the foremost States in the country suitable for raising all kinds of fruits, vegetables and spices. The agroclimatic conditions of the plains of U.P. have potential to produce various sub-tropical and tropical horticultural crops. To exploit this potential, and to improve economic status of the growers, various schemes have been launched in the past, as a result of which the production of fruits, vegetable and potato has increased manifold.

#### *Progress during the Sixth Plan and first three years of Seventh Plan :*

1.1.29. Against an outlay of Rs.790.00 lakh for the Sixth Plan, an expenditure of Rs.1,084.02 lakh was incurred. The outlay approved for Seventh Plan is Rs.2,050.00 lakh. Against this a sum of Rs.431.21 lakh was utilized during 1985-86 and Rs.364.43 lakh and Rs.552.67 lakh during 1986-87 and 1987-88 respectively. For the year 1988-89 an outlay of Rs.562.00 lakh has been approved and it is anticipated that the same will be utilized completely. For the year 1989-90 an outlay of Rs.742.36 lakh has been proposed.

1.1.30. The physical progress during the Sixth Plan and the first three years of the Seventh Plan along with target proposed for 1989-90 are given below :—

TABLE 8—Physical Progress

Year	AREA Lakh hectare						Production—Lakh tonnes	
	Fruit		Vegetable		Potato		Area	Production
	Area	Production	Area	Production	Area	Production		
(i)	(2)	(3)	(4)	(5)	(6)	(7)		
1. 1984-85	5.80	43.50	7.41	89.92	2.05	56.74		
2. 1985-86	6.02	46.00	7.55	95.00	2.85	42.00		
3. 1986-87	6.24	49.95	7.65	100.46	2.86	55.50		
4. 1987-88	6.50	50.15	7.95	102.55	3.15	60.00		
5. 1988-89 (Anticipated)	6.75	52.25	8.20	108.24	3.10	65.00		
6. 1989-90 (Target)	7.00	54.50	8.50	114.75	3.20	70.00		



## ANNUAL PLAN 1989-90

1.1.31. The strategy for 'Annual Plan 1989-90 continues to lay emphasis on the following :

1. To increase the area, production and productivity of fruit, vegetable, potato and other horticultural crops, giving priority to high value fruit crops and to develop fruit belts.

2. To lay more emphasis in private entrepreneurship for producing good quality and genuine seeds and plants.

3. To popularise cultivation of high yielding new varieties of vegetable and spices.

4. To make available latest technical know how and expertise to orchardists.

5. To create alternative sources of income by popularising and expanding mushroom production, bee-keeping and betel vine cultivation. Scheduled Caste and Schedule Tribe families will be encouraged specially to cultivate horticulture crops.

6. To provide post harvest technology, such as handling, storage, processing and marketing of horticultural crops.

1.1.32. *Strengthening of Horticulture Production Units in the State and Establishment of seed processing Units*—Under this scheme, 54 nurseries, 3 vegetable seed production farms, one potato farm, 2 seed processing units and one betel vine nursery have been established so far. Genuine quality fruits, ornamental and other plants and seeds are grown in these units for distribution amongst growers. It is proposed to establish over a period of time 2 hectare of nurseries in every block for providing quality plants to growers. For 1989-90, an outlay of Rs.187.60 lakh has been kept for this scheme. During 1987-88, 23 block level nurseries were established and 23 more are proposed for 1988-89. During 1989-90, 46 nurseries are proposed to be established on private land, raising the

total number of block level nurseries on private land to 92 at the end of 1989-90.

1.1.33. With a view to increase vegetable production and to provide fresh vegetables to consumers at fair prices it is proposed to intensify vegetable cultivation around big cities and river basins by providing quality seed and other inputs, like plant protection, chemicals etc. to vegetable growers. A better distribution system for fresh vegetables will also be evolved under this programme for the benefit of growers as well as consumers. This programme will be adopted in 10 divisional headquarters and in industrial towns of Kanpur and Ghaziabad.

1.1.34. *Development of Ornamental Gardening in the State*—There is tremendous scope for increasing area under ornamental plants. Apart from aesthetic value, the cultivation of flowering plant is more remunerative than growing other crops. At present roses are being grown extensively in Aligarh and Faizabad under the supervision of Horticulture Department. During 1988-89 cultivation of flowers is being encouraged by providing quality planting material and other incentives to flower growers at various places of pilgrimage, like Ayodhya, Varanasi, Mathura, Haridwar, Allahabad, Mirzapur, Agra etc. This programme will also be undertaken in places, situated around Delhi. The establishment of landscape gardens and maintenance of parks will also be undertaken in 1989-90 to check environmental pollution in Sultanpur, Bareilly, Moradabad, Allahabad and other districts. An outlay of Rs.26.43 lakh has been provided for 1989-90 for this scheme.

1.1.35. *Horticulture Development in Tribal Areas of Gonda and Kheri* — The object of the scheme is to develop tribal areas by providing tribal farmers with horticultural inputs, like planting materials, fertilizers and pesticides at subsidised rates along with technical know-how. Gaisari and Pachperava in Gonda districts and Pallia and Nighasan in Kheri district have been selected for this purpose. An outlay of Rs.2.17 lakh has been proposed for 1989-90 for this scheme.

1.1.36. *Strengthening of Community Canning and Preservation Services*—With a view to educate growers, to make proper use of fruits, which are not of table quality as also surplus vegetables, 95 community canning-cum-training centres have been established in different districts in plains. Those interested in this work come to these centres to learn techniques of fruit and vegetable preservation and to get their products preserved in thier presence at nominal charges. These centres also organise 15 days training classes in different localities. During 1988-89 and 1989-90 this scheme will be further strengthened and three new centres will be set up in Gorakhpur, Bijnore and Moradabad. An outlay of Rs.70.57 lakh has been provided for this purpose.

1.1.37. The main physical targets proposed for 1989-90 are given below :—

Item	Unit	1989-90 Target proposed
1. Area		
(a) Fruit	'000 ha.	700
(b) Vegetable	'000 ha.	850
(c) Potato	'000 ha.	320
2. Production		
(a) Fruit	'000 mat.t.	5405
(b) Vegetable	'000 mat.t.	10620
(c) Potato	'000 mat.t.	6100
3. Distribution of fruit plants	lakh no.	67.00
4. Distribution of vegetable seeds	Qtls.	4000
5. Distribution of Potato seeds	Qtls.	70000
6. Rejuvenation of old orchards	lakh ha.	0.30

Item	Unit	1989-90 Target proposed
7. Distribution of Bee-colonies	Nos.	730
8. Training of Bee-keeping	Nos.	1250

#### FRUIT UTILISATION

1.1.38. The hills of the State have an immense potential for cultivation of horticulture crops, especially fruits. During the Sixth Plan various programmes were successfully implemented and as a result, good production of fruits, vegetables and potato was achieved. A sizable infrastructure of 122 production units, 156 mobile team units, 40 community Canning Centres and 9 Research Stations Sub-Stations was also established.

1.1.39. The Seventh Five Year Plan lays emphasis on increasing the area under horticulture crops, increasing production and productivity, strengthening financial incentive, technical know-how and various inputs and strengthening of applied research programme. The objective is the optimum utilization of natural resources and better returns to the growers.

1.1.40. *Progress during 1985-88* The outlay for the Seventh Plan has been fixed at Rs.3,500.00 lakh. Against it, an expenditure of Rs.1,825.19 lakh was incurred during 1985-88. For the year 1988-89 an outlay of Rs.800.00 lakh has been approved and is anticipated to be utilised in full.

1.1.41. Against the expenditure for 1985-88 the physical progress made is given in the table below :

TABLE 9—Physical Targets and Achievements

Item	Unit	Seventh Plan 1985-90 Target	Achievement †		1987-88 Achievement
			1985-86	1986-87	
(1)	(2)	(3)	(4)	(5)	(6)
1. Additional Area to be brought under orchards	'000 ha.	40	6.4	7.06	5.23
2. Additional Area to be brought under vegetable	'000 ha.	15	3.40	2.58	3.04
3. Area to be brought under potato	'000 ha.	15	0.80	0.75	0.97
4. Production of fruits	Lakh tonnes	4.20	3.50	3.75	3.75
5. Production of vegetable	Lakh tonnes	1.80	1.40	1.54	1.70
6. Production of potato	Lakh tonnes	3.60	2.36	2.35	2.33
7. Control of pests and diseases against horticulture crops	'000 ha.	135	35.90	42.0	37.65
8. Rejuvenation of old orchard	'000 ha.	40	7.50	9.68	8.00

1.1.42. To implement the above physical programmes 25 horticulture mobile teams were established in 1985-87 and 5 more shall be established in 1987-88. For the transport of various inputs, trucks have been provided to Uttar Kashi, Pithoragarh and Chamoli and the demand of transportation subsidy has been fulfilled. The seed certification scheme was also extended to Dehradun and Nainital districts and Two Potato seed farms were established in 1985-86. Under the World Bank Project, 4 elite gardens were established and two bee-keeping centres were strengthened.

1.1.43. Mushroom production and horticulture also received attention. In the current year provision has been made for mechanical grading of fruits for Ramgarh fruit belt and subsidy for transportation shall be provided to potato growers. Construction of various building works has also been envisaged.

#### *Annual Plan 1989-90*

1.1.44. For implementing various horticulture programmes during 1989-90, and outlay of Rs. 900.00 lakh has been proposed. Besides continuing schemes, following new programmes are proposed:—

1. In view of the ever increasing demand for more community canning centres in fruit growing areas, five more centres are proposed for 1988-89.

2. It is proposed to construct two cold storages at Nainital and Chamoli districts. The capacity of these storages would be 2000 M. T. each.

3. To further improve the production of Government farms, orchards and nurseries it is proposed to provide gravity rope ways and sprinklers to these farms and gardens etc.

1.1.45. The main physical targets proposed for the year 1988-89 are given below:—

<i>Item</i>	<i>Unit</i>	<i>1988-89 Target</i>	<i>Anticipated achievement</i>
1. Area to be brought under orchards	ha.	9000	9000

<i>Item</i>	<i>Unit</i>	<i>1988-89 Target</i>	<i>Anticipated achievement</i>
2. Area to brought under vegetable	ha.	4000	3000
3. Area to be brought under Potato	ha.	5000	1000
4. Control of pests and diseases against horticulture crop	ha.	40000	40000
5. Rejuvenation of old orchards	ha.	9000	9000
6. Production of fruits	lakh tonnes	4.10	4.10
7. Production of Potato	lakh tonnes	3.50	3.50
8. Production of vegetable	lakh tonnes	1.70	1.70

#### **CANE DEVELOPMENT**

1.1.46. The cultivation of sugarcane is most profitable in crop husbandry. The fluctuations in production of sugarcane not only influence the economy of cane growers but also the economy of the State. The fate of many industries viz. Sugar, Gur, Khandsari, Alcohol and alcohol based industries is also linked with production of sugarcane. The period preceding Seventh Plan was marked by comparatively lower sugarcane production (678.05 lakh tonnes) and low productivity (46.13 tonnes/ha.). Consequently, the production of sugar was also low (14.77 lakh tonnes). The targets of Seventh Plan were therefore fixed relatively at higher levels. Keeping in view the objective of raising the level of sugar production to bring it up to 25 per cent of the total sugar production in the country, the development of sugarcane sector was meticulously planned. Sustained efforts in this field resulted in achievements exceeding the target set for 1987-88, when the production of sugar in Uttar Pradesh reached 26.65 lakh metric tonnes which was 31.7 per-cent of the total sugar production of 85.00 lakh metric tonnes in the country.

1.1.47. The strategy for cane development in the past has been to maximise per hectare yield and per cent recovery of sugar, to stabilise the area under cane and to fully cater to the entire raw material demand of the sugar factories. Khandsari producers and Gur manufacturers through

higher doses of fertilizers and distribution of improved seeds.

1.1.48. The targets and achievements under different items connected with this sector are given in the following table :—

TABLE 10—Physical Progress and Programme under Cane

Item	Units	Base	Seventh	1985-86	1986-87	1987-88	1988-89		1989-90
		year level (1984-85)	Plan Target (1985-90)	Achievement	Achievement	Achievement	Target	Achievement	proposed target
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. Cane area	lakh ha.	14.70	18.00	14.34	16.59	18.50	17.60	18.71	18.00
2. Productivity	tonne ha.	46.13	55.00	49.26	51.00	51.60	53.00	53.00	55.00
3. Sugarcane production	Lakh tonnes	678.05	990.00	706.35	846.42	954.79	950.00	991.63	990.00
4. Sugar production	Lakh tonnes	14.77	27.00	16.48	25.56	26.65	25.95	29.34	27.00
5. Distribution of :									
(i) Nitrogen.(N)	'000 tonnes	73.53	126.00	68.71	79.66	80.91	115.00	115.00	126.00
(ii) Phosphate (P)	'000 tonnes	10.63	13.00	10.50	10.37	10.93	12.00	12.00	13.00
(iii) Potash (K)	'000 tonnes	4.44	6.00	3.83	4.03	3.92	6.00	6.00	6.00
(iv) Nitrogen application	Kgs. ha.	50.03	51.00	47.92	48.00	43.74	64.00	64.00	70.00
6. Distribution of caneseed	Lakh tonnes	3.15	3.15	2.91	3.18	3.26	3.14	3.14	3.15

1.1.49. The distribution of fertilizers and cane seeds are the two areas which much more needs to be done than what has been the case so far. The co-operative cane unions have a vital role to play in these areas. These unions have marketed sugarcane worth Rs.745.00 cr. beside financing cane seeds worth Rs.8.74 cr. to its members. Cane Co-operatives also supplied 95.76 thousand tonnes fertilizers and distributed insecticides, pesticides and other agricultural implements.

1.1.50. *Assistance to increase storage capacity*—With a view to increase storage capacity of fertilizers godowns of the co-operative cane institutions, a sum of Rs.120.00 lakh has been proposed as 20 per-cent state subsidy for 1989-90 on the basis of standard pattern of financing by National Co-operative Development Corporation (N.C.D.C.), by which the cane unions can avail a soft loan assistance of Rs.213.50 lakh by N.C.D.C. and Rs.427.30 lakh by U.P. Co-operative Banks.

1.1.51. *Assistance to financially weak cane unions*—As a result of analysis of income and the cost of management of Co-operative Cane Union, it has been found that the income of many cane unions, during the past fifteen years increased only three times, whereas, the cost of management increased thirteen times resulting in the deterioration of their financial capacity. Under this scheme, the financial assistance is to be provided to these weak cane unions so as to enable them to purvey the concessional cane finance and other facilities like cash crop loans obtained through commercial banks/seeds corporation.

1.1.52. An outlay of Rs.50.00 lakh has been proposed in 1989-90 to assist these weak cane unions only once.

1.1.53. *Inter Village Roads*—During the first three years of the Seventh Plan Rs.430.00 lakh was provided for the painting of 344 km. of road on contributory basis. During 1988-89, an outlay of

Rs.145.00 lakh is anticipated to be utilised and Rs.160.00 lakh have been proposed for 1989-90 to paint 129 km. of road.

1.1.54. An amount of Rs.593.20 lakh (including Rs.26.00 lakh for hills)

## 1.2. SOIL AND WATER CONSERVATION

In view of scarce land resource scientific soil and water conservation management with proper and effective land use is of paramount importance for meeting the requirements of the increasing population in terms of food, fodder, timber and raw-materials for industries. Integrated management of natural resources of soil and water on watershed basis is essentially important not only to ensure and safeguard the productivity of fertile land but also to protect it from degradation as well as to reclaim vast areas which have gone out of use due to erosion, salinity and alkalinity, floods and waterlogging.

1.2.2. It is estimated that out of total reported area of 297.59 lakh hectares an area of 67.35 lakh hectares of agricultural land and 52.67 lakh hectares of non-agricultural and i.e. 120.02 lakh hectares require intensive soil and water conservation measures. Of the total problem area, nearly 36.74 lakh hectares of cultivated land suffers from moderate soil erosion, 12.3 lakh hectares is classified as severely gullied and ravinous land, 11.05 lakh hectares is under salinity and alkalinity and on an average 18.7 lakh hectares is affected by water logging and flood.

### STATE LAND USE BOARD

1.2.3. The State Land Use Board has been set up in this State under a centrally sponsored scheme. The entire expenditure connected with the activities of the Board will be met by the centre during Seventh Plan, where after the burden will be passed on to the State Government. The expenditure under this scheme will be incurred for:—

(a) support for creating nucleus staff (b) support for infrastructure such as data bank, library, documentation, furniture and jeep etc.

has been proposed for sugarcane development, out of which Rs.345.00 lakh is proposed for state sector schemes and Rs.248.20 lakh for district sector schemes for 1989-90.

(c) support for studies and evaluation.

1.2.4. The basic functions of the State Land Use Board are:—

(a) To prepare a 25 years perspective plan for balanced and optimum management of State's land and water resources so that this may provide rational framework for yearly and 5 yearly plans for land and water,

(b) To review existing land uses in the State, and explore the possibilities of getting land to use according to their capability and issue necessary guidelines on appropriate use of land;

(c) To take effective measures to protect good agricultural land against depletion on account of soil erosion, water-logging, loss of fertility, urbanisation and industrialisation etc.,

(d) To Implement the programmes of command area development projects, catchment area development projects and dryland farming techniques,

(e) To the reclamation of alkaline, saline, acidic soils and revinous land,

(f) To review the agricultural and forest laws;

(g) To increase land and water efficiency by adopting suitable cropping patterns;

(h) To consider and review proposals concerning soil survey and general assessment of land resource within the State,

(i) To create an informed public opinion, and awareness about an optimum use of land for agricultural and non-agricultural purposes.

1.2.5. *Data Bank*—The data relating to the land use classified into 9 categories viz. forest, barren and unculturable land, land put to non-agricultural uses, culturable waste, Permanent pastures and other grazing land, Land under miscellaneous trees crops and grasses not included in net area sown, current fallows other fallows and net area sown have been collected for the last 35 years from 1950-51 to 1986-87 in respect of 58 districts of the State. Yearwise data for the last 20 years on waste lands, cropping pattern, crop productivity etc. has also been collected for these districts. Perspective plan for the next 25 years regarding land use are now being prepared by reputed Research Institutes of the state which have necessary experience and or expertise in this areas.

1.2.6. During 1988-89, a meeting of Land Use Board was held on June 1, 1988, which discussed in detail problems relating to land and its proper use. The State Land Use Board is also being strengthened suitably so that it may be able to discharge its obligations property.

1.2.7. The Central Government had sanctioned Rs.3.75 lakh during 1987-88 for this scheme, out of which Rs.3.71 were spent. For 1988-89, Rs.3.50 lakh has been sanctioned. Rs.6.00 have been provided for this scheme in 1989-90.

#### PAST ACHIEVEMENT AND PROGRESS

1.2.8. Up to 1979-80, an area of 23.14 lakh hectares of the problem area was treated with appropriate soil and water conservation measures and 0.34 lakh hectares of usar land was reclaimed. During the Sixth Five Year Plan against a target of 4.14 lakh hectares additional area of 4.69 lakh hectares was treated.

Similarity against a target of 1.00 lakh hectares, 0.72 lakh hectares of alkaline land were treated with application of 2.67 lakh M.T. of soil amendments.

#### STRATEGY DURING SEVENTH FIVE YEAR PLAN

1.2.9. The watershed approach adopted in the Sixth Plan will be continued with added emphasis on integrated development encompassing agricultural

and non-agricultural lands. Water conservation integrated with irrigation and drainage, emphasis on production particularly in dry farming areas, supply of inputs and institutional leading, close co-operation and coordination with the allied departments for the implementation of the programmes is also being undertaken during the Seventh Plan. Attempts are also being made to ensure that soil and water conservation and water harvesting practices yield quick benefits of increased agricultural production to devetial crop husbandry programme as a part of watershed development project.

#### SEVENTH FIVE YEAR PLAN TARGETS

1.2.10. During the Seventh Plan period it is proposed to undertake erosion control measures in an area of 6.36 lakh hectares and usar reclamation programme in an area of 1.10 lakh hectares with an approved outlay of Rs.82.50 crore. The main thrust is on ravine reclamation, usar reclamation and integrated watershed management in flood prone rivers.

#### PROGRESS DURING SEVENTH FIVE YEAR PLAN

1.2.11. The following table shows targets and achievements of the first three years of the Seventh Plan.

TABLE 11—Target and achievement

Year	Target		achievement	
	Treatment of eroded land	Reclamation of usar	Treatment of eroded land	Reclamation of usar
(1)	(2)	(3)	(4)	(5)
1985-86	0.90	0.10	1.14	0.08
1986-87	0.92	0.20	1.24	0.08
1987-88	1.09	0.25	1.47	0.05

#### Annual Plan 1989-90

1.2.12. It is proposed to undertake soil and water conservation measures in an area of 1.07 lakh hectares of eroded land and usar reclamation programmes on an area of 0.20 lakh hectares during 1989-90.

#### SPECIAL THRUST ON THE PROGRAMME

1.2.13. It is proposed to further streamline the action plan of soil and moisture conservation in the State for promoting integrated development of selected watersheds by mobilizing budgetary resources and also by pooling resources from other on going programme e.g. R.L.E.G.P., D.P.A.P., N.R.E.P. S.M.F.P. etc. It is also proposed to boost up the work of ravine reclamation in the catchments of Chambal and Yamuna Rivers. The work of ravine reclamation in dacoit prone areas has also begun in 8 districts of the State and 9 units have been established for the same purpose. The programme of dry land farming will also be further intensified in selected watersheds. The programme as a part of centrally sponsored national watershed scheme will be executed in three districts of Bundelkhand region namely Jhansi, Hamirpur and Banda. A similar programme has also been taken up in Bareilly and Mirzapur District in collaboration with Pant Nagar University and B. H. U. respectively.

1.2.14. *Strengthening and Reorganization of Soil Conservation set up at headquarters*—As a result of expansion of the programme, the need for additional technical expertise is being strongly felt. Accordingly, establishment of technical audit and plan formulation cells for prompt follow up and monitoring and evaluation has been proposed with an outlay of Rs.75.00 lakh were proposed in the Seventh Plan. The such cells have already been established, one for technical audit and the other for planning, plan formulation and monitoring and evaluation.

1.2.15. *Soil And Land Use Survey*—The soil and land use survey is very necessary for effective planning and management of soil conservation programmes. There are already 10 Regional soil survey units. These units are now required to undertake soil survey in selected watersheds, specially for categorization of salt affected land. It is proposed to undertake soil survey in area of 30 lakh hectares in Seventh Plan, against which an area of 20.91 lakh hectares has been surveyed during 1985-88.

1.2.16. *Remote Sensing Soil Survey/ Through Satellite Imageries*—For obtaining quick and reliable data pertaining to various land use problems in the state the soil survey through remote sensing techniques would also be undertaken in coordination with the Directorate of Remote Sensing Application Centre, Lucknow. The nucleus staff available for this work has already commenced work in this direction.

1.2.17. During Seventh Five Year Plan, it is proposed to identify and categorise 140.00 lakh hectares of problem area with an estimated outlay of Rs.100.00 lakh. Against this, an area of 4.27 lakh hectares has been categorised so far.

1.2.18. *Research Education And Training*—Soil conservation is a highly technical and multidisciplinary programme comprising engineering, soil science, Agronomy and Forestry. The personnel engaged in the execution of soil and water conservation works in the field, need training and acquaintance with new development and technology of soil and water conservation. Farmers are also required to be educated about the programme of soil and water conservation so that they also participate in this programme and maintain the executed works. The following schemes are in operation for this purpose—

(i) Strengthening of soil conservation training centres in Plains and Hill

(ii) Establishment of user Reclamation Training centre at Rae-Bareilly.

1.2.19. There are three state soil conservation Training centres located at Rahmankhera (Lucknow), Muzaffarabad (Saharanpur) and Mauranipur (Jhansi) in plains and Majkhali (Almora) and Pauri in hills. The State soil conservation and water Management Training Centre, Rahmankhera is utilized for training the field staff of soil conservation units of department as well as the staff of command Area Development staff in water management techniques.

A new centre has been established at Rae-Bareilly for imparting training in usar reclamation and an outlay of Rs. 20.00 lakh has been allotted out of which Rs. 5.00 lakh was meant for building and the remaining for other infrastructure. About 720 farmers would be imparted training in usar reclamation during 1989-90.

1.2.20. *Soil And Water Conservation in Plains*—The significance of Soil conservation programme controlling soil erosion and improving productivity of agricultural lands is well known. The non-agricultural lands lying in selected watersheds are also covered under this scheme. 37 soil conservation units are working at present covering 35 districts in plains and plateau of the state. During the Seventh Plan, it is proposed to cover 2.70 lakh hectares eroded and degraded lands under soil and water conservation programme with an estimated outlay of Rs. 4200.00 lakh. Three new units are proposed to be established in Gorakhpur, Allahabad (Manjhanpur) and Faizabad during 1989-90. During 1989-90 an area of 47000 hectares is proposed to be treated with an outlay of Rs. 1164.00 lakh. Ten new units will be established in command area.

1.2.21. *Protection of table land and stabilization of ravines* — Up to 1987-88 this scheme was in operation in three districts of Kanpur, Etawah and Agra, but this year (1988-89) the scheme is operating only in Kanpur District.

1.2.22. *Reclamation of Alkaline land*—This scheme is in operation in 36 districts where the problem of usar is acute. The main programme under this scheme is reclamation of mild and moderate type of usar through application of soil amendments such as pyrites and gypsum on the basis of actual soil test. Under this scheme, subsidy is given on purchase of soil amendments to the extent of 75 per cent to cultivators with land holding up to 3 hectares and 50 per cent to other farmers. During the Seventh Plan, it was proposed to treat 1.10 lakh hectares of alkaline land in all the schemes. This scheme is likely

to be merged now in the Centrally sponsored scheme after concurrence of Government of India has been received. For the current year, 3,500 hectares of usar land is proposed to be treated with an outlay of Rs. 50.00 lakh. It is also proposed to merge in this scheme another scheme of reclamation of usar land of allottees.

1.2.23. *Comprehensive scheme for the reclamation of usar (alkali) land*—This is a Centrally sponsored scheme and was approved by Government of India in 1986-87 with the object of reclaiming an area of 58,380 hectare of usar land. The scheme was launched in the first half of the year. It was contemplated that the target of treating 10,000 hectares of usar land will be achieved, but only some advance action could be taken during the year. For 1987-88, the target was for reclamation of 12,140 hectares of usar land, against which 4,607 hectares were reclaimed and boring of 136 tube-wells was completed. For 1988-89 a target of 12,000 hectare has been fixed, against which an area of 1,450 hectare has been reclaimed by July, 1988. For 1989-90, a target of 16,120 hectare has been proposed.

1.2.24. *Reclamation of usar land of allottees* — This scheme was sanctioned under 'district sector' for the districts of Lucknow, Moradabad, Etah, Fatehpur and Unnao. Under this scheme an integrated programme of usar reclamation including on farm development, assured provision of Irrigation and drainage beside application of soil amendments has been taken with a view to benefit new allottees specially Scheduled Cast beneficiaries. During Seventh Plan, it was proposed to treat 1,800 hectares of usar land of allottees. One unit has been established in Etah District to undertake this work specifically. It is proposed now to merge this scheme in the comprehensive scheme of usar land in U.P. or the scheme of reclamation of usar land in U.P. during 1989-90.

1.2.25. *Centrally sponsored scheme, of integrated water-shed management in the catchment of flood prone rivers of Indo-Gangetic Basin*—The scheme of integrated water-shed management in the



catchment of flood prone rivers of Indo-Gangetic Basin was started during the Sixth Plan with a view to reduce flood hazards. The following catchments have been taken up under this scheme :—

1. Gomti
2. Sone
3. Upper Ganga
4. Upper Yamuna above Tajewala

1.2.26. *Centrally sponsored scheme in the catchment of river valley project Matatila*—Out of the total problem area of 46,500 hectare area falling in high and very high priority categories, an area of 10,761 hectare have been treated by the end of the Sixth Plan. During the Seventh Plan an area of 9,800 hectares is proposed to be treated with an outlay of 219.48 lakh. For 1989-90 an area of 2,200 hectares is proposed to be treated with an outlay of Rs.50.00 lakh.

1.2.27. *National water-shed development programme for rainfed agriculture*—The Centrally sponsored scheme of National Water-shed Development for Rainfed Agriculture was sanctioned by the Government of India in 1986-87 with an annual outlay of Rs.400 lakh, out of which 50 per cent is required to be met by Government of India and the remaining 50 per cent by the State Government. Three districts of Bundelkhand region, namely Jhansi, Hamirpur, and Banda have been taken up under this programme during 1987-88.

1.2.28. Alongwith moisture conservation measures, crop demonstration adaptive trials, training of staff and cultivators, dry land horticulture and farm forestry are the main components of this programme. There is provision of expenditure up to Rs.1,000 per hectare for soil and moisture conservation and another Rs.1,000 per hectare for crop demonstration programme. Detailed survey has been conducted for 87 macro water-sheds in 6 selected water-sheds for 1988-89. For 1988-89 an area of 12,000 hectare is proposed to be treated with an outlay of Rs.400.00 lakh.

1.2.29. The Civil and Soyam forests are scattered over in the eight hill districts of the state covering 8,014 sq.km. In addition to this there are about 2,368 sq. km. of Panchayati forests.

1.2.30. Due to unrestricted and indiscriminate felling, grazing, encroachment, and rights of the local people in these forests, for decades coupled with absence of any programme for their scientific management, the civil and soyam forests are getting denuded of vegetation and tree causing ecological imbalance, large scale soil erosion, heavy floods and loss of natural water resources. The districts-wise area under civil and soyam and Panchayati forests is as under :

Districts	Civil and Soyam Forest	Area in Sq. Km. (Panchayati forests)
1. Almora	.. 1821.00	627.99
2. Nainital	.. 192.00	207.67
3. Pithoragarh	.. 12.10.00	714.45
4. Pauri Garhwal	.. 1806.00	296.40
5. Chamoli	.. 1043.00	521.49
6. Tehri	.. 1277.74	..
7. Uttarkashi	.. 147.88	..
8. Dehradun	.. 516.00	..
Total	.. 8013.62	2368.00

1.2.31. With a view to minimise soil erosion, improve ecology of the region and meet the pressing demand of fuel and fodder including production of edible local grasses by protection, the forest department started a scheme of soil conservation works in civil and soyam forest, in 1974-75 and 5 forests divisions were sanctioned under this scheme. In the hills, because of heavy biotic pressure the single most important factor which contributes to the success of plantation is protection. However, it has not been possible so far, to give adequate protection to the planted area. Only wall fencing of the area is not sufficient to protect the area as there stone walls are often

demolished or broken by villagers and cattle. It is essential therefore to have a chowkidar on each unit as the areas made available are generally in small patches of 5-10 hectare which are scattered. In addition to this, funds should also be made available for beating up i.e. replacement of dead and damaged plants in old plantation. During the Seventh Plan the average annual target for each division will be as under:

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

1.2.32. *Development of civil and soyam forest in Kumaon and Garhwal region*—This scheme is being implemented since 1974-75. Achievement up to 1984-85 are as under:—

<i>Physical</i>	
1. Survey and demarcation (ha.)	143706
2. Afforestation/pasture development	78088
3. Treatment of Agriculture land (ha.)	168
4. Plantation of fruit trees (ha.)	199
5. Minor Engineering works (Nos.)	11521
6. Conservation of low density forest (ha. into normal density forests) (ha.)	118674
<i>Financial (Rs. in lakhs)</i>	2186.12

1.2.33. The target of Seventh Plan and achievements of 1985-86, 1986-87, 1987-88 and 1988-89 together with targets of 1989-90 are as under:—

TABLE 12—Physical targets and achievements

Item	Target Seventh Plan (1985-90)	Achievement 1985-86	Achievement 1986-87	Achievement 1987-88	Target 1988-89	Likely Achievement 1988-89	Proposed target 1989-90
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>A.—PHYSICAL</b>							
1. Survey and Demarcation (ha.)	313250	6683	7621	8037	7560	7500	6000
2. Afforestation/Pasture development (ha.)	20000	5695	4755	4771	4500	4500	3750
3. Treatment of Agriculture land (ha.)	..	..	..	..	..	..	..
4. Plantation fruit trees (ha.)	..	..	..	..	..	..	..
5. Minor Engineering works (no)	Worth Rs. 300.00	1628	1766	2127	1800	1800	1750
6. Conservation of low density forest into normal density in civil and soyam/Reserved forests (ha.)	22500	5213	9459	6523	6000	6000	5800
<b>B.—FINANCIAL</b>							
(Rs. in lakh)	2500.00	489.59	497.99	524.40	550.00	550.00	575.00

1.2.34. *River Valley Project in the catchment of Ramganga (100 per cent Centrally Sponsored Scheme)*—The scheme was started in March, 1962 to carry out soil conservation works in the catchment of ramganga reservoir built across the river Kalagarh to check the rate of silting of the dam through afforestation, development of pasture treatment of agriculture land fruit trees plantation and construction of engineering works. The scheme is being continued in Seventh Plan

also and achievement up to 1984-85 are as under:—

*Physical :*

1. Afforestation/Pasture development (ha.)	36643
2. Treatment of Agriculture land (ha.)	1547
3. Plantation of fruit trees (ha.)	1017
4. Minor Engineering works (Nos.)	8491
<i>Financial (Rs. lakh)</i>	772.42

The targets of Seventh Plan and achievements of 1985-86, 1986-87, 1987-88 and for 1988-89 together with targets of 1989-90 are as under :—

TABLE 13—*Targets and Achievements*

Item	Seventh Plan (1985-90)	Achievement				Likely Achievement	Proposed target 1989-90
		1985-86	1986-87	1987-88	1988-89 Target		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>A—PHYSICAL</b>							
1. Afforestation Pasture Development (ha.)	10400	1258	1254	1620	1440	1440	1440
2. Treatment of Agriculture land (ha.)	..	..	..	..	..	..	..
3. Plantation of fruit trees (ha.)	..	..	..	..	..	..	..
4. Minor Engineering Works (no.)	2550	247	207	110	LS	LS	LS
5. Density improvement in forest areas (ha.)	5200	..	..	..	..	..	..
<b>B—FINANCIAL</b>							
(Rs. in lakhs)	995.00	85.11	83.85	82.11	80.00	80.00	90.00

1.2.35. *Integrated soil, tree and water conservation in the Himalayan (100 per cent Centrally sponsored schemes)*—This is another Central sector scheme of soil conservation for hill. The scheme was started in 1978-79 and achievement up to 1984-85 are as under :—

Item	Achievement
1. Afforestation/Pasture development (ha.)	29207
2. Treatment of Agriculture land (ha.)	124
3. Distribution of seedlings to farmers (Rs. in lakh)	105.60
4. Soil Conservation survey (ha.)	46610
5. Minor Engineering works (Nos.)	5431
6. Financial (Rs. in lakh)	1010.69

1.2.36. The target of Seventh Plan, achievements during four years and targets of 1989-90 are as under :—

TABLE 14—Targets and Achievements—1985—90

Item	Seventh Plan (1985—90) target	Achievement			Target	1988-89	Proposed
		1985-86	1986-87	1987-88		Likely achievement	target 1989-90
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>A—PHYSICAL</b>							
1. Afforestation/Pasture development (ha.)	20800	3121	4259	2725	2532	2685	2630
2. Density improvement (ha.)	10400	981	..	..	..	..	..
3. Treatment of agriculture land (ha.)	..	..	..	..	..	..	..
4. Distribution of seedling to farmers (Nos. in lakhs)	8200	8.00	..	..	..	..	..
5. Soil conservation survey (sq. km.)	20000	5016	..	..	..	..	..
6. Engineering Works (construction)	360	607	355	LS	19	LS	LS
<b>B—FINANCIAL</b>							
(Rs. in lakhs)	2215.00	247.08	168.55	120.00	119.41	130.00	140.00

1.2.37. *Integrated water-shed management in the catchment of flood prone river of Indo-Gangetic Basin*—This scheme is being implemented in the hills from March, 1982. The achievement up to 1984-85 (i.e. during VIth Plan period) are as under :—

Item	Achievement upto 1984—85
1. Survey (ha.)	31279
2. Plantation and pasture development (ha.)	4269

Item	
3. Minor Engineering works (nos)	2687
4. Road side plantation (Km)	25
5. Nursery establishment (no.)	3
6. Density improvement (ha.)	9
7. Financial (Rs. in lakhs)	290.35

1.2.38. The targets of Seventh Plan, achievements, of 1985-86, 1986-87, 1987-88. and 1988-89 and the targets of 1989-90 are as under :—

TABLE 15—Targets and achievements

Item	Seventh Five Year Plan (1985—90) target	Achievement			Target	1988-89	
		1985-86	1986-87	1987-88		Likely achievement 1988-89	Proposed target 1989-90
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Survey (ha.)	..	..	..	..	..	..	..
2. Plantation	12800	1300	1880	1536	1734	1734	1734
3. Minor Engineering Works (Nos.)	12050	1294	70	384	LS	L.S.	L.S.
4. Road side plantation (Km.)	100	15	..	..	..	..	..
5. Nursery establishment (No.)	100	4	..	L.S.	..	..	..
6. Density improvement (ha.)	6400	656	..	..	..	..	90
7. Financial (Rs. in lakh)	1475.00	98.79	78.79	86.49	80.00	80.00	80.00

1.2.39. *Soil Conservation Work in the catchment of Matatila Dam Project*—In order to check siltation of the dam plantation and minor engineering works are being done in the catchment of Matatila Dam Project which is located in Lalitpur district of Bundelkhand region on river Betwa. The total catchment area of the reservoir is 20,720 sq. km. out of which 1,296 sq. km. is under the control of State Forest Department, which is implementing soil conservation works in that area. Outside the Forest Area, Agriculture Department is also doing soil conservation work, up to the end of Sixth Plan afforestation over 1,954 hectare, pasture development over 1,070 hectares bunding of Agricultural Land over 855 hectares and 1,328 Minor Engineering Works had been completed at a cost of Rs. 118.60 lakh. The targets of Seventh Plan, achievements of 1985-86, likely achievements of 1988-89 and targets of 1989-90 are as under :—

Plan period	Financial (Rs. in lakh)	Physical Afforestation (ha.)	Minor Engineering works (in no.)
Seventh Plan Target	208.00	5000	200
Achievement during 1985-88	43.94	1245	
Likely Achievement 1988-89	18.00	426	
Proposed target for 1989-90	20.00	450	

1.2.40. *Water-shed Management Project 1989-90*—The Water-shed Management Project was undertaken in 1983 in the Himalayan Region of Uttar Pradesh with financial assistance from World Bank and European Economic Community. The basic objectives of the Programme are as under :—

(i) To minimise soil erosion and surface water run off by afforestation in denuded hill slopes.

(ii) To increase production of domestic timber, fuel wood and fodder.

(iii) To minimise further deterioration of Himalayan eco-system in selected critical areas on priority.

(iv) To ensure socio-economic development by providing various agricultural inputs and infrastructure.

(v) To create employment opportunities for skilled and unskilled labourers and the educated unemployed belonging to the region.

1.2.41. To check degradation of Himalayan Eco-system, the strategy is to close areas to grazing, to provide fertilizers, free fodder seed minikits to farmers for incorporating fodder in their crop rotation and increase its production. The afforestation programme is primarily intended to meet the needs of fuel wood and constructional timber for local people. The strategy of soil conservation is directed towards reducing soil losses by introduction of low cost methods better cultivation practices and introduction of shrubs and khus grass on contours for in-situ moisture conservation.

1.2.42. Horticulture and Minor Irrigation Programme is under taken for proper land use and maximisation of agricultural production.

1.2.43. Selected mini water-sheds are being treated intensively so that the impact of the programme is perceptible, which will in due course decide the replicability of this programme in other areas.

1.2.44. At present only two projects viz. Himalayan Water-shed Management aided by the World Bank and another relating to South Bhagirathi Project aided by EEC are being implemented from 1983-84.

1.2.45. *European Economic Community (EEC) Aided South Bhagirathi Project*—The South Bhagirathi Zone comprises the area lying within the Bhagirathi Water-shed which drains directly

into the Bhagirathi river from Tehri to Deoprayag and part of the area which drains directly into Ganges, Hinval and Alaknanda rivers. It lies in Tehri district. The northern part of this zone has been taken under South Bhagirathi phase-I Project. The total area of this project is about 192 sq. km. It covers three micro water-sheds viz. Chandra-bhaga, Ghargaon and Chamba. The project was originally prepared at an estimated cost of Rs.4.90 crore out of which an assistance of 4.58 MECU was approved as a grant from the EEC.

1.2.46. The year 1987-88 was the last year of its execution after completion of 5 years of duration for operation in field from 1983-84. But the project was extended by one year more for full utilization of the grant under this project. The ECU exchange rate has increased from Rs.11 per ECU during 1983-84 to Rs.14.80 per ECU during

1987-88 which resulted in the increase in project cost from Rs.4.90 crore to Rs.6.02 crore.

1.2.47. By the end of Sixth Plan an expenditure of Rs.122.34 lakh was incurred while during the first three years of Seventh Plan Rs.368.81 lakh were utilised. In the year 1988-89 Rs.126.00 lakh is anticipated to be utilised. During the 1988-89 EEC aided South Bhagirathi Phase-II Project will be started. During the first preparatory year, nursery, advance soil work will be carried out and an outlay of Rs.138.00 lakh has been proposed for 1989-90.

1.2.48. The physical achievement of Phase-I Project are given in the following table.

1.2.49. The physical achievements up to 1987-88, targets and anticipated achievements of 1988-89 are shown in the table given below :—

TABLE 16 Physical Targets and Achievements

Project activity	Unit	Project target	Achievement up to the end of Sixth Plan (1984-85)	Actual achievement				Anticipated achievement 1988-89
				1985-86	1986-87	1987-88	1988-89 Target	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>1. FORESTRY</b>								
1.1 Afforestation of denuded hills	(ha.)	3100	224	500	1060	440	876	876
1.2 Fodder and Pasture development	(ha.)	1408	200	200	300	136	572	572 (including 108 ha. fire burnt areas)
1.3 Forest rehabilitation	(ha.)	2201	400	415	591	229	566	556
1.4 Road side Plantation	(R. Km.)	4	4	2	1	1	..	..
1.5 Vegetative rehabilitation of bench terraces	(ha.)	88	..	..	50	38	..	..
<b>2. SOIL CONSERVATION</b>								
2.1 Gully and nala control (i) Brushwood check-dams and cratewire dams	(Nos.)	2438	628	71 and 438 mt. checkwall	713	716	310	310
2.2 Land shaping terracing and contour bunding	(ha.)	144	139	5	..	..	..	..
2.3 Stabilization of road cutting	(Km.)	3.2	3.2	..	..	..	..	..
<b>3. MINOR IRRIGATION</b>								
3.1 Construction of irrigation channel	(Km.)	1.00	1.00	..	..	..	..	..
3.2 Construction of storage tank (with fodderchannel)	(Nos.)	39	1	12	12	12	2	..

1.2.50. *World Bank aided Himalayan Water-shed Management Project*—The Himalayan Water-shed Management Project aided by the World Bank was originally approved for Rs.63.58 crore for a period of seven years, out of which I.D.A. loan of 46.2 million US dollars from the World Bank was sanctioned to be utilized in different years of operation as per World Bank disbursement schedule. According to Mid Term Review of this project the revised cost is Rs.87.98 crore for a period of ten years. on account of increasing exchange rate of rupees in terms of US dollar to utilize the

approved amount of loan i.e. 46.2 million US dollar. The area of implementation was originally extended over 3,120 sq. km. covering 9 sub-watersheds (SWS) 8 in Nayar in Garhwal hills (2,656 sq. km.) and one in Saryu Water-shed in Kumaon hills (464 sq. km.) of the state. SWS Projects were prepared for all 9 SWS to cover 83 micro water-shed (MWS), 74 MWS in Garhwal hills and 9 MWS in Kumaon hills and each SWS project was phased to be carried out in five years. But subsequently a few changes were made after the Mid-term Review of the project. The details are given below :—

TABLE 17 —Physical Targets

Sub-watershed Project	As per Subject appraisal report				As per Mid-term review			
	Area of SWS (sq. km.)	No. of starting	Year of starting	Period of implementation (years)	Area of SWS (sq. km.)	No. of starting	Year of starting	Period of implementation (years)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Machlad	168	4	1983-84	5	168	4	1983-84	10
2. Sringar	366	11	1984-85	5	366	11	1984-85	9
3. Rudraprayag	152	4	1985-86	5	152	4	1985-86	8
4. Randigad	161	4	1985-86	5	262	6	1985-86	8
5. Nayar Rt.	101	2	1985-86	5				
6. Panar	464	9	1985-86	5	464	9	1985-86	8
7. Pachimi NR	760	22	1986-87	4	760	22	1986-87	7
8. Parbi NYR	695	19	1987-88	3	695	19	1988-89	5
9. Nayar Left	253	8	1987-88	3	..	..	..	..
Total ..	3120	83	..	..	2867	75	..	..

1.2.51. Thus the first two SWS were started in Sixth Plan period and four SWS projects in the inception of Seventh Five-Year Plan. One SWS project was started from 1986-87 and the last Purvi Nayar SWS was started from the year 1988-89.

1.2.52. Up to end of Sixth Plan Rs.232.56 lakh were utilised while during the first three years of Seventh Plan an expenditure of Rs.2,044.30 lakh was incurred. It is expected that Rs.1,197.00

lakh would be utilised during 1988-89. An outlay of Rs. 1,405.00 lakh is proposed for 1989-90.

1.2.53. The revised physical targets for the project period, Seventh Plan (1985-90) on basis of MTR report and actual achievements up to 1987-88, anticipated achievement for 1988-89 and proposed targets for 1989-90 under important items of the different components are given in Annexure.

## 1.3. ANIMAL HUSBANDRY

The main objectives of animal husbandry programme are to increase production of livestock product by extension of animal husbandry services namely, veterinary health, breeding facilities including improvement in breed through cross-breeding, provision of improved varieties of fodder and development of poultry, sheep and pigs and other livestock programme resulting in additional source of income to rural poor.

1.3.2. Animal Husbandry Sector has

an outlay of Rs.3,525.00 lakh for the Seventh Plan (1985-90), out of which Rs.1,575.00 lakh is allocated for programmes in hills. For the 1988-89, an outlay of Rs.1,657.00 lakh has been provided which included Rs.450.00 lakh for hills. Annual Plan for 1989-90 provides an outlay of Rs.2,015.94 lakh out of which Rs.500.00 lakh is for hills.

1.3.3. The physical progress achieved and the targets of 1989-90 are given below :

TABLE 18—Physical Targets and Achievements

Livestock production	Base Year 1984-85	Seventh Plan Target	1985-86 Achievement	1986-87 Achievement	1987-88 Achievement	1988-89 Target	Anticipated achievement	1989-90 Target	Annual growth rate
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Milk (000 Tons)	7261	9210	7542	7336	8136	8680	8680	9210	5%
Eggs (Million)	374	524	375	386	398	450	450	524	7%
Wool (Lakh, kgs.)	16.14	21.50	17.14	17.84	18.29	20.00	20.0	21.50	6%

## LEVEL OF SERVICES

1.3.4. The level of services achieved

at the end of 1984-85 and those anticipated at the end of 1989-90 are as follows :—

TABLE 9—Level of services in term of livestock

Item	Base year 1984-85	Anticipated achievement		
		Seventh Plan (1985-90)	1988-89	1989-90
(1)	(2)	(3)	(4)	(5)
1. Livestock population per veterinary hospital	38000	35000	36000	34000
2. Veterinary hospital	1363	1530	1623	1673
3. Breeding coverage (percentage)				
(i) Cow	17.65	23.35		
(ii) Buffalo	11.77	16.72		
(iii) Sheep	61.45	78.00		
(iv) Goat	7.00	21.00		
(v) Piggery	15.00	28.00		



### Progress

1.3.5. The progress pertaining to various groups of the development programme is as follows :

1.3.6. *Veterinary health and disease control* — As per 1982 census, there are about 567.360 lakh livestock and 68.58 lakh poultry in the State. To maximise the production of the livestock, it is necessary that the health of the livestock is properly maintained, disease control measures are adequately taken and epidemics are kept under control. Treatment facilities and disease control services are being provided through Veterinary hospitals and dispensaries in the State. The National Commission on Agriculture suggested that there should be one Veterinary Hospital for every 20,000 cattle population by the end of 1990. During 1989-90, it is proposed to establish 50 veterinary hospitals, 35 stockmen dispensaries and 2 mobile dispensaries. By the end of Seventh Five-Year Plan period, there would be 1,673 veterinary hospitals and 2,910 stockmen centres in the State. There would be thus one veterinary hospital available for every 34,000 livestock population as against the target of 35,000 livestock population. In order to provide health services in remote villages, 2 more mobile dispensaries are proposed to be established.

1.3.7. It has also been decided to establish polyclinics at various important places in order to provide treatment, Surgical and Pathological facilities based on Modern Scientific lines. Three Polyclinics have already been established in the State with X-ray and Surgical facilities at Lucknow, Muzaffarnagar and Gorakhpur. The programme of control and eradication of R.P. disease will continue. More vigilance units and check posts are proposed to be established and the surveillance programme is also proposed to be strengthened. In order to check the incidence of R.P. effectively, cell culture vaccine will be produced at Biological Products unit, Lucknow. This programme has been taken up with the help of Government of India. One Biological Production Institute at Gorakhpur has been sanctioned and is being established. Another Biological

Products Institute has been proposed to be established in hills, so to produce a few Vital Vaccine viz. Anti-Rabic, Sheep Pox, Tissue Culture vaccines and a few antigenous. The existing Biological Products Section at Lucknow is further being expanded and strengthened.

1.3.8. *Cattle Development Programme*—As per latest livestock census of 1982, the total livestock present in the State are 567.36 lakh, out of which there are 261.51 lakh cows, and 157.85 lakh buffaloes which constitute about 75 per cent of the total livestock population. The total breedable population is 65.7 lakh in case of cows and 72.2 lakh in case of buffaloes, but their productivity is very low. By the end of Sixth Plan the anticipated production of milk in the State, was 72.61 lakh million tonnes, with annual growth rate of 3.5 per cent. By adapting modern techniques, the total milk production of the State would reach up to 92.10 lakh metric tonnes by the end of Seventh Plan, with annual growth rate of 5 per cent. As per recommendation of I.C.M.R., the *per capita* availability of milk per day should be 210 grams against which 184 grams would be available by the end of 1989-90. For bringing a rapid improvement in the breed of cattle, the cross breeding programme will further be extended. Deep Frozan Semen Technology will be given more importance, thereby replacing the use of Liquid Semen. For this, the essential infrastructure is being provided. There are four Deep Frozen Semen Production Centres and six Liquid Nitrogen Plants functioning in the State. These will be further strengthened. More Liquid Nitrogen Plants are being established at Jalaun, Azamgarh, Gorakhpur and Allahabad and one plant at Muzaffarnagar. At Ballia also one plant is proposed to be established. Two Deep Frozen Semen production centres are being established at Ghaziabad and Niblet Livestock Farm in Barabanki District. Plants at Gajaria and Pashulok are being expanded. Availability of more liquid Nitrogen will be ensured. Cross-breeding Programme will continue in the eastern and Bundelkhand zones of the State in collaboration

with Bharatiya Agro Industrial Federation, Poona. A new programme of Embryo Transplantation is being proposed in selected pockets. This will provide an appropriate boost for milk production programme by utilizing uneconomic cows as surrogate mothers. In the remote and inaccessible places where it is not possible to provide artificial insemination service, 412 natural breeding centres were functioning by the end of 1987-88. During 1988-89 three more such centres are proposed to be established.

1.3.9. The programme of preservation and improvement of renowned indigenous breed would continue at Majara Livestock Farm, for Murrah breed. During 1988-89, programme for development of Haryana breed has been taken up at Saidpur Farm Lalitpur. Both these programmes will continue during 1989-90. One project of Cross Breeding in milch animals outside Operation Flood-II area has also been taken up in Faizabad Division with 100 per cent Central assistance. Under this project, Deep Frozen Semen facilities are being provided on 200 Artificial Insemination Centres. Two more Liquid Nitrogen Plants are to be established. One Training Centre for providing training under deep frozen semen technology is also being established at Kheri District.

1.3.10. All the 12 livestock farms of the State will be re-organised so as to en-

sure smooth availability of better quality bulls and good quality of fodder seed. For this the available land is being put under fodder cultivation. Additional irrigation and Bio-gas facilities are proposed to be provided. For this purpose, Land Development Work is being taken up in Bhareri Sen Farm. An exotic breeding farm is proposed to be set up at Champawat in Pithoragarh District with the help of D.R.D.A. Intensive Development of Cattle would continue to take place through the existing seven Intensive Cattle Development Projects in the State.

1.3.11. *Fodder Development Programme*—To promote Green fodder cultivation, High Yielding Variety of Fodder Seeds will be made available to breeders. For this, during 1988-89, an amount of Rs.20.07 lakh was expended. During 1989-90, an outlay of Rs.25.47 lakh has been proposed out of which 13.00 lakh is for hill. A Centrally sponsored programme for development of fodder and pasture in the State has been taken up from 1988-89. The intensive fodder development will also be taken up at the livestock farm under this programme.

1.3.12. *Special Livestock Development Programme*—Since the beginning of the Sixth Five Year Plan, the programme is continuing in 17 districts of the State. The progress achieved so far and targets for 1989-90 are as given below:—

TABLE 20—Target and Achievement

Name of the Programme	Name of district	1985-86	1986-87	1987-88	1988-89	1989-90	
		Achievement	Achievement	Achievement	Target	Target	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Cross Breeding production	Lucknow, Kanpur, Raebareilly, Pratapgarh and Meerut	3330	3349	3615	3500	3500	3500
2. Sheep production	Hamirpur, Allahabad, Mirzapur, Jaunpur, Varanasi	1638	1751	1527	1500	1500	1500
3. Pig production	Meerut, Pratapgarh, Budauln	810	877	567	300	300	300
4. Poultry production	Muzaffarnagar, Gorakhpur, Aligarh, Varanasi, Mirzapur, Lucknow, Kanpur, Meerut	924	1005	994	2400	2400	2400

1.3.13. *Sheep and Wool Development Programme*—A number of schemes are in operation for development of sheep and wool. There are 19 sheep farms in the State (14 in hills and 5 in plains).

1.3.14. *Special Livestock Production Programme*—Since the beginning of the Sixth Plan, the programme is continuing in 17 districts of the State. The follow-

ing few programmes are being run in districts shown against them :—

Name of the Programme	Name of Districts
1. Cross Breed Heifers production	Lucknow, Kanpur, Raebareli, Mathura, Muzaffarnagar, Pratapgarh and Meerut.
A. Sheep Production	Hamirpur, Allahabad, Mirzapur, Jaunpur, Varanasi.
3. Pig Production ..	Meerut, Pratapgarh, Budaun.
4. Poultry Production	Moradabad, Gorakhpur, Allahabad, Varanasi, Mirzapur, Lucknow, Kanpur, Meerut.

TABLE 20 —Physical targets and achievements—1985-90

Name of the Programme	1985-86		1986-87		1987-88		1988-89		1989-90
	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. Cross Breed Heifers production	3300	3330	3300	3349	3599	3615	3500	3500	3500
2. Sheep Production ..	1850	1638	1850	1751	1500	1527	1500	1500	1500
3. Pig Production	800	810	800	877	300	567	300	300	300
4. Poultry Production	1500	934	1500	1005	2400	994	2400	2400	2400

1.3.15. *Sheep and Wool Development Programme*—The sheep and wool development work is being carried out through sheep breeding farms, and wool extension centres/stud ram centres, distribution of improved rams in the field on contribution basis and wool grading and marketing centres. Mass drenching facilities are also provided to sheep breeders.

1.3.16. According to livestock Census of 1982, the population of breedable sheep in the State is about 11,810 lakh. By the end of Sixth Five-Year Plan there were 270 sheep and wool extension centres functioning in the State providing breeding facilities for 4,07,500 breedable ewes i. e. 41.72 per cent through improved breed of rams. During the last four years of Seventh Plan, 32 more centres have been established. Thus the level of breeding facility has been reached up to 45 per cent.

1.3.17. In total 1,200 rams of improved breed were purchased during 1988-89 for distribution in the field and for location at sheep and wool extension centres/stud ram centres. In 1989-90, it is proposed to purchase 1,204 improved rams more. Hundred exotic rams have been imported during 1988-89.

1.3.18. Three wool grading and Marketing Centres are functioning, one in Mirzapur and the other in Jhansi in plain. One such centre is functioning in Tehri Garhwal at Muni-ki-reti, wool of sheep breeders and of departmental institutions is graded here so as to obtain remunerative price. These centres also organised sale of graded wool to save the sheep breeders from the clutches of middle-men.

1.3.19. *Goat Development Programme* — At present Six Goat Breeding Farms are functioning in plains and one

in hills. Bucks of improved breed are located at 999 Veterinary Hospitals for providing breeding facilities to Goat Breeders. During 1989-90, it is also proposed to locate bucks at 14 more hospitals. It is also proposed to purchase 866 additional bucks of improved breed during 1989-90 for distribution in the field on contribution basis.

1.3.20. *Pig Breeding Programme*—At present Six Pig breeding Farms are functioning where pigs of improved breeds are produced for distribution in the field on contribution basis with a view to improve the breed of local pigs. Pigs of improved breed are located at 271 Veterinary Hospitals up to 1988-89. In 1989-90 boars of improved breed will be located at 14 more Veterinary Hospitals. It is also proposed to strengthen and expand Pig Breeding Station at C.D.F., Aligarh. For this purpose, exotic pigs are being imported.

1.3.21. *Poultry Development Programme*—The population of the poultry as per 1982 census is 68.58 lakh which is likely to go up to 86.50 lakh by the end of Seventh Plan. There are 43 poultry farms in the State on which about 30,000 layers are being maintained. Through these farms, about 15 lakh chicks are being produced every year and distributed to poultry farmers. There are 12 Intensive Poultry Development Projects functioning in the State through these projects. Support programmes i.e., treatment, disease control, training, poultry feed, and chick distribution and marketing are also being provided as package

inputs. Under applied Nutrition Programme in collaboration with UNICEF, twenty poultry farmers are trained in each block and 400 two months old chicks are distributed. For creating marketing facilities of Poultry Products, U.P. Poultry and Livestock Specialities Limited (Previously named as Prayag Chitrakoot Krishi Evam Godan Vikas Nigam Ltd.) has been provided additional funds, which will arrange marketing facilities of Poultry Products.

1.3.22. Four Poultry Feed Manufacturing Centres are Functioning at Lucknow, Gorakhpur, Hapur (Chaziabad) and Robertsganj (Mirzapur). These centres cater to the need of State Poultry Farms.

1.3.23. Two Duck Breeding Farms (at Lucknow and Gorakhpur) are being established. Duck breeding facility will be provided on more farms.

1.3.24. *Investigation and Statistics*—To provide the district level estimates of milk, egg, wool and meat production, Annual Survey is carried out. This scheme covers 30 districts in 6 divisions in plain area. This programme is now proposed to be expanded in rest of the districts of the State as a Centrally sponsored programme on 50 : 50 basis.

1.3.25. *Angora Rabbit Farms* — To provide better type of fur for fancy woollen garments, Angora Rabbit Breeding has been taken up in hill area. There are four such farms functioning at Almora, Tehri, Pithoragarh and Chamoli. These farms will be further strengthened.

#### 1.4. DAIRY DEVELOPMENT

The objectives of Dairy Development are :—

(i) To raise income of milk producers.

(ii) To provide good quality of milk and milk products at reasonable prices, particularly to consumers in urban areas.

1.4.2. These objectives can be achieved only if there is an effective sys-

tem of marketing that would ensure equitable returns to milk producers and along with that the desired veterinary cover and other essential inputs for them. A modern infrastructure of processing and of marketing milk and milk products to consumers is also required. The programmes of dairy development seek to provide these services only.

1.4.3. *Outlays and Expenditure*—An outlay of Rs.2,240.00 lakh, including

Rs.200.00 lakh for hills was approved in Seventh Plan for dairy development. An expenditure of Rs.1,631.12 lakh was incurred up to 1987-88. An outlay of Rs.600.00 lakh for 1988-89 is also expected to be fully utilised. An outlay of Rs.650.00 lakh, including Rs.150.00 lakh for hills is now proposed for the year 1989-90. The scheme-wise details are given below :—

1.4.4. *Direction and Administration*—Since May, 1976 a separate Dairy Development Department is looking after the Dairy Development Programme in the State. The department conducts survey for assessing the potentialities of a particular area, organises and registers milk co-operative societies, ensures direction and supervision, concurrent audit, arbitration and inspection of milk co-operative, co-ordinates activities of the various Development Department relating to Dairy Development Work. Because of expending activities of this sector the department has been strengthened from time to time.

1.4.5. *Extension and Training*—The following facilities are provided under this scheme :—

(a) Training of Secretaries of Primary Co-operative Milk Societies to enable them to maintain accounts, conduct quality testing of milk and milk products and carry out extension activities.

(b) Refresher courses and training in various discipline to the departmental, institutional and Milk Union staff.

(c) Training to Milk Producers in Veterinary health and improved techniques.

(d) Assistance to the Agriculture Institute, Allahabad for arranging dairv courses in respect of man-power development.

(e) Consumer Education Programme in respect of dairy products and cattle feed.

(f) Seminars at Block and Tehsil level to educate milk producers about Dairy Development Programmes.

1.4.6. *Operation Flood II Programmes*—Milk Sheds in 30 districts constitute the Operation Flood II Programme. This programme has been undertaken to develop dairy industry on a co-operative basis so that co-operatives can become economically viable and serve as nuclei for Dairy Development in adjacent areas. Besides milk procurement, the programme includes provision of technical inputs, creation of modern milk processing facilities and marketing of milk to urban consumers in selected cities. The State Government is required to bear the financial burden of the following items :—

1.4.7. *Operational deficit to O.F. II societies*—Under this programme, Operational Deficit of Milk Co-operative Societies is met by the government. Expenditure incurred by these Milk Co-operative Societies include items of purchase of Milk from Producers, purchase of cattle feed from Milk Unions, staff salary and other overheads.

1.4.8. *Operational deficit to P.C. D.F. and milk unions*—Operational losses incurred by the Pradeshik Co-operative Dairy Federation and the producer Co-operative Milk Unions, because of capacity utilisation of their processing plants being less than what required for break-even point and on account of heavy burden of fixed costs, are met by the government on the shape of Grants.

1.4.9. *Land and Power etc. for O.F. Dairies and Chilling Plants*—With a view to create more processing facilities, new Dairy Plants, Chilling Centres, Tube-wells and Drainage facilities etc. in different districts are set-up and the expenditure required is met by the government.

1.4.10. *Strengthening the financial base of Milk Co-operative*—On account of old liabilities, some Co-operative Union/Dairy Federation have become financially

weak and non-viable. To place such institutions on healthy economic financial basis, the old liabilities are wiped off by the government.

1.4.11. *Margin Money under O.F. Programme*—Till now the requirement of margin money for the P. C. D. F. was met by raising the share capital from the Government / Milk Unions / Societies. However, due to increase in the activities of the Federation the requirement for Margin Money has increased considerably. It may not be possible to meet this requirement also by mobilising funds through raising more share capital. It is therefore, proposed to assist the federation in meeting its margin money requirements.

1.4.12. *Technical Inputs Under O. F. Programme*—Under technical inputs programme following facilities are provided to the members in Anand Pattern :

- (i) Animal health cover, under which veterinary Aid is provided all the members at nominal fee.
- (ii) Artificial insemination facilities are provided with insured quality semen.
- (iii) Under extension service farmers are educated to use balanced feed and fodder and adopt modern techniques of dairy development. Farmers are also motivated to become members of societies through some incentives and arranging their visit to the union.

1.4.13. The expenses on technical inputs programme, which is developmental activity under operation flood programme in 30 districts are reimbursed to Milk Union. The expected expenses in this programme would be about Rs. 325.90 lakh including Rs. 7.92 lakh for hills.

1.4.14. *For Repayment of O.F.-I and O. F. II Loan*—In the previous years N.C.D.C. has been granting financial assistance as loan to the P.C.D.F. The P.C.D.F. is however, not in a position to

this liability at present from its own sources. Financial assistance for repayment of O.F.-I loan is therefore, proposed to be given by the State Government.

1.4.15. *Assistance to Co-operatives and other Bodies Integrated Milk Shed Development*—In the Non O. F. areas, some other schemes are being operated. The B. A. I. F. programme operated by the Bhartiya Agro Industries Foundation is one such scheme covering 10 districts of Banda, Allahabad, Jalaun, Pratapgarh, Sultanpur, Faizabad, Deoria, Gorakhpur, Basti and Gonda. Under this scheme, the cross-breeding of non-descript cattle is undertaken. Supporting Programme like animal health cover, milk collection and milk marketing are undertaken by the Animal Husbandry Department and the State Dairy Development Department respectively. Faizabad, Gorakhpur, Banda, Pratapgarh, Jalaun, Gonda, Basti and Deoria districts have already been taken up under B. A. I. F. scheme. The districts of Allahabad and Sultanpur have already been covered under O. F. II programme. Items for which financial assistance is provided under Dairy Support Programme are :—

- (i) To meet the Operational Deficit of Co-operatives.
- (ii) To meet Operational Deficit of Dairies.
- (iii) Aid to Cooperative Societies (for equipment etc.)
- (iv) Financial assistance to Dairies for Land and Power etc.
- (v) To provide cattle feed subsidy to members.

1.4.16. Besides the B.A.I.F. programme, financial assistance would also be required for similar items in some other districts also *viz.* Bareilly and Shahjahanpur in 1989-90.

1.4.17. *Revitalization, Consolidation and Expansion of Existing Milk Unions in the Hill Areas*—It is proposed to revitalise dairies and their affiliated societies,

at Dehradun, Kotdwar (Pauri) Almora and Pithoragarh. Nainital district will also be covered under O. F. Programme in 1989-90. The milk societies in the milk sheds of these dairies are also proposed to be organised/reorganised on Anand Pattern. It is proposed to strengthen and expand marketing structure of these dairies. There are also some other townships, not far off from these dairies. Marketing of milk and milk products from these dairies is also proposed to be undertaken in selected townships of Uttar Kashi, Gopeshwar (District-Chamoli) Tehri and Srinagar (District Pauri). Dairy plants are also proposed to be established in these districts. One dairy plant at Srinagar (Pauri) is also proposed under Watershed Management Scheme.

1.4.18. *Technology Mission for Dairy Development*—The oldest Government organisation is Pradeshik Cooperative Dairy Federation (PCDF) which was established in 1962. In 1970-71 under the World Food Programme Operation Flood-I was launched. Under Operation Flood-I 8 districts of U. P. were taken. The progress of O. F.-I was not very encouraging and even the loan amount could not be paid back to Indian Dairy Corporation (IDC). Even then O. F.-II (second phase of O. F.-I) was started in November 1982 by the PCDF with an estimated cost of Rs. 138.00 crores spread over period of 7 years. In phase-II 28 districts including 8 districts of O. F.-I were taken up. For the Seventh Plan, an outlay of Rs. 2240.00 lakh including Rs. 200.00 lakh for hills was approved. A sum of Rs. 1040.91 lakh has been spent up to 1986-87.

1.4.19. As per data available, milk production during the 1986-87 was 79.36 lakh tonnes in U.P. Though O.F.-I and O. F.-II have been instrumental in giving impetus to dairy development in the State through milk co-operatives more concerted efforts are needed to be made for making available reasonable quality of milk to the growing population. To

achieve, the national objectives and coordinate efforts of all the agencies, Technology Mission for Dairy Development is in the offing. The main objective of the mission/programme is to accelerate the pace of increasing rural income and employment, reduce costs of operation and ensure greater availability of milk and milk products in the State. This objective is to be achieved by increasing peoples participation in the programme, by creating pockets of excellence having its own demonstrating effect and dovetailing ongoing Government programmes with the Operation Flood Programme.

1.4.20. Another major objective of the Technology Mission would be to consolidate the achievements of Co-operative Dairy sector using the infrastructure already established. Emphasis would be laid on increasing productivity of animals, intensive breeding programme, expending liquid milk collection processing and marketing facilities thus ensuring that co-operatives continue to grow on self sustaining basis. Efforts will be made for improving breeds of milch animals, better land management, improved feed and fodder, intensive animal health cover and extension work increasing the processing and marketing capacities etc.

1.4.21. Another major objectives of the mission is to achieve the Technology leap in a variety of areas like breeding, processing facilities and energy conservation to reduce costs of operation and optimum utilisation of resources. The strategies to be adopted to achieve the above objective would be to have cost effective handling and processing systems, intensive marketing effort by reducing the cost of milk collection and by improved R and D work including transfer of technology.

1.4.22. The targets envisaged during the year 1989-90 would be as follows:

1. No. of Societies (Plains)	6385
2. Milk Procurement Av. LLPD	356.5
3. A.I. Centres	1086

## 1.5. FISHERIES

Uttar Pradesh is one of the largest Inland Fisheries States having about 11.65 lakh hectare water area. The water resources comprise Rivers, Canals, Lakes, Reservoirs and village ponds. Out of 11.65 lakh hectares, 7.20 lakh hectares are running water, and 4.45 lakh hectares are confined water. The main thrust of the Department is to bring maximum water area under fish culture through extension methods and by ensuring technical and financial support. Since small water bodies are capable of giving higher yields with only marginal investments, aquaculture programme holds high promise for increasing the level of fish production in the State and to provide gainful employment to rural poor.

1.5.2. During the Seventh Plan, it is proposed to bring 24,000 hectare water area under fish culture by utilizing fallow water bodies thereby providing employment to about 24,000 families. The fisheries development programme aims at raising the level of fish production from all sources

from about 50,000 tonnes at the beginning of the plan to about 1,00,000 tonnes at the end of the plan. The plan also emphasises efficient reservoir management for increasing the rate of fish production per hectare which has now reached 11 kg. per hectare from the reservoirs.

1.5.3. An outlay of Rs.1250.00 lakh was approved for the Seventh Plan which includes Rs.100.00 lakh for the development of cold water fisheries in hill areas. The expenditure in 1985-86, 1986-87 and 1987-88 was Rs.170.21 lakh Rs.276.81 lakh and Rs.264.50 lakh respectively. For 1988-89, an outlay of Rs.307.00 lakh has been approved which includes Rs.30.00 lakh for hills. An outlay of Rs.397.59 lakh has been proposed for the 1989-90, which includes Rs.35.00 lakh for hill areas.

1.5.4. The progress during 1985-89 and the proposed targets for 1989-90 under main production items are as below :—

TABLE 21—Physical Target and Achievement

Item	Unit	1985-86 Achievement	1986-87 Achievement	1987-88		1988-89 Anticipated achievement	1989-90 Proposed target
				Achievement	Target		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Fish production Inland	00.0 tonnes	67.35	80.00	83.10	90.00	90.00	100.00
2. Fish seed production	Million	120.00	150.00	136.20	180.00	180.00	200.00

*Proposed Programme For 1989-90*

1.5.5. A brief resume of the proposed programme for 1989-90 is given below :—

1.5.6. *Reorganisation of Fisheries Department*—For effective implementation of additional programmes during Seventh Plan period, for efficient planning and collection of reliable 'Fisheries Statistics', and for proper supervision and execution, an outlay of Rs.18.48 lakh has been proposed for 1989-90 for strengthening the organisation.

*Education and Training*—Under the continuing scheme of training of departmental staff at I.C.A.R. training centres, an outlay of Rs.1.00 lakh has been proposed for 1989-90.

1.5.7. *Organisation of Fisheries Co-operatives*—In order to safeguard the interests of fishermen community who are the primary producers of fish, a major scheme of organising co-operatives of fisherman community and providing financial assistance through N.C.D.C. has been introduced in the Seventh Plan. Provision has been



made, therefore for payment of share capital and marginal subsidy for these co-operatives For 1989-90, an outlay of Rs.10.00 lakh has been proposed for this scheme.

1.5.8. *Construction of Aquarium Houses*—Since fisheries activities require publicity and extension, it is necessary to provide infrastructure facilities in this direction. It is proposed, therefore, to construct one aquarium house in Gorakhpur at Divisional District Headquarter for which an outlay of Rs.30.00 lakh has been proposed for 1989-90. This aquarium house will act as a publicity medium for motivating people to adopt fish farming besides providing recreational facilities.

1.5.9. *Establishment of Fisheries Estate*—With a view to utilize vast water logged and lowlying areas of land available along irrigation canals for fish culture a scheme for establishment of 'fisheries estate' is being introduced this year. The project involves construction of battery of small ponds of about 0.4 to 0.5 hectares each, which will be allotted to pisciculturists particularly those living below poverty line. It is proposed to establish one Fisheries Estate in the District Lakhimpur Kheri. for which an outlay of Rs.20.00 lakh has been proposed for 1989-90.

1.5.10. *Demonstration of Intensive Fish Culture Practices*—The intensive fish culture technology developed in recent years has introduced a new dimension in the integrated approach for development of rural areas. Under "lab to land" programme it has been empty demonstrated that level of fish production can be increased from 600 kg. to 3000 kg. hectare/year. Therefore, there is an urgent need for making intensive efforts to extend the technology to private fish farmers. It is proposed, therefore, to demonstrate intensive fish culture practices in one hectare pond selected in each Fish Farmer Development Agencies district for which input funds will be arranged under this scheme. An outlay of Rs.12.00 lakh has been proposed for this scheme for 1989-90.

1.5.11. *National welfare for fishermen*—The scheme envisages provision of basic civic amenities to fishermen such as housing community halls etc. During 1989-90 it is proposed to construct 300 houses and 3 community halls in villages density populated by fishermen of Varanasi, Faizabad and Gorakhpur district. An outlay of Rs.17.45 lakh has been proposed for 1989-90.

1.5.12. *Group Accident Insurance for active Fishermen*—In view of their hazardous occupation, active fishermen of the registered fishermen's co-operatives will be covered under the accidental insurance scheme, wherein the nominal annual premium of Rs.9.00 for each person, would be shared equally by the Central and State Governments. For 1989-90 the target is to cover 26,000 fishermen, outlay of Rs.1.17 lakh has been proposed for this purpose.

1.5.13. *Development of Sewage fed Fisheries*—Under the scheme it is proposed to establish two sewage fish farms of 5.0 hectare area each to utilise organic water for fish production during 1989-90. A site has been selected at Naini, in Allahabad and Government of India has issued administrative approval of Rs.64.00 lakh for Capital expenditure as 100 per cent Grant-in-aid for the project. The State Government would bear recurring cost of Rs.1.80 lakh/year. It will also help to check river-pollution in river Ganga. An outlay of Rs.1.80 lakh has been proposed for 1989-90 to meet the recurring cost under the scheme.

1.5.14. *Development of Inland Fisheries Statistics*—This scheme has been launched by Government of India and 100 per cent expenditure of this scheme is to be provided by the Central Government. Under the scheme, special resource statistical survey, is being conducted as per guidelines of Government of India with a view to evolving uniform and scientific methodology for collection of Inland Fisheries Statistics. Under the scheme the work proposed for IIIrd phase programme is in full swing. During 1989-90 the Government of India would bear the recurring cost of Rs.2.13 lakh.

1.5.15. *Centrally Sponsered Fish Farmers Development Agencies*—Fish Farmers Development Agencies which were aided by World Bank in 24 districts of the State till September 30, 1988-89 will remain functional under the Centrally Sponsored Scheme as per Government of India's directives. Thus during 1989-90, 28 agencies will be covered under the Centrally sponsored scheme. Under the scheme, fish farmers are allotted tanks on long-term lease and provided concessional credit with 25 per cent Government subsidy for improvement of tanks and for the procurement of the 1st year input. During 1989-90 an additional water area of 2800 hactares is proposed to be brought under fish culture and 2800 persons are proposed to be trained in modern techniques of fish culture. For this, an outlay of Rs.170.92 lakh has been proposed for 1989-90.

1.5.16 *State Fish Farmers Development Agencies*—State Fish Farmers Deve-

lopment Agencies are functioning in the remaining 20 districts of the State, which will continue during 1989-90. Under this scheme 2,000 hectares additional water area is proposed to be brought under fish culture and 2000 persons are proposed to be trained. An outlay of Rs.42.54 lakh has been proposed under this scheme for 1989-90.

1.5.17. *Development of Cold Water Fisheries*—Keeping in view the urgent need of rehabilitation of reverine fisheries and development of Kumaou lake fishery. it is proposed to establish and renovate fish farmer and hatcheries in hill districts so that stocking material is produced in large quantity. The proposed additional infrastructure would however, be very much helpful for producing fingerlings of food and game fish like Mahaseer, Trout, Mirror Carp, Schizothorax etc. An outlay of Rs.35.00 lakh has been proposed for 1989-90.

## 1.6. FORESTRY AND WILD LIFE

Forests are renewable assets of the state. They perform three basic functions (i) production, (ii) protection and (iii) Recreation. But when they are exploited beyond their carrying capacity they become exhaustible. Due to rise in cattle and human population the biotic pressure on forests is increasing. In 1981 when the population of the state was about 12.00 crores the production of timber from forests was 9.50 lakh cu.m. and that of fire wood 17.50 lakh cu.m. Now when the population of the states has risen to about 14.00 crores the production has come down to 6.00 lakh cu.m. of timber and 6.00 lakh cu.m. of fire-wood. According to National Forest Policy 33.3 per cent

of geographical area should be under forests whereas in our state it is only 17.4 per cent. But according to N.R.S.A. the actual area under tree cover is only about 11 per cent. Region-wise and district-wise distribution of forest area is even more unbalanced. 67 per cent of the total forest area of U.P. is in hills, 13 per cent is in Tarai, 14 per cent in Vindhyan region and only about 6 per cent in the entire Indo-Gangetic Plains where bulk of the state's population is living. District-wise variations are even more steep. In the context of demand vis-a-vis supply, the position is precarious which is shown in the following table :—

TABLE 22.—Demand and Supply

Item	Unit	Demand	Supply	Supply as % of demand
(1)	(2)	(3)	(4)	(5)
1. Sawn wood	(Lakh cu.m.)	30.00	3.00	10
2. Pulp wood	(Lakh cu.m.)	25.00	5.00	20
3. Other Industrial wood	(Lakh cu.m.)	35.00	7.00	28
Total		90.00	15.00	17.0

1.6.2: The above table clearly indicates that as against recorded production 6.00 lakh cu.m. of timber the supply position to wood-based industries is much higher which is coming either from outside state or from areas which are not under the control of Forest Department. This point is highlighted more clearly when we consider the position of firewood. The estimated annual requirement of fuelwood in the state in 2000 A.D. will be of the order of 63 million cu.m. whereas the recorded production at present is only 0.6 million cu.m. Thus there is a big gap in demand and supply of both timber and firewood.

1.6.3. It is in this background that the emphasis now is on conservation, protection and meeting the bonafide requirements of fuel, fodder and small timber of the local people. Improvement in public relation is sought and forest publicity is emphasised. On the operational level the emphasis is on conservation of ecology, substantially increasing the vegetative cover by massive afforestation through social forestry and farm forestry, enhancing basic needs of fuelwood, fodder, small timber and efficient utilization of forest produce.

TABLE 23 —Position of Forests in the State

	Area in sq. km		
	Eight hill districts	Plains	Total
(1)	(2)	(3)	(4)
(i) Under the control of Forest Department	23,795	16,895	40,690
(ii) Civil Soyam Forests	8,014	..	8,014
(iii) Panchayati Forests	2,368	..	2,368
(iv) Private, Cantonment and other Forests	197	..	197
Total	34,374	16,895	51,269

1.6.4. The forest area per capita in the country and especially in Uttar Pradesh is very low in comparison to other

countries, as shown in the following table:—

TABLE 24 —Comparative Per Capita Forest Area

Name of the Country	Percentage of forest area to land area	Per capita forest area (in ha.)
(1)	(2)	(3)
1. U.S.S.R. ..	41.1	3.6
2. United States ..	31.1	1.3
3. Japan .. ..	67.6	0.2
4. Canada .. ..	35.4	14.2
5. United Kingdom ..	8.3	0.4
6. Thailand .. ..	41.2	0.5
7. Italy .. ..	20.7	0.1
8. Australia .. ..	14.0	7.6
9. Nepal .. ..	28.6	0.3
10. India .. ..	22.8	0.1
11. U.P. .. ..	17.4	0.04
World Average ..	30.4	1.0

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

*Strategy for the Seventh Five year Plan.*

1.6.6. Considering all the above aspects, the strategy for the Seventh Plan for forest conservation and development has been :—

Preservation of biological diversity.

Conservation of the ecologically fragile eco-systems.

Increasing substantially, the vegetal cover by massive afforestation, through

social forestry, farm forestry and other programmes for wasteland development.

Enhancing the basic needs of fuel-wood, fodder, minor forest produce and small timber.

Ensuring a close linkage between the forestry programme and the welfare of the tribal and other communities traditionally dependent on forests.

Special emphasis on forestry research, education and extension.

Encouraging efficient utilization of forest produce.

Creating a massive people's movement for achieving the above objectives and strengthening the infrastructure and improving overall capability for better production and management of forests.

1.6.7. Keeping in view the above strategy, an outlay of Rs.190.00 cr. (Rs.41.00 cr. for the Hills and Rs.149.00 cr. for the plains) has been approved for Seventh Five Year Plan for forestry and wildlife. The break-up of physical targets and financial outlays of the main schemes for the Seventh Plan and achievements for the 1985-86 to 1987-88, likely achievements for 1988-89 and targets for 1989-90 are as under :—

TABLE 25—Break-up of Targets and Actuals

Name of Scheme	Unit	Achievement					1988-89 Likely achievement	1989-90 Target
		1985—90 Target	1985-86 Achievement	1986-87 Achievement	1987-88 Achievement	1988-89 Target		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
<b>I FINANCIAL</b>	Rs. in crore	189.95	27.14	35.66	42.39	57.43	59.00	
<b>II PHYSICAL</b>								
1. Industrial and pulp-wood plantation.	ha.	75000	8384	10586	13459	14000	14000	
2. Road side Plantation	R.Km.	5000	523	657	674	551	670	
3. Plantation under Social Forestry Project—								
(i) Plantation	ha.	27950	11467	10923	7590	5590	5590	
(ii) Farm forestry	ha.	134500	21333	22000	22667	3333	23300	
4. Rural Fuel wood Plantation—								
(i) Plantation	ha.	33432	6106	4611	6067	6600	6200	
(ii) Raising of plant for distribution	No. in lakh	2800	352	223	..	..	..	
5. Energy Plantation	ha.	..	..	..	..	200	1000	

1.6.8. A brief description of the schemes being implemented during 1988-89 and proposed for 1989-90 is given in following paragraph :

1.6.9. *Forest Statistics—Forest Statistics and Monitoring*—A cell for collection and processing of forest statistics was started during Fourth Plan. A post of

Investigator-cum-Computer has been provided in each division and the staff of headquarters has also been strengthened. For quick processing of data an Electronic minicomputer has also been installed. With this assistance the Forest Department is publishing periodically a bulletin of 'Forest Statistics' showing data obtained as by product of day-to-day forest administration. **The cell also carries out the work of monitoring physical and financial achievements against approved targets of all Plan schemes. An outlay of Rs.60.00 lakh has been approved for Seventh Plan. During 1985-88 Rs.7.49 lakh have been spent. Against the anticipated expenditure of Rs.5.00 lakh during 1988-89, an outlay of Rs.4.50 lakh has been proposed for 1989-90. Under this scheme, salary of statistical staff and maintenance of computer is being provided.**

1.6.10. *Training of Staff*—Training is an essential part in forestry programmes. Forest staff at different levels has to be trained in forestry in order to be able to contribute effectively to the management of forests. At present, the training facility is inadequate. To meet the essential training requirement, it is proposed to increase the intake capacity of existing Forest Ranger College. Social Forestry Institute is also proposed to be established along with Forest Guard Training School during Seventh Plan. During 1985-88 Rs.4.80 lakh have been spent. Against the anticipated expenditure of Rs.1.00 lakh during 1988-89 an outlay of Rs.1.00 lakh has been proposed for 1989-90.

1.6.11. *Establishment of wildlife training centre at Kalagarh*—In order to provide training in wildlife management to subordinate staff of wildlife organisation, a separate wildlife training centre is proposed to be established at Kalagarh. For 1989-90 Rs.5.00 lakh has been provided to start the training centre.

1.6.12. *Forest Resources Survey*—The forests in the natural course replenish themselves. It is however, essential to know the growing stock, rate of growth, success and survival of various indigenous and exotic species. Since the growing

stock in the forest is always changing with time, it is essential, not only to survey and estimate it, but to keep the required data up-to-date by carrying out periodical sample surveys of forests, to arrive at the up-to-date position of the growing stock. Up-to the end of VIth five year plan 21.17 lakh ha. has already been sample surveyed at a cost of Rs.88.07 lakh. During VIIth five year plan against the target of 1.10 lakh ha. survey at a cost of Rs.50.00 lakh 66,800 lakh ha. has been surveyed at a cost of Rs.19.38 lakh. For 1989-90 it is proposed to sample survey 10,000 ha. at a cost of Rs.7.00 lakh against the likely 10.000 ha sample survey at a cost of Rs.7.00 lakh during 1988-89.

1.6.13. *Minor Forest Produce*—Under this scheme survey and development of minor forest produce sepecially medicinal herbs is being taken up. Under this scheme medicinal herbs particularly as perennial crop in the merginally productive or non-productive agricultural land is being raised along with survey of medicinal herbs. For this Rs.40.00 lakh has been approved for Seventh Five Year Plan. During first three years of Seventh Plan Rs.13.91 lakh have already been spent. Against the anticipated expenditure of Rs.6.00 lakh during 1988-89, an amount of Rs.5.30 lakh has also been proposed for 1989-90.

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

First, to ensure adequate supply of the best possible forest products as well as the protection of soils and environment in the long term perspective through protection from fire. Second, to devise, test and demonstrate principles and techniques

of prevention, detection and supervision of forest fires in natural and man made forests.

1.6.15. During 1985-86 and 1987-88 Rs.188.22 lakh was spent. For 1989-90 an outlay of Rs.73.50 lakh has been proposed against the anticipated expenditure of Rs.67.59 lakh during 1988-89.

1.6.16. *Forest Protection*—The main aim of this scheme is to protect the forests from illicit felling, encroachment and poaching for which erection of protection force and reduction of the size of beats are being arranged. For the two complainies of ex-army personnel each consisting of 114 ex-army persons, along with a truck has been created in the department along with 31 police armed guard squads each consisting of a head constable and three constables. During 1985—88, Rs.151.51 has already been spent. Against the likely expenditure of 53.00 lakh during 1988-89 Rs.64.00 lakh has been proposed for 1989-90.

1.6.17. *Industrial and Pulpwood Plantation*—The objective of this scheme is to meet the demand of wood based industries in the State. Major industries are paper and pulp, plywood, match pencil, resin and turpentine, furniture, Katha etc. To achieve the objective of plantations of fast growing species and species of industrial importance are being raised under this scheme. Till the end of Sixth Five Year Plan, plantations have already been raised over an area 3,67,396 ha. at a cost of Rs.3,983.83 lakh. For Seventh Five Year Plan it is proposed to raise plantations over 7500 ha. at a cost of Rs.4,435.00 lakh. During first three years of VIIth five year plan, plantations have been raised over an area of 32,429 ha. at a cost of Rs.1,359.06 lakh. For 1988-89, it is proposed to raise plantations over 14,000 ha. at the cost of Rs.600.00 lakh. The target for 1989-90 is to raise 14,000 hect. plantation at an estimated cost of Rs.566.77 lakh.

1.6.18. *Rehabilitation of Degraded Forest*—The forests which are degraded need rehabilitation for which an outlay of Rs.100.00 lakh has been provided during

Seventh Plan. The scheme was started in 1987-88 and Rs.15.00 lakh were spent. Fencing over 400 ha. and cultural operations over 400 ha. target has been proposed for 1989-90 against the same financial and physical achievement during 1988-89.

1.6.19. *Social Forestry*—Social Forestry project is being implemented with the assistance of World Bank and U.S. aid. The second phase of this project has been made coterminous with Seventh Five Year Plan. This phase provides for :

(i) Creating tree consciousness among people specially the rural communities.

(ii) Encouraging and helping people in planting trees on suitable lands, whether private or public.

(iii) Educating and helping rural communities to plant trees on their agricultural holdings, field boundaries, tank bunds, village common and such other lands which are available in the village and also to guide them in protecting and managing such plantations to meet their own needs of fuel wood, fodder and small timber.

(iv) Gainful and sustained employment to the landless population through planting activity.

(v) Extensive as well as intensive efforts to make usar and eroded land productive through planting.

The present scheme covers all the 49 districts of the plains region of Uttar Pradesh. World Bank and USAID will reimburse a substantial part of expenditure on the project. This phase would improve the efficiency and the quality of the nurseries, plantations, maintenance and utilisation of forest produce by intensifying the extension, training the research activities. In the wake of massive plantations envisaged under Waste Land Development Programme the project would bring nurseries closer to the farmers by establishing well distributed nurseries in every development block and would also provide infrastructure conducive to large scale social forestry plantation in the State.

The financial and physical achievement of this project during VIIth Five Year Plan are as under :—

	Financial (Rs. in lakh)	Physical Plantation ha.	Farm Forestry ha.
1. Seventh Plan targets	11,500.00	27,950	1,34,500
2. Achievements during 1985-86 1987-88	5,883.47	29,980	66,000
3. 1988-89 Anticipated achievements	3,713.65	5,590	23,333
4. 1989-90 Proposed targets.	3,740.00	5,590	23,333

#### 1.6.20. Rural Fuel Wood Plantation

It is a Centrally sponsored scheme and was started in 1981-82, in seven plain and three hill districts. During 1983-84 the scheme was extended to nine more plain districts. During Seventh Five-Year Plan it is proposed to extend this scheme to all the eight hill districts and to continue in sixteen plain districts. During Sixth Plan period 15,952 ha. plantation has been done at a cost of Rs. 554.82 lakh including Central share. Targets for Seventh Plan, achievements for 1985-86, 1986-87, 1987-88 and likely achievements for 1988-89 and targets for 1989-90 are as under :—

1. Target for Seventh Plan originally set were as follows (a) Plantation—33,432 (ha), (b) Raising of plants for distribution—2,80 (c) Financial (Rs. in lakh)—1,260.00 (only state share) .

2. Actual achievement for 1985-86 and 1986-87 and 1987-88.

(a) Plantation—16,784 (ha.)

(b) Raising of plants for distribution—575 lakh Nos.)

(c) Financial (Rs. in lakh)—1,097.20 (including Central share)

3. Anticipated for 1988-89

(a) Plantation—6,600 (ha.)

(b) Financial (Rs. in lakh) 409.10 (including Central share)<sup>1</sup>

4. Proposals for 1989-90

(a) Plantation (ha.) — 6,200

(b) Financial (Rs. in lakh) 392.40 (including centra store)

1.6.21. *Roadside Plantation*— It is proposed to continue the scheme during 1989-90 for raising plantations along with P. W. D. and other roads for the purpose of providing shade to pedestrians and also adding aesthetic look to roads. Outlay for VIIth Five-Year Plan (1985—90), achievement of 1985-86, 1986-87, 1987-88 and anticipated achievement of 1988-89 proposals for Annual Plan 1989-90 are as under :—

Item	Financial (Rs. in lakh)	Physical plantation (row km)
1. Seventh Plan 1985—90	200.00	5,000
2. Achievement 1985-86— 1986-87, 1987-88	97.96	1,854
3. Anticipated expenditure 1988-89	38.50	551
4. Proposal for 1989-90	48.50	670

#### 1.6.22. Social Forestry in Urban areas

—For raising plantations along roadsides in urban areas this scheme is being implemented at an outlay of Rs. 50.00 lakh During 1985-86 to 1987-88 Rs. 59.35 lakh was spent. For 1989-90 an outlay of Rs. 38.00 lakh is proposed against anticipated expenditure of Rs. 38.32 lakh during 1988-89.

1.6.23. *Fodder Development*—There has been great scarcity of grazing grounds and fodder grasses in hill districts due to excessive soil erosion and denudation of the vegetative cover of mountains. Cattle, which are a source of main livelihood of Hill people are becoming a burden to them due to paucity of fodder and grass. The grazing grounds are generally over grazed. A new scheme of Fodder Development has been, therefore, introduced and is being implemented through Van Panchayats. Outlay for Seventh Plan (1985—90) and proposals for Annual Plan (1988-89) is as under:—

Item	Financial (Rs. in lakhs)
1. Approved Outlay - Seventh Plan (1985—90)	40.00
2. Expenditure up to 1985—88	46.57
3. Anticipated expenditure 1988-89	33.00
4. Proposal for 1989-90	35.00

1.6.24. *Energy Plantation*—For raising fuelwood plantation, the scheme of rural fuelwood plantation is being implemented in three districts namely Almora, Pauri Garhwal and Tehri of Hill region. In the rest 5 hill districts which are devoid of fuelwood the scheme of energy plantation was implemented from 1987-88. During 1987-88 Rs.2.00 lakh were spent. Against the anticipated expenditure of Rs.120.00 lakh an amount of Rs.113.50 lakh has been proposed for 1989-90. During 1988-89 plantations are likely to be raised over 200 hectares. For 1989-90 it is proposed to raise plantation over 1,000 hectares.

1.6.25. *Afforestation and pasture development*—This scheme is being implemented in hills from 1987-88 to raise plantation of fodder species. During 1988-89 it is anticipated to raise plantation at a cost of Rs.25.00 lakh and for 1989-90 it is proposed to raise plantation at a cost of Rs.24.00 lakh.

1.6.26. *Creation of green belts*—For creation of green belts in KAVAL towns, this scheme is proposed for 1989-90 at a cost of Rs.40.00 lakh.

1.6.27. *Communication*—Development of transport and communication is very essential for extraction and proper utilisation of forest produce. Under the scheme construction of new road/bridge paths, metalling and renovation of old roads, construction of bridges and culverts, installation of telephone lines etc. are being carried out. Up to the end of Sixth Plan 5,656 kms of new roads, 8,427 kms of renovation of old roads, 5,656 kms of telephone lines and 701 number of bridges and culverts have been constructed at a cost of Rs.740.00 lakh. During the Seventh Plan an outlay of Rs.350.00 lakh is approved, out of which Rs.286.79 lakh was spent during 1985-88. For 1989-90, an outlay of Rs.118.00 lakh is proposed against the anticipated expenditure of Rs.109.20 lakh during 1988-89. In addition to this, during 1988-89 a scheme of communication has been proposed with the assistance of Japan Government for which token provision of 4.00 lakh has been proposed.

1.6.28. *Building*—As a result of development activities in the forests the strength of staff and officers has increased. There is an acute shortage of buildings for their residence and offices. The position of residential quarters is also unsatisfactory for subordinate and touring staff. Accordingly, buildings are being constructed under this scheme subject to availability of funds.

1.6.29. During Seventh Plan an outlay of Rs.350.00 lakh was approved, against which a sum of Rs.307.71 lakh have been spent during 1985-86 to 1987-88. For 1989-90 an outlay of Rs.132.50 lakh is proposed against anticipated expenditure of Rs.120.15 lakh during 1988-89.

1.6.30. *Project formulation and Evaluation Cell*—A scheme for setting up of a cell for project formulation was started in 1977-78 with one forest economist and two field investigators. The cell prepares forestry projects which are posed to external agencies for aid. This cell is also carrying out physical audit and evaluation of various forestry schemes being implemented by the department. It is proposed to strengthen this cell. For Seventh Five Year Plan, an outlay of Rs.15.00 lakh is provided. Rs.2.79 lakh have been spent during 1985-86, 1986-87 and 1987-88 and Rs.1.50 lakh is proposed for 1989-90, against an anticipated expenditure of Rs.1.00 lakh during 1988-89.

1.6.31. *Revision and preparation of Working Plans*—For the scientific management of forests and proper utilisation of forest produce it is necessary to prepare working plan for each division. Revision of working plan of each division is done after every ten years. For Seventh Plan, an outlay of Rs.90.00 lakh is approved for this purpose. Up to 1987-88, Rs.42.80 lakh have been spent. For the year 1988-89 the likely expenditure is Rs.16.18 lakh and for 1989-90 Rs.19.50 lakh has been proposed.

1.6.32. *Drinking Water and Electric facility to subordinate staff and Amenities to forest labours, 'Taungya cultivators of Forest Department including food aid to*



*labours under world food programme*—In forest areas where employees are posted, there is great inconvenience of water and electricity which adversely affects the efficiency of staff. The scheme envisages provision of such facilities wherever possible. to Forest department employees large number of labourers and taungya cultivators. It is proposed to build hutments for them under this scheme. For the welfare of forest labours, world food programme assisted by United Nations W.F.P. Fund is also being implemented from 1985-86. For Seventh Five Year Plan an outlay of Rs.600.00 lakh has been provided for these purposes. Actual expenditure during 1985-86 and 1986-87 and 1987-88 is Rs.200.48 lakh. For 1989-90, an outlay of Rs.140.00 lakh has been proposed against anticipated expenditure of Rs.121.96 lakh during 1988-89.

1.6.33. *Intensive Management of Sanctuaries*—A number of National Park and Wildlife Sancuaries have been created in the State covering almost all the geographical regions with a view to preserve, conserve and protect variety of fauna and flora which the nature has bountifully bestowed upon us. Due to heavy population and cattle pressure on forests there has been large scale shrinkage in the habitat of wildlife. Up to the end of Sixth Plan, Rs.146.57 lakh have been spent. During Seventh Plan an outlay of Rs.370.00 lakh is approved. The actual expenditure during 1985-88 is Rs.171.84 lakh. Against the anticipated expenditure of Rs.61.12 lakh during 1988-89, the proposal for 1989-90 is Rs.71.00 lakh.

1.6.34. *Corbett Park Tiger Reserve*—Tiger is one of the most beautiful animals of the world, but some time back due to indiscriminate shooting its population was dwindling so alarmingly that the species was on the verge of extinction. In order to save and rehabilitate this species, "project tiger" was launched in the State in Corbett National Park on February 1, 1974. It is proposed to continue this centrally sponsored scheme in Seventh Five-Year Plan. This scheme was being implemented on 50 : 50 basis.

till 1986-87. But from 1987-88 the pattern of assistance is 100 per cent non-recurring on selected items and 50 per cent of recurring expenditure. For VIIth Plan, an outlay of Rs.120.00 lakh is approved. During 1985-88 Rs.76.96 lakh were spent. Against the anticipated expenditure of Rs.29.67 lakhs during 1988-89, an amount of Rs.32.50 lakh has been proposed for 1989-90.

1.6.35. *Dudhwa National Park*—This park, situated in the district of Lakhimpur-Kheri, covers in area of 480 sq. km. and was opened on 1st February, 1977. The Park is well known throughout the country for a variety of wildlife species. In 1983-84 rhinoceros from Assam and later from Nepal were introduced in this park. For VIIth Plan, State's share of Rs.30.00 lakh is provided for this scheme. During 1985-88 Rs.42.31 lakh were spent. Against anticipated expenditure of Rs.17.60 lakh during 1988-89 an outlay of Rs.48.00 lakh has been provided for 1989-90.

1.6.36. *Regeneration/Rehabilitation of Magar/Ghariyal*—This scheme was sanctioned in 1975 with Central Assistance and is being continued in the Seventh Plan. In order to rehabilitate dwindling population of crocodiles, artificial hatching of crocodile eggs collected from nature are reared at centres established at Kukrail and Katarniaghat, which are subsequently released in natural habitat when they are big enough to feed themselves. For Seventh Plan, State's share of Rs.25.00 lakh was approved. During 1985-88 Rs.24.29 lakh were spent. Against anticipated expenditure of Rs.10.46 lakh during 1988-89, an amount of Rs.12.00 lakh has been proposed for 1989-90.

1.6.37. *National Chambal Sanctuary*—This scheme was started in 1978-79 for the protection of Magar and Ghariyal found in the river Chambal. In addition to this Magar and Ghariyal hatched and reared under another scheme are released in Chambal river. For Seventh Plan, Rs.70.00 lakhs has been provided. During 1985-88 Rs.35.22 lakh has been spent. For 1988-89 an expenditure of Rs.19.50

lakh is anticipated. An amount of Rs.24.00 lakh has been proposed for 1989-90.

1.6.38. *Tiger Water*—Due to intensive protection given to Tiger and Panther in the State, there has been substantial increase in their population. With increase in their population and constant disturbance to their habitat, the incidence of cases of human killings has also been reported. In order to meet this menace and to catch or destroy such dangerous animals a Tiger Watch Cell has been established which will continue in the Seventh Plan as well. For Seventh Plan Rs.10.00 lakh has been provided for this purpose. The actual expenditure during 1985-88 is Rs.10.57 lakh. Against anticipated expenditure of Rs.3.83 lakh during 1988-89, an outlay of Rs.4.00 lakh has been proposed for 1989-90.

1.6.39. *Intensification of Wildlife Protection in area outside sanctuaries*—At present there is no Wild Life Staff for the protection of wild life outside parks and sanctuaries. The scheme is proposed, therefore, for VIIth Plan at an outlay of Rs.80.00 lakh. For 1989-90, an outlay of Rs.5.00 lakh has been proposed against an anticipated expenditure of Rs.5.00 lakh during 1988-89.

1.6.40. *Establishment of new Parks and Sanctuaries*—For the establishment of new parks and sanctuaries an outlay of Rs.50.00 lakh has been provided for Seventh Plan. Against anticipated expenditure Rs.1.00 lakh during 1988-89 an outlay Rs.1.00 lakh has been proposed for 1989-90.

1.6.41. *Devevelopment of Wetland Sanctuaries*—For the development of Wet land sanctuaries an outlay of Rs.10.00 lakh has been provided for Seventh Plan. During 1987-88 Rs.3.13 lakh were spent. Against the anticipated expenditure of Rs.0.70 lakh during 1988-89 an outlay of Rs.5.00 lakh has been proposed for 1989-90.

1.6.42. *Capitive Breeding of Endangered Species*—Due to constant inroads in

Wild Life habitat in the past, the population of certain species of fauna has diminished to such an extent that they are threatened with extinction. To achieve desired results, it will be necessary to supplement the existing population with captive bredstock so as to provide stable breeding nucleus for each species and then to provide ideal conditions for natural propagation of these species.

1.6.43. It is proposed to augment the breedstock of following species in the first phase.

1. Deer, antelope
2. Cats, Canenes
3. Birds, Fowls, partridges
4. Chinkara and Chausingha
5. Turdo
6. Pheasant

1.6.44. The outlay for the VIIth Plan is Rs.40.00 lakh, Rs.28.92 lakh have been spent during 1985-86, 1986-87 and 1987-88. Against an anticipated expenditure of Rs.14.90 lakh during 1988-89 an outlay of Rs.14.50 lakh has been proposed for 1989-90.

1.6.45. *Rehabilitation of Turtle*—This scheme is being implemented with the assistance of Ganga Pollution Board. To minimise pollution in various rivers the rehabilitation of turtle is being done under this scheme. At present one rehabilitation centre is functioning at Kukrail in Lucknow district. During 1986-88 Rs.11.56 lakh have been spent. Against anticipated expenditure of Rs.10.68 lakh during 1988-89, Rs.22.00 lakh has been proposed for 1989-90.

1.6.46. *Preservation of Mahasheer*—Mahasheer is an important fish variety in hill rivers of U. P. found up to 1200 metre height. With the construction of roads in hills and dynamiting of hill streams a great damage is caused to this fish. Hence to check illegal poaching of fish and impose vigorous control measures including angling in suitable identified areas this scheme of protection and development of mahasheer fishing in hill rivers has been

proposed for inclusion during Seventh Plan period. This scheme has been recommended for immediate sanction in fifth meeting of Wildlife Advisory Committee held on 26.9.86. An outlay of Rs.1.00 lakh has been proposed for this scheme for 1989-90 against anticipated expenditure of Rs.1.00 lakh during 1988-89.

1.6.47. *Musk Deer Preservation*—Musk deer occurs in U.P. hills from Kumaon to Garhwal region from an altitude of 3000 to 4200 metres. Musk deer, specially males, are shot for musk which fetches high price in the market. Professional nomadic shikaries besides military and paramilitary organisations are responsible for their destruction. It is proposed to post mobile and suitable equipped patrolling squads in strategic areas in Himalayan region to prevent their destruction. For the above new scheme, an outlay of Rs.1.00 lakh is proposed for 1989-90 against anticipated expenditure of Rs.1.00 lakh during 1988-89.

1.6.48. *Ecological Development of Musabagh and Rasulpur (Lucknow)*—For the improvement of Ecology this scheme is being implemented at Musabagh I.T Forest Block situated at a distance of 9 kms. from Lucknow. Under this scheme plantation, construction of Check-dam etc. works are being carried out along with construction of Environment centre. An amount of Rs.13.01 lakh has been spent up to 1987-88. Against an anticipated expenditure of Rs.4.00 lakh during 1988-89 an outlay of Rs.2.00 lakh has been proposed for 1989-90.

1.6.49. *Development of Pakshi Vihar at Nawabganj*—For the development of Pakshi Vihar at Nawabganj a sum of Rs.10.20 lakh has been spent up to 1987-88. Against an anticipated expenditure of Rs.3.50 lakh during 1988-89 an outlay of Rs.2.50 lakh has been proposed for 1989-90.

1.6.50. *Development of Forest Parks*—The importance of recreation forestry has now increased as the demand of urban population desiring to move out of congested towns for recreation purpose

is increasing day by day. This scheme envisages creation of new and maintenance of established forest parks like Kukrail Park near Lucknow and Sarnath Park near Varanasi. This is a district plan scheme and there is great demand for creation of forest parks and Van Chetna Kendras (Forest Awakening Centres). For 1989-90 an outlay of Rs.144.00 lakh has been proposed against the anticipated expenditure of Rs.140.95 lakh during 1988-89. Up to 1987-88 Rs.274.54 lakh has been spent.

1.6.51. *Development of Ramgarh Lake*—For the development and beautification of Ramgarh lake in Gorakhpur district up to 1987-88, Rs.199.76 lakh have been spent. An outlay of Rs.30.00 lakh has been proposed for 1989-90 against anticipated expenditure of Rs.37.00 lakh during 1988-89. Under this scheme plantation and other beautification work around the lake will be carried out.

1.6.52. *Establishment of Botanical Garden at Rae Bareli*—In the memory of late Prime Minister of India Mrs. Indira Gandhi, a botanical garden is being established at Rae Bareli. During 1986-87 and 1987-88 Rs.21.25 lakh has been spent on this project. Against anticipated expenditure of Rs.12.93 lakh during 1988-89 an outlay of Rs.13.00 lakh has been proposed for 1989-90 for this scheme.

1.6.53. *Development of Samaspur Lake*—'Samaspur Lake' is situated 40 km. away from Rae Bareli city. The area of this lake is about 44 ha. The whole area of Samaspur Lake is declared as reserved forest and is under the control of Forest Department. It is proposed to develop this lake as 'Bird Sanctuary'. Rs.10.00 lakh has been sanctioned during 1987-88. For 1989-90 Rs.10.00 lakh has been proposed to develop this lake against anticipated expenditure of Rs.10.00 lakh during 1988-89.

1.6.54. *Development of Zoos*—The State has two zoological parks at Kanpur and Lucknow for recreation, study and research. A good zoological park should have proper breeding facilities and there

should be sufficient number of animal houses and enclosures to avoid discomfort to animals. With this purpose in view, renovation of existing enclosures, construction of new roads, modernisation of veterinary hospital, establishment of natural history museum and audiovisual hall, establishment of serpentarium, aquarium, well-in-aviary will be implemented. For the Seventh Plan, an outlay of Rs.25.00 lakh is provided out of which Rs.23.56 lakh have been spent during 1985-88. Against an anticipated achieve-

ment Rs.7.35 lakh during 1988-89, outlay for 1989-90 is Rs.7.00 lakh.

1.6.55. *Establishment of Rajaji National Park*—Rajaji National Park is being created by merging Rajaji, Motichur and Chilla sanctuaries. Up to 1987-88 Rs.363.30 lakh have been spent for land compensation and Gujar rehabilitation. Against anticipated expenditure of Rs.60.50 lakh during 1988-89 an outlay of Rs.60.00 lakh has been proposed for 1989-90.

### 1.7. FOOD STORAGE AND WAREHOUSING

*Construction of Godowns by Food and Civil Supply Department*—For successful implementation of the public distribution system, as also for storage of wheat and rice procured under the 'Support Price Scheme' it is proposed to Construct 5,000 M.T. godowns in each district of the State in a phased manner depending upon the availability of funds. This storage capacity under the Food and Civil Supplies Department will augment the storage capacity being created in the Co-operative sector and by the State and Central Warehousing Corporation.

1.7.2. The year-wise outlays and physical targets were as below :—

Year	No. of Godowns	Capacity in M.T.	Approved outlay in Lakh Rs
1985-86	11	55,000	60.00
1986-87	12	60,000	110.00
1987-88	12	60,000	150.00
1988-89	11	55,000	134.00
1989-90	11	60,000	150.00

(Proposed)

1.7.3. During 1985-86 to 1988-89 a total amount of Rs.252.97 lakh has been released to P.W.D. for construction of 9 godowns. It is expected that 4 godowns will be completed by March 1989. For completion of the continuing works on priority basis, an outlay of Rs.150.00 lakh has been proposed for 1989-90.

1.7.4. *State Warehousing Corporation* — The State Warehousing Corporation was established in 1958. The State Government and Central Warehousing Corporation have equal shares in this Corporation. The main function of this Corporation is scientific storage of agricultural produce, seeds, fertiliser and notified commodities etc. and to minimise storage losses from pests, insects, rodents and moisture etc. The Corporation is required to construct godowns at places where the Mandi Parishads have acquired land or is having plans for acquiring the land. Before establishing its Centres the Corporation generally explores the possibilities and potentials of storage. A target of creating additional storage capacity of 1.25 lakh M.T. was approved for this Corporation. However, the Corporation could not take up any construction in 1985-86 due to non-availability of funds.

1.7.5. The authorised and paid up capital of the Corporation was Rs.5.00 crore and Rs.4.96 crore respectively and no further funds could be subscribed till the increase of the authorised share Capital from Government of India. The Central Government issued notification preventing increase of authorised share capital of this Corporation from Rs.5.00 to Rs.7.00 crore towards the end of March 1986. A loan of Rs.25.00 lakh (Rs.15.00 lakh for plains and Rs.10.00 lakh for hills) was sanctioned by the State Government in March 1986, on the condition that it will be converted into share capital only

if matching contribution is subscribed the Central Warehousing Corporation. The Central Warehousing Corporation had been requested to sanction and subscribe the equity but their share could not be received so far. For 1986-87 an outlay of Rs.75.00 lakh was sanctioned by the State Government (Rs.50.00 lakh for plain and Rs.25.00 lakh for hills) for construction of 25,000 M.T. capacity. The Central Warehousing Corporation was also requested to sanction and contribute towards equity, but their matching contribution for 1986-87 has also not been received. The State Government released its share of Rs.75.00 lakh in March 1987 for Construction of Warehouses in plains and hills and a capacity of 1000 M.T. was constructed at Gularbhoj in Naini Tal District. The target for 1987-88 is to construct a capacity of 25,000 M.T. for which an outlay of Rs.75.00 lakh (Rs.50.00 lakh for plains and Rs.25.00 lakh for hills) has been provided as loan. However, the Corporation could not get any equity from the Central Warehousing Corporation. The Corporation has taken up construction programme of 60,630 M.T. in 1988-89 at those places where land was made available. The State Government had approved an outlay of Rs.25.00 lakh for the construction of Warehouses in hill region. The shareholders had approved budget provision of Rs.10.00 lakh to be equally contributed by the two share-holders during 1988-89.

1.7.6. For 1989-90, the target is to construct Warehouses of 29,000 M.T. at the following places noted below during the final year of the Seventh Plan:—

	(M.T.)
1. Aligarh .. ..	11,400
2. Jais (Raebareli) .. ..	5,700
3. Almora .. ..	5,700

#### 1.8. AGRICULTURE RESEARCH AND EDUCATION

In the field of agriculture, education and research for developing new technologies and scientific method of cultivation is of great importance. There are three research universities in the state at Pant Nagar (Nainital), Kanpur and Faizabad

	M. T.
4. Baheri (Bareilly) .. ..	3,200
5. Rudrapur (Nainital) .. ..	3,000
Tota .. ..	29,000

By the end of the Seventh Plan, the Corporation may be in a position to complete storage capacity of 1,44,103 M.T. as against a target of 1,25,000 M.T. as approved by the Central Planning Commission.

1.7.7.. Construction of rural godowns (Mandi Parishad)—To bring about orderly conditions of marketing, ensure fair and remuneration prices to primary producers and provide marketing facilities to producers in their close proximity, the Seventh Plan has laid special emphasis on the development of primary and subsidiary market yards and the construction of rural godowns. Construction of 200 rural godowns during Seventh Plan at a cost of Rs.136.00 lakh is proposed for this purpose. This is a Centrally sponsored scheme on a 50 : 50 sharing basis between Centre and State. In 1985-86, 44 rural godowns having a total capacity of 22,000 M.T. were constructed. During 1986-87 162 additional rural godowns having a capacity of 84,000 M.T. were constructed. During 1987-88, 15 additional rural godowns having capacity 8,000 M.T. have been constructed, against a target of 26 rural godowns. The balance 11 rural godowns having capacity of 5,000 M.T. are in progress and may be completed during 1988-89.

1.7.8. During 1989-90 a new scheme viz. for contribution of grant in aid to Mandi Parishad for construction of cool houses as assembling point of agricultural produce in hill area is being taken up with an outlay of Rs.2.00 lakh for construction of two cool houses at Dehra Dun District.

respectively. These universities have been entrusted with the work of conducting researches for specific and spatial requirements in different regions. The universities are given grant-in-aid by State Government.

1.8.2. An outlay of Rs.2,156.00 lakh including Rs.256.00 lakh for hills was approved for Research and Education for Seventh Plan against which an expenditure of Rs.1,428.29 lakh including Rs. 125.48 lakh for hills was incurred during first three years of Seventh Plan. During 1988-89 an outlay of Rs.724.00 lakh including 100.00 lakh for hills was approved and the same is anticipated to be fully utilized. For 1989-90 an outlay of Rs.950.00 lakh, including Rs.150.00 lakh for hills has been proposed. A brief description of the work being done by these universities is as follows :—

1.8.3. *G. B. Pant University of Agriculture and Technology, Pant Nagar, Nainital*—The G.B. Pant University of Agriculture and Technology Pant Nagar was established in 1960 with the main objective of the development of agriculture and for the benefit of rural people of the State. To discharge this responsibility the university had established its faculties and the Directorate of Research and Extension to integrate teaching, research and extension functions.

1.8.4. In the 70s, the area responsibility for 8 hill districts and 12 Western districts in research and extension education was transferred to the University by the Government. Accordingly, the university is now in process of establishing a network of regional and testing research stations to cater to the needs of different agroclimatic situations. Three research stations one each at Ranichauri, Pauri and **Majhera have been established for hills** and three research stations, one each at Daurala, Bulandshahar and Nagina have been established for Western and mid-Western plains.

1.8.5. The main research thrust of the university is in field crops, fruits and vegetables, livestock and milk production, animal health and disease control, farm machinery, water management and soil conservation, food technology and basic research relevant to agriculture livestock and energy aspect including bio-techniques. Research work on home science and agricultural communications has been initiated recently.

1.8.6. *C. S. Azad University of Agriculture and Technology, Kanpur*—Established in the year 1975, the Chandra Shekhar Azad University of Agriculture and Technology includes two constituent colleges, one for **'Agriculture at Kanpur** and another for **Animal Husbandry at Mathura**. The University covers 22 districts of Lucknow, Agra, Allahabad and Jhansi Division. The university has conducted researches on different foodgrains crops and develop more than 24 different varieties specially suitable for irrigated and unirrigated area. The university is also carrying out researches in agro-techniques, dry land technology, technology for salt affected soils, technology for mitigating the effect of drought, weed control and plant protection. The unit at Mathura is responsible for conducting researches in animal husbandry. It has developed new methods of semen collection for improving the variety of breeds.

1.8.7. *Narendra Dev University of Agriculture and Technology Faizabad*—The university was established in 1975. It caters to the needs of 15 districts of Faizabad, Gorakhpur and Varanasi Division for agriculture research and extension. It has the responsibility of developing new technology for improving agricultural production suited to various agro-ecological conditions of eastern U. P. In order to meet this objective, a systematic research programme in a number of disciplines covering various crops and farming condition including problem soils is in progress at 5 crop research centres in the districts of Faizabad, Baharaich and Mirzapur.

1.8.8. The university has developed about 31 varieties of rice, pulses, oilseed and vegetables. University is engaged on projects of wasteland management, post harvest technology (crop regulation studies, propagational studies) crop production technology, crop protection and farm tools and implements researches are also being conducted to evolve the new agro-technologies for various crops (cereals, pulses, oilseed etc.) and for various situation like upland, lowland, dry land, waste land etc.

1.8.9. *Science and Technology Component in Cane Development*—The programmes undertaken under cane development can be divided into research, education and training. The U.P. Sugar Cane Research Council is carrying out research programmes on various aspects of sugarcane production including evolution, breeding and testing of sugarcane varieties suited to different kinds of soils and varied environmental and ecological conditions of the state, multiplication of quality seed material, disease and pest control. Simultaneously, it has also become necessary to educate cane cultivators regarding benefits of the latest techniques adopted in cane production. Thus, effective publicity, extension and dissemination of improved cane cultivation technology is widely accepted. In order that the field staff and cane growers may become **fully conversant** with the latest techniques of sugarcane cultivation, various practical training programmes are arranged by U.P. Ganna Kishan Sansthan. Mobile training programmes in rural areas with 'media training' have also been taken up. The research programmes carried out at the main research centre Shahjahanpur and other sub-stations have shown that sugarcane varieties such as U.P.-5, U.P.-6, U.P.-8, CoS 8118, CoS 8408, CoS 8214, CoS8314, and CoS 8422 are found useful for general cultivation while CoS 8009 and CoS 8016 are suited for water logged areas. CoS 8434—a moderately thick and red-rot resistant variety with high yield and juice percentage has been released for general cultivation in Northern India.

1.8.10. Against a total outlay of Rs.86.00 lakh for the Seventh Plan, Rs.136.00 lakh have been spent during the first three years. During 1988-89 against an outlay of Rs.42.00 lakh an amount of Rs.103.21 lakh including Rs.61.21 lakh for the strengthening of Kuraghat Research Station in Gorakhpur are anticipated to be utilised. An outlay of Rs.50.00 lakh has been proposed for 1989-90.

1.8.11. *Forest Research*—Research and field trials are an integral part of management of forest. Research has to

proceed as well as follow any new development in Silvicultural technique, production, utilisation and preservation of eco-system. The aim of **forest research** organisation is to perfect technique to enable the department to meet the industrial, Social, cultural and environmental obligations from forests to the extent possible and to solve the problems arising out of various forestry practices. Forestry research is carried out mostly by Forest Department itself. Before the onset of **Five Year Plans**, research was **concerned** mainly with the collection, assisting territorial staff with technical information for conduct of scientific forest management. In plains region, intensive research is required in **ecology and environment, social, agro forestry** and afforestation of degraded areas such as Usar, Ravines, Water logged and denuded slopes of **Vindhyan and Bundelkhand** regions. The present staff available for research is inadequate for intensifying research activities in the above fields.

1.8.12. The hill region of the State is vitally important for preserving environment, and ecology of the State. Large areas in the hill region are **devoid of vegetation** and need to be afforested as early as possible. With deviation in altitude, soil slope, moisture, biotic factor the selection of suitable species is essential for different areas. The hill region covering more than 30,000 sq. km. of forest area and varying from the lower foothills to alpine zones is so vast and the present research staff is so inadequate that the whole of Garhwal region is, at present, not covered by any research station. In addition to the above, seed also plays an important role on success of plantations. The collection of good seed and testing is also necessary for which at present there is no staff.

1.8.13. Keeping in view the above facts, the work of research is to be implemented with bigger infrastructure. Up to the end of Six Plan 162.89 lakh has already been spent. For Seventh Plan, an outlay of Rs.205.00 lakh has been approved. During 1985-86, 1986-87 and 1987-88 Rs.93.00 lakh have already been

spent. Against the anticipated expenditure of Rs. 35.00 lakh during 1988-89, an

outlay of Rs. 45.00 lakh has been proposed for 1989-90.

### 1.9. AGRICULTURAL FINANCIAL INSTITUTION

The primary agricultural financial institution in the State is "The Uttar Pradesh State Cooperative Land Development Bank Limited," which was registered on 12th March, 1959 with the basic objective of providing long term financial credit assistance to cultivators of the State for agricultural development. In order to disburse long term credit, the bank issues ordinary and special debenture, which are shared by the Government of India, State Government and National Bank for Agricultural and Rural Development (NABARD). Besides, for increasing the loan disbursement capacity of the branches of the bank, the State Government also invests in the shares of the bank branches. In the beginning, the Bank was advancing loans to farmers mainly for the programmes of minor irrigation and farm mechanisation. But

later on, the Bank started advancing loans for diversified programmes such as dairy development, fisheries, horticulture, sugar godowns, gohar gas plants, village cottage industries etc.

1.9.2. Under minor irrigation programme, a loan of Rs. 209.15 crore was disbursed in the first three years (1985-88) of the Seventh Plan, and it created additional irrigation potential of 12.49 lakh hectares. For 1988-89, the target is to disburse a loan of Rs. 98.00 crore for minor irrigation programmes and to create additional irrigation potential of 3.18 lakh hectares. A loan of Rs. 98.00 crore is proposed to be distributed during 1989-90 to create additional irrigation potential of 3.40 lakh hectares

1.9.3. The details of loans disbursement by the Bank are given in the table-26

TABLE 26—Loan Disbursement—Target/Achievement

(Rupees in crore)

Item	Target 1985-90	Achievement			Target 1988-89	Proposed target 1989-90
		1985-86	1986-87	1987-88		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Minor Irrigation	417.00	63.35	65.22	80.58	98.00	98.00
2. Farm Mechanisation ..	48.00	6.82	10.18	11.47	10.00	10.00
3. Diversified programmes	22.00	3.53	5.44	7.61	7.00	17.00
4. Institutional Finance ..	31.00	0.69	3.82	1.23	5.00	5.00
Total ..	518.00	74.39	84.66	100.89	120.00	130.00

1.9.4. To provide adequate and timely loans to cultivators, 274 branches of the bank are functioning in the State. Some new branches at newly created tehsils are expected to be opened during the years 1989-90. During the first three years

of the Seventh Plan, the State Government have invested Rs. 944.47 lakh in the debentures/shares of the bank against the Seventh Plan target of Rs. 2450.00 lakh. An outlay of Rs. 350.00 lakh has been approved for 1988-89 for investment in



the debentures/shares of the bank, against which anticipated expenditure is Rs.550.00 lakh. The proposed outlay for 1989-90 is Rs.500.00 lakh.

1.9.5. The details of investments in different years of Seventh Plan are given in the table-27 :

TABLE 27—State Government's Investment in Debentures, Shares

Purpose	(Rupees in lakh)					
	Investment			1988-89		1989-90
	1985-86	1986-87	1987-88	Approved outlay	Anticipated expenditure	Proposed outlay
(8)	(2)	(3)	(4)	(5)	(6)	(7)
(A) Investment in the debentures floated by the Bank						
(i) Minor Irrigation ..	109.74	128.80	123.51	200.00	225.00	200.00
(ii) Farm Mechanisation ..	59.00	84.99	99.44	60.00	100.00	100.00
(iii) Diversified programme ..	22.00	22.83	25.43	53.00	60.00	70.00
(iv) Institutional Finance ..	8.00	6.65	25.86	12.00	40.00	30.00
Total (A) ..	198.74	243.27	274.24	325.00	425.00	400.00
(B) Investment in the share of Bank Branches.	116.22	100.00	12.00	25.00	125.00	100.00
Total (A+B) ..	314.96	343.27	286.24	350.00	550.00	500.00

1.9.6. During 1989-90 efforts will be made to arrange the resources for an all time high lending programme of Rs.130.00 crore. This will be done through floatation of debentures or loans as per norms applicable by NABARD for floatation of debentures against the loaning.

1.9.7. In the loaning process, the proper recovery of loans is an important activity. Under the recovery programme, the achievement made by the bank in the first three years of the Seventh Plan are

given in table-28 :

TABLE 28—Recovery of Loans  
(Rupees in crore)

Year	Recovery of loans		
	Target	Achievement	Percentage
(1)	(2)	(3)	(4)
1985-86 ..	114.37	87.26	76.3
1986-87 ..	141.53	97.79	69.1
1987-88 ..	125.57	49.07	39.0

1.9.8. The target for recovery of loans during 1988-89 is Rs.150.00 crore and the proposed target for 1989-90 is Rs.145.00 crore.

#### 1.10. CO-OPERATION

The Co-operative movement has rendered valuable service by extending credit facilities to farmers. The Co-operatives also assist farmers in marketing and processing agricultural produce, though on

a limited scale of fate, Co-operatives have also undertaken the task of making available various consumer goods in remote rural areas under public distribution system.

The Co-operative infrastructure created so far in the state is shown below :

Institutions	Total number
1. Apex Institutions ..	10
2. Primary Agricultural Credit Societies (PACS) including Farmer Service Societies (FSS)	8601
5. Cold storages ..	89
4. Processing unit ..	94
3. District Co-operative Banks ..	57
6. Central wholesale Consumer Stores	60
7. Marketing Societies ..	266
8. Urban Co-operative Banks ..	24
9. Seed Stores/Block Unions ..	1642
10. Primary Co-operative Consumers' Societies ..	1789
11. Primary Co-operative Banks ..	8

1.10.2. The Co-operative movement started as primary village co-operative societies or primary village banks with the sole purpose of distributing credit and mobilising savings, if any, but with the passage of time the activities under co-operative movement have greatly been diversified for the benefit of farmers.

1.10.3. For short term and medium term credit, Co-operatives function through U. P. Co-operative Bank, District Co-operative Bank and Primary agricultural credit societies. The long term credit is made available through the Land Development Bank and its branches. The volume of disbursement of different kinds of loans in the Seventh Five Year Plan was as under :

TABLE 29.—Volume level of disbursed loan

Item Unit	Base year (1984-85) level	Seventh Plan 1985-90 target	1985-86 Achievement	1986-87 Achievement	1987-88 Achievement	1988-89 Target	1988-89 Achievement anticipated	1989-90 Proposed Target
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Short term loan (Rs. in crores)	232.46	600.00	243.60	256.90	322.50	425.00	425.00	475.00
Medium terms loan (Rs. in crore)	30.90	100.00	25.12	30.44	38.34	50.00	50.00	60.00
Long term loan (Rs. in crores)	70.00	160.00	75.00	84.66	100.89	120.00	120.00	140.00

1.10.4. Fertilizers are also distributed to farmers through Co-operatives. The distribution of fertilizers through Co-operative net work increased from Rs 211.18 crore in 1984-85 to Rs. 320.00 crore in 1987-88.

For the Co-operative net work in rural areas, rural godowns in almost all the Nyaya Panchayat level primary Agricultural Credit Societies with a storage capacity of 20.00 lakh tonnes have been constructed. Seventeen closed cold storages were repaired and restarted after a long gap.

1.10.5. The main thrust of Co-operatives during 1989-90 shall be:—

(i) Optimum utilization of the resources with maximum benefit to members.

(ii) Mass participation in Co-operatives greater emphasis on universal membership.

(iii) Awakening among the Co-operative members and office bearers of the Institutions regarding Co-operative principles and their inter se responsibilities.

Cases, embezzlement, misappropriation and the amounts involved there in :

TABLE 30 *Misappropriation of funds different years*

Co-operative year	No. of cases	Total amount involved (Rs. in lakh)	Of which embezzled amount (Rs. in lakh)
(1)	(2)	(3)	(4)
June, 1983	29267	8701.46	2310.87
June, 1984	30471	10053.31	2884.98
June, 1985	31559	11359.68	3137.66
June, 1986	31954	13923.10	3566.24
June, 1987	31963	15325.97	3995.87
March, 1988	32138	16716.79	4330.2

1.10.19. It will be seen from the above table that cases of fraud, embezzlement, misappropriation and amount involved therein is increasing progressively from year to year. It is, therefore, necessary to strengthen the Co-operative and Panchayat

audit organisation to prevent and minimize these irregularities. There is at present shortage of staff in audit organisation. A large number of Co-operative Societies were left unaudited in the past, mainly due to shortage of staff.

1.10.20. *Outlays and Expenditure*—The following table shows yearwise outlay and Expenditure incurred on co-operative Audit organisation :

Year	Rupees in lakh	
	Outlay sanctioned Total	Expenditure incurred
1985-86	43.00	43.00
1986-87	58.83	58.59
1987-88	82.00	73.65
1988-89 (Anticipated)	107.00	170.00

1.10.21. An outlay of Rs.126.00 lakh (including Rs.26.00 lakh for Hills) has been proposed in 1989-90 for strengthening of this organisation.

#### 1.11. OTHER AGRICULTURE PROGRAMME

Technological advancements in the field of agricultural production have indeed shown spectacular results on the production front. The transition from subsistence farming to agricultural surplus has brought into sharp focus, the imperative need for adoption of appropriate marketing technology with the overall objectives of bringing about orderly conditions of marketing of agricultural produce and ensuring a fair and remunerative price to the farmers in the disposal of his produce, in the new context of growing surpluses. To provide the basic facilities of marketing as near to the form as possible through modern well laid out rural subsidiary main market yards cleaning and grading facilities a net work of rural godowns improvement of means of communication in the rural areas to facilitate movement of produce from the village to nearby markets etc. an outlay of

Rs.751.00 lakh was approved for Seventh Plan, which includes Rs.87.00 lakh for hills. It was proposed that construction of 80 principal market yards, 400 sub-market yards and rural markets along with 35 cool houses in the hill areas will be taken up with this outlay. The scheme of cool houses has now been transferred to the head development of 'Food Storage and Warehousing' from 1989-90.

1.11.2. The following table gives Yearwise expenditure :

	(Rs. in lakh)
1985-86 (Expenditure)	16.87
1986-87 (Expenditure)	172.28
1987-88 (Expenditure)	50.00
1988-89 (Approved outlay)	65.00
1989-90 (Proposed outlay)	35.00

1.11.3. Physical achievement/target are as shown below :

TABLE 31—Physical Targets/Achievements

Item	Base year (1984-85) level	Seventh Plan (1985—90) Target	1985-86 Achieve- ment	1986-87 Achieve- ment	1987-88 Achieve- ment	1988-89 Target/ achieve- ment	1989-90 Target
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Principal Market yards (No.)	98	178	110	123	129	139	149
2. Sub-Market yards (No.)	39	439	53	66	76	86	96
3. Commercial grading units (No.)	..	203	2	4	8	19	29

1.11.4. An outlay of Rs. 35.00 lakh has been proposed for 1989-90 which includes Rs. 20.00 lakh for hills.

**ANNEXURE**

*Physical achievement and Target - World Bank aided Himalayan Water Shed Management Project\**

Project activity	Unit	Project Target		1984-85 Achievement	Actual achievement			1988-89 Target/ anticipated achievement	Proposed target for 1989-90	
		Total project target	Seventh Plan (1985-90) Target		(6)	(7)	(8)			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
<b>1. FORESTRY</b>										
1.1	Plantation on degraded land	ha.	14720	11790	200	596	2312	4482	2750 (3335)	1650
1.2	Plantation on blank areas	ha.	11999	8114	255	237	1664	2603	1960 (2570)	1650
1.3	Plantation near villages	.. ha.	9446	6806	100	497	1803	1826	1330 (1755)	1350
1.4	Farm forestry	.. ha.	17891	16791	1160	2762	5748	8281	..	..
Figures under parentheses are of anticipated achievements.										
<b>2. SOIL CONSERVATION</b>										
2.1	Brushwood/stone checkdams	.. Nos.	21087	15395	63	378	3723	6753	2250	2250
2.2	Crete wire dams	.. Nos.	4023	3074	58	193	312	1721	415	433
2.3	Drop structures	.. Nos.	231	150	3	21	26	46	30	27
2.4	Vegetative rehabilitation of abandoned terraces	ha.	132	55	..	..	..	..	22	31
2.5	Repairs of old agricultural terraces in selected MWS (mini water sheets)	'000 Rs.	550	550	..	..	..	..	275	275

### 3. HORTICULTURE

3.1	Top working	...	ha.	831	578	73	77	84	220	102	95 ]
3.2	Raising of individual orchards		ha.	1088	819	43	116	216	268	124	95
3.3	Rejuvenation of old orchards		ha.	714	536	...	24	118	186	110	98
3.4	Homestead orchards		'000 Nos.	236	179	...	...	42.8	81.5	32	22.5
3.5	Distribution of Horticulture tools		Nos.	140	130	10	20	5	...	105	...
3.6	Establishment of elite garden		Nos.	2	2	...	...	...	1(part)	2(part)	2(completion)

### 4. MINOR IRRIGATION

4.1	Lining of irrigation channel		Km.	105.47	68.87	2.92	6.26	13.54	5.07	23	21
4.2	Construction of storage tanks		Nos.	605	429	10	46	121	115	78	69

### 5. AGRICULTURE

#### 5.1 Distribution of seeds minikits

(a)	Paddy	...	Nos.	9177	7246	131	1150	2315	2581	600	600
(b)	Soya been	..	Nos.	7778	5298	80	505	1442	1751	800	800
(c)	Wheat	..	Nos.	11827	7138	1089	950	1637	2151	1200	1200

#### 5.2 FIELD TRIALS

(a)	Paddy		No.	41903	17903	...	315	722	866	8000	8000
(b)	Soya been	...	No.	42269	18269	...	265	709	1295	8000	8000
(c)	Wheat	...	No.	42216	17753	463	265	688	800	8000	8000
(d)	Toria	..	No.	20000	8000	...	...	...	...	4000	4000
(e)	Lentil	...	No.	3500	1400	...	...	...	...	700	700

5.3	Construction of input storage/godowns		Nos.	59	45	2	6	13	9	13	4
-----	---------------------------------------	--	------	----	----	---	---	----	---	----	---

Project activity	Unit	Project target		1984-85 Achieve- ment	Actual achievement			1988-89 Target/ anticipated achieve- ment	Proposed target for 1989-90
		Total project target	Seventh Plan (1985-90) target		1985-86	1986-87	1987-88		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
5.4 Distribution of improvement agricultural implements :									
(a) Nasura .. ..	Nos.	5000	2000	..	..	..	..	1000/ 2644	1000
(b) Kutla .. ..	Nos.	5000	2000	..	..	..	..	1000/ 2644	1000
(c) Danela .. ..	Nos.	250	100	..	..	..	..	50/ 510	50
(d) Seed Drills .. ..	Nos.	50	20	..	..	..	..	10	10
(e) Plant protection equipment	Nos.	100	40	..	..	..	..	20	20
5.5 Establishment of seed produc- tion centres	Nos. hq.	4	4	..	..	..	..	2/31	2/106
		137	137						
6. ANIMAL HUSBANDRY									
6.1 Cattle exchange .. ..	Nos.	250	..	250	dropped				
6.2 Supply of feed .. ..	Nos.	250 (for 2 years)	..	260					
6.3 Strengthening of Veterinary Hospitals .. ..	Nos.	8	7	1	4	3	..	..	..
6.4 Strengthening of Veterinary Dispensary-cum bull centres	Nos.	16	15	1	6	7	2	..	..

6.5	Provision of A.I. facility at Veterinary Hospitals	No	13	13	..	10	2	1	..	..
6.6	Provision of artificial insemination facility at S.M.C.S.	Nos.	15	15	..	11	3	1	..	..
6.7	Establishment of NBC at stockman centres	Nos.	34	34	..	..	14	..	17	3
6.8	Establishment of NBC on Darinda pattern	Nos.	34	34	..	10	21	3	..	..
6.9	Establishment of Liquid Nitrogen plants	..	2	2	..	..	2 (purchased)	2 (installed)	..	..
6.10	Supply of mulch cattle	..	500	200	..	..	..	..	..	200
6.11	Feed and Fodder stores at Veterinary Hospitals (with A.I. Labs)	Nos.	8	8	..	..	8	..	..	..
6.12	Feed and Fodder store at stockman dispensaries	Nos.	12	12	..	..	12	..	..	..
6.13	Distribution of fodder minikits (Ravi and Kharif season)	Nos.	46340	12450	..	..	765	1075	1710	8900
6.14	Supply of concentrate feed to crossbreed heifers	Nos.	8976	3151	..	..	246	330	975	1600
6.15	Castration of scrub bulls	Nos.	6852	6852	..	equipment	3160	3692	..	..
6.16	Pastures									
	(a) Development of pasture	ha.	560	200	..	..	..	..	50	150
	(b) Maintenance of pasture	No.	440	50	..	..	..	..	..	50
6.17	Health cover (Medicine and vaccine) at Veterinary Hospital and SMCS	'000 Rs.	L.S.	L.S.	..	..	116	133	..	..
6.18	Replacement/repairs of essential equipment at Hospitals/SMC	'000 Rs.	L.S.	L.S.	..	..	161	98	..	..
6.19	Cow/Bull units	.. Nos.	146	146	..	..	80	66	..	..



## ANNEXURE (Concl.)

Project activity	Unit	Project target		1984-85 Achieve- ment	Actual achievement			1988-89 Target/ anticipated achieve- ment	Proposed target for 1989-90
		Total Project target	Seventh Plan (1985-90) target		1985-86	1986-87	1987-88		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
6.20 Establishment of demonstration Units	Nos.	9	9	..	..	9	..	..	..
6.21 Farmer's motivators Calf rallies and cattle show	Nos.	12	12	..	..	12	..	..	..
6.22 Installation of cattle crushes	Nos.	182	182	..	..	172	10	..	..
6.23 Improvement of feed and fodder resources									
(a) Supply of thrasher ..	Nos.	20	20	..	..	..	..	10	10
(b) Supply of chaffcutter	Nos.	2000	2000	..	..	..	..	10000 850	1000
(c) Supply of feed troughs ..	Nos.	2000	2000	..	..	..	..	640	1360
6.24 Provision of equipment and improved breeding facilities	Set nos.	120	120	..	..	..	..	100	20
6.25 Establishment of 20,000 litre capacity dairy plant at Srinagar	Nos.	1	1(part)	..	..	..	..	part	part
6.26 Establishment of milk co-operative	Nos.	40	L.S.	..	..	..	..	L.S.	L.S.

## 7. WORKS BY PROJECT DEMONSTRATION

7.1 Research	..	Various Forestry, Hydrology and Soil Conservation Research							
7.2 Smokeless Chulhas	.. Nos.	L.S.	L.S.	..	..	600	2752	3100	L.S.

7.3	Solar cookers	..	Nos.	L.S.	L.S.	..	..	..	350	..	L.S.
7.4	Bio-gas plants	..	Nos.	L.S.	L.S.	..	..	..	24	28	L.S.
7.5	Raising of nutritious/lagume grasses.	..	ha.	L.S.	L.S.	..	..	..	37	..	..
7.6	Priyagni Agethi/wood stove		Nos.	L.S.	L.S.	..	..	..	4027	4306	L.S.

---

## CHAPTER II

### RURAL DEVELOPMENT

#### 2.1. SPECIAL PROGRAMME FOR RURAL DEVELOPMENT

##### *Integrated Rural Development Programme*

Integrated Rural Development Programme (I. R. D. P.) being one of the significant anti-poverty programmes, continues during the Seventh Five Year Plan also with a package of poverty alleviation measures. This programme aims at increasing additional employment/work opportunities for selected beneficiaries from identified target groups/families living below the poverty line in rural areas and for reducing unemployment and under employment to the maximum extent through provision of income generation and income supplementing assets of weaker sections of society in rural areas. In order to accelerate this programme a new strategy is being adopted to revitalise the execution mechanism. The new strategy lays more emphasis on consolidation of gains of the Sixth plan by providing second dose of financial assistance to those beneficiaries who could not cross the poverty line with the first dose. Efforts will be made to ensure that no beneficiary of the Sixth Plan is left live below the poverty line by the end of the Seventh Plan. At least 50 percent of the selected beneficiaries will be from Scheduled Caste/Scheduled Tribe families. This percentage will be 30 for hill regions. Due weightage will also be given to women by fixing 30 percent quota for them. The programme execution machinery has been made more responsive by inclusion of Gaon Sabha and peoples' representatives in the selection process of beneficiaries. Village and block level advisory committees have also been constituted to advise on execution of programmes.

2.1.2. The annual family income has also been redefined now for determining the poverty line. The family with an annual income of Rs. 6400 or less is considered to be a family below the poverty line. But for the purposes of

the identification of eligible families living below the poverty line for assistance the 'cut off' point has been fixed at Rs. 4800 annual income per family. DRDAs will ensure total coverage of families with an annual income upto Rs. 3500 and after exhaustion of the first category, the families in the annual income group of Rs. 3501 to Rs. 4800 per annum will be covered. The entire programme will be suitably dovetailed with other sectoral programmes like Handloom and Sericulture, Social Forestry, Cattle Development & Agricultural Production, etc. for ensuring maximum benefit flow to poor families.

2.1.3. A target of covering 31.60 lakh families has been fixed for the Seventh Plan under this programme. During first three years of the current plan, 20.42 lakh families were covered. In the current year, 6.11 lakh families are likely to be benefitted. By the end of the fourth year of the plan the total number of assisted families will be 26.53 lakhs leaving a balance of 5.07 lakh families for the last year (1989-90) of the Seventh Plan. The tentative target for the 1989-90 has been fixed at 5.80 lakh families with the proposed outlay of Rs.7848.87 lakh including Rs.600.00 lakh for hills.

2.1.4. *Development of Women and Children in Rural Areas:* The programme (DWCRA) was started in 1984-85 in the State as a sub-scheme of IRDP. Assistance to village women to avail the facilities under IRDP by organizing them into groups to take up economically viable activities, provision of supportive services for caring their children and to improve the quality of their life, organization of childcare facilities at NREP work sites and encouragement to rural women to take benefit of other developmental schemes like smokeless chulha, water seal

latrines, I.C.D.S. and adult education, etc. are the main objectives of the programme. In 1984-85 five districts Sultanpur, Etawah, Deoria, Basti and Banda were covered under the programme. Allahabad and Gorakhpur districts were taken up in 1986-87 while 6 more districts Raebareli, Gonda, Mainpuri, Nainital, Pauri and Shahjahanpur were selected during 1987-88. Thus in all, 13 districts were covered under the programme upto March, 1988. Four more districts were added to the area of operation in the current financial year bringing the total to 17 districts.

2.1.5. A target of 5,212 groups was fixed for Seventh plan, out of which 2894 groups were formed during first 3 years of the Seventh Plan. The target of remaining groups will be achieved in 1988-89 and 1989-90. Of the anticipated total expenditure of Rs. 281.02 lakh, a sum of Rs. 24.16 lakh would be spent in hills. A target of including 4 other districts has been fixed for 1989-90, bringing the total to 21 districts (consisting of 230 blocks) by the end of the Seventh Plan.

2.1.6. With one ADO (W) and 3 VDOs (W) allocated for each block, the total requirement will be 230 ADOs and 690 VDOs. In each block one VDO will be financed by UNICEF, leaving 460 VDOs to be financed by the Central and State Governments. One hundred and five ADOs will be covered in the ANP budget while 125 of them will be covered in the DWCRA budget. Financial provisions has been worked out at Rs. 1700 per ADO per month and Rs. 1200 per VDO per month.

2.1.7. The target for formation of women groups in 1989-90 is 1600. Of these, 800 will be formed in old blocks and the remaining half in new districts. The state government will have to provide Rs. 81,60,000 at the rate of Rs. 5100 per group. The scheme is centrally sponsored and the state and Central governments would bear the expenditure on fifty-fifty basis. The total expenditure will amount to Rs. 559.84 lakh. The scheme is expected to go a long way in furthering the objectives of the IRDP, in helping the families of the target groups.

## DROUGHT PRONE AREA PROGRAMME

2.1.8. A large part of the State's cropped area, being rainfed with low productivity despite substantial irrigation development, demands serious consideration to boost production to the extent possible by adopting modern agricultural practices in such areas to improve the lot of rural poor. The situation becomes all the more critical when viewed in the light of susceptibility of rainfed agriculture to frequent droughts. The situation required concerted efforts to evolve and disseminate the dry land agriculture technology in such areas. A long term development strategy will have to be thought of to maximise agricultural production in resource deficit areas ensuring most efficient harvesting of available water resources. It will include pasture and fodder development for the live stock economy. The Drought Prone Area Programme aims at restoration of ecological balance, increasing productivity and generating additional employment potential for small and marginal farmers and agricultural landless labourers.

2.1.9. This programme is being implemented in the state since 1974-75 and now covers 87 blocks in 16 districts. It is a centrally sponsored district sector scheme with Central and State funding on 50:50 basis.

2.1.10. The outlay per block is available on the basis of its area. The blocks with 500 sq. km. area get at the rate of Rs. 15 lakh while the blocks with area of 500-1000 sq. km. are eligible to get funds at the rate of Rs. 16.50 lakh. The blocks with an area of more than 1000 sq. km. area receive funds at the rate of Rs. 18.50 lakh annually. The total outlay available for 1989-90, is estimated to be Rs. 1386 lakh.

2.1.11. The DPAP is an area development programme. The micro watershed is its unit of planning. The selection of watershed, sub-watershed, mini watershed and micro watershed is done in each block in such a way that the entire problem area is covered and then the coding of these watersheds is done. One micro watershed is selected in each

block from the top of watershed. The Government of India has fixed up the following weightage to various sectors to ensure drought proofing of area.

Sectors	Weightage (Percentage)
1. Soil and Water conservation ..	30
2. Afforestation and pasture development ..	25
3. Water resource development ..	20
4. Project administration ..	10
5. Others ..	15
Total ..	100

2.1.12. The planning of different development activities is done in the selected area after conducting land resource survey, soil survey, topographical survey etc. The estimates are, then, prepared and phasing is done. The planning is done as per requirements of the area with utmost consideration of prescribed weightages while finalising the plans.

2.1.13. The following steps will be taken for achieving the objectives of the programme :

1. More emphasis on water harvesting works under Soil Conservation Sector to ensure drought proofing of area.

2. Afforestation to be linked with water harvesting to ensure higher survival rate.

3. More emphasis on extensive forestry and farm forestry to benefit the local people and ensure restoration of ecological balance.

4. In the irrigation sector only small and viable projects to be taken up to cover wide area and ensure quick benefits.

5. Proper linkage of irrigation projects with agriculture programme to ensure more agriculture production.

6. More people's participation in planning and implementation of programme to ensure their involvement.

7. More publicity to the programme through audio-visual aids and other means.

8. Intensive monitoring of the programme for timely implementation and improving the quality.

9. Concurrent evaluation of the programme to find out the deficiencies and good points of the programme.

2.1.14. The achievements in the preceding three years and during the current year are given as under :—

	(Rupees in lakh)			
	1985-86	1986-87	1987-88	1988-89
1. Carried over balance ..	843.45	839.86	487.19	371.05
2. Outlay ..	1044.00	1305.00	1305.00	633.00*
3. Total ..	1887.45	2144.86	1792.19	1004.05
4. Expenditure ..	1086.91	1510.98	1437.61	355.31+
5. Percentage ..	57.59	70.45	80.21	35.39

\* First instalment + August 1988

Sector	1985-86		1986-87		1987-88		1988-89	
	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
1. Soil and Water Conservation(ha.)	33456	26846	30476	23705	20447	17714	20676	3234
2. Irrigation (ha.)	10675	4545	13692	6639	14756	9787	8288	3779
3. Afforestation and Pasture Development(ha.)	5764	5778	6134	5990	8696	7493	13802	3752

Physical

2.1.15. About 25 per cent of the State's share is marked for the development of Scheduled Caste, Backward Class beneficiaries under the Special Component Plan. In 1988-89, a sum of Rs. 173.50 lakh has been allotted under this head to benefit 9000 families of which Rs. 43.30 lakh have been utilized by the end of August, 1988. The same amount is proposed for 1989-90 with the following physical and financial targets.

Sector	Financial (Rs. in lakh)	Physical (Area in ha.)
1. Soil and Water conservation	15.80	20,000
2. Afforestation and pasture development	4346.50	12,000
3. Water resource development	877.20	6,000
4. Project administration	138.60	..
5. Others	207.90	..
Total	1986.00	..

## 2.2 RURAL EMPLOYMENT

### NATIONAL RURAL EMPLOYMENT PROGRAMME

National Rural Employment Programme (NREP) was started in October, 1980 with the objective of providing additional productive employment to unemployed and under employed of rural areas, creating durable productive community assets beneficial to poorer sections of society and strengthening rural economic and social infrastructure facilities for improvement in the overall quality of life of the rural poor. The programme was started in 1980-81 with 100 per cent central assistance. However, since 1981-82 this programme is being implemented on a 50:50 sharing basis between the Central and State Government. Allocation of funds to different districts is made on the basis of fifty per cent weightage to the number of rural agricultural labourers and marginal farmers in the district and fifty per cent weightage for SC/ST population in the district. At the district level, the DRDA is responsible for planning, monitoring and implementation of the programme as per prescribed norms and guidelines. Earmarking of funds under certain specified sectors is based on 25 per cent of annual allocation for social forestry projects and 10 per cent for pro-

### 2.1.16. INTEGRATED RURAL ENERGY PROGRAMME

This scheme is being implemented under the guidance of Planning Commission for which an outlay of Rs. 175.00 lakh for 1989-90 is proposed. Under Integrated Rural Energy Programme (I.R.E.P.) the energy needs of the blocks are assessed after detailed survey to formulate the detailed strategy for fulfilling the energy needs by conventional as well as non-conventional sources. Apart from Sultanpur, Lucknow, Nainital, Dehradun, Deoria there are other 24 districts where the scheme is being implemented.

jects which benefit Scheduled Castes/Scheduled Tribes exclusively.

2.2.2. In the absence of funds for maintaining physical assets created under NREP, difficulties were experienced in maintaining these assets. Now, Government of India have prescribed that to maintain such assets created under this programme, DRDA can utilise 10 per cent of the total financial allocation for the year. Directory of works has been prepared in each district listing out year-wise details of the assets created including nature of project, cost involved, benefits obtained, employment generated and other necessary details. These works have been classified in to two categories viz. work for which some agency undertakes responsibility for maintenance and works for which there is no provision for maintenance in any department. For second category works maintenance will be done mainly as follows :

- (1) Village/Forestry Maintenance cost upto Rs. 1000 per annum
- (2) Block Maintenance cost upto Rs. 10000
- (3) Rural Engineering Service Department—works other than above

2.2.3. During Sixth Plan (1980-85), Rs. 308.03 crore were actually released, of

which Rs.142.15 crore was state's share, against the approved outlay of Rs.200.00 crore in which state's share was Rs.100.00 crore. During the same period, Rs.293.49 crore were utilised which was 95.3 per cent of the total sanctions. The programme generated employment of 19.16 crore mandays against a target of 21.42 crore mandays which was 89.44 per cent of the physical target.

2.2.4. For the Seventh Plan period (1985-90), an outlay of Rs.19250.00 lakh of which Rs.2250.00 lakh is for hills, has been approved by the State Government. The Central Government has not intimated their share for the plan period. For 1985-86, Central Government and the State Government approved an outlay of Rs.3922.00 lakh each. Out of the state outlay of Rs.3922.00 lakh, Rs.248.83 lakh was approved for hill region. The Central Government released Rs.3765.27 lakh against their allocation of Rs.3922.00 lakh. During the same period, 501.50 lakh mandays employment was created against the target of 427 lakh mandays.

2.2.5. For 1986-87, the State Government approved an outlay of Rs.4400.00 lakh of which Rs.400.00 lakh was for hill region. While the Central Government approved allocation of Rs.4054.00 lakh only for Central and State Government each. Against this allocation Rs.4423.22 lakh was released by State and Central Government each creating an employment of 465.23 lakh mandays.

2.2.6. For 1987-88, an outlay of Rs.4502.00 lakh has been approved of which Rs.171.00 lakh is for hills. A physical target of 530.22 lakh mandays employment generation is the target for the year. Government of India has also allocated 205871 M.T. of foodgrains as additionality to the State Government under NREP. The rate of wheat per Kg. has been raised from Rs.1.50 per Kg. to Rs.1.55 per Kg. and rice will be available at the rate of Rs.1.85 per Kg.

2.2.7. The details of the year-wise expenditure incurred on earmarked sectors are as below :

TABLE 1—Year-wise expenditure

Sector	(Rupees in lakh)		
	1985-86 expenditure	1986-87 expenditure	1987-88 expenditure
(1)	(2)	(3)	(4)
1. Social Forestry .. .. .	1237.39	1980.83	2089.45
2. Rural Sanitation .. .. .		130.45	140.91
3. Community Centres .. .. .		842.79	1050.72
4. Scheduled Castes/ Scheduled Tribes .. .. .	1868.61	2487.32	3020.77

2.2.8. The overall achievements in terms of foodgrains utilization and em-

ployment generation are as below :

TABLE 2—Achievements in terms of foodgrains and employment

Item	1985-86	1986-87	1987-88
(1)	(2)	(3)	(4)
1. Foodgrains received (M.T.) .. .. .	135750.00	276340.00	1926208.00
2. Foodgrains utilized (M.T.) .. .. .	113494.81	203730.02	198263.98
3. Employment Generated (Lakh mandays)	501.90	465.23	553.51
4. (Pre-mandays foodgrains (Utilisation Kg.)	2.26	4.37	3.58
5. Wage: Non-wage ratio .. .. .	1:0.7	1:0.9	1:0.7

2.2.9. During 1987-88 the outlay fixed by the Government of India was Rs.4502 lakh for generating 530.22 lakh mandays of employment. Against these target, Rs.6489.08 lakh of state's share was released and 553.51 lakh mandays of employment was generated. For 1988-89, an outlay of Rs.7398 lakh has been fixed which will generate 580 lakh of mandays of employment.

2.2.10. There is no indication from Government of India regarding outlay and physical targets for 1989-90. However, on the basis of district plans an outlay of Rs.8137.80 lakh has been fixed which will generate employment of 663.23 lakh mandays.

#### RURAL LANDLESS EMPLOYMENT GUARANTEE PROGRAMME (RLEGP)

2.2.11. This (RLEGP) programme was started on 15th August, 1983 with 100 per cent contribution from Government of India. The objective of the programme is to provide employment for a minimum of 100 days in a year to atleast one member of every rural landless family. The programme aims at creating permanent assets which may accelerate economic growth of rural areas. Projects at an estimated cost of Rs.213.00 crore were sanctioned by Government of India for Sixth Plan, against which Rs.86.13 crore were released. Against this, an amount Rs.66.91 crore was utilised generating employment of 433.91 lakh mandays. The Government of India released Rs.86.17 crore during 1985-86 including Rs.16.97 crore for Indira Avas Yojna and Rs.1.06 crore for rural sanitation programme. Social forestry programme was earmarked 20 per cent of the funds. The Central Government also provided 1,10,750 MT Wheat as an additionality. The utilization was of Rs.115.95 crore which generated employment of the order of 535 lakh mandays.

2.2.12. By the end of 1988-89, 7801 km. link road, 1211 km. field channels and 218 tubewells were constructed. An area of 7720 hectare was also brought under social forestry. In all 16467 houses were constructed for Harijans and freed bonded labourers. Besides, 4381 km.

drains were dug and 188 kms. bunds were constructed to get rid of the problem of water logging and to combat floods. 16467 houses were constructed for Harijans and freed bonded labourers.

2.2.13. In 1986-87, 24971 houses under Indira Avas Yojna, 29775 sanitary latrines, 1104 km. link roads, 2345 km. Kharanja and 1681 primary school buildings were constructed. In addition 295 new nurseries were developed and plantation was done on 5307 hectare under social forestry. A sum of Rs.117.50 crore was spent to generate employment of 527.61 lakh mandays during this year.

2.2.14. During 1987-88 an expenditure of Rs.110.18 crore was incurred to generate 515.84 lakh mandays. During the same period, 25709 houses, 14180 sanitary latrines, 1269 km. kharanja road, 499 primary school buildings were constructed. Afforestation was done on 25,930 hectares and 49 new nurseries were developed in 1987-88 under social forestry programme.

2.2.15. In 1988-89, the Government of India provided an outlay of Rs.106.00 crore in addition to 80900 M. T. foodgrain worth Rs.13.75 crores with an employment target of 427.70 lakh mandays. During this year, following programmes are being implemented :-

Name of the Project	Cost (Lakh Rs)
1. Indira Avas .. ..	2368.90
2. Social Forestry .. ..	1308.21
3. Soil Conservation .. ..	1549.23
4. P.W.D. .. ..	1643.34
5. Irrigation .. ..	252.03
6. Primary Schools .. ..	862.96
7. Jeevan Dhara .. ..	143.64
8. Nirbal Varg Avas Yojna .. ..	2172.97
9. General Projects .. ..	1674.30



2.2.16. The year-wise expenditure of earmarked sectors under RLEGP is given below :-

TABLE 3 -Year-wise expenditure of the earmarked sectors

Scheme	Year-wise expenditure (Lakh Rs.)			
	1985-86	1986-87	1987-88	1988-89 Anticipated
(1)	(2)	(3)	(4)	(5)
1. Social forestry	308.24	1271.78	1633.88	1308.21
2. Indira Avas Yojna	1329.05	2196.51	2367.16	2368.90
3. Sanitary latrines	..	287.68	134.23	..
4. Works for Scheduled Caste/ Scheduled Tribe	1329.05	3813.24	2501.39	2368.90

2.2.17. Yearwise details of foodgrain received and utilised and employment in terms of mandays generated is as follows:

TABLE 3—Yearwise physical progress

Item	Yearwise details			
	1985-86	1986-87	1987-88	1988-89 Anticipated
(1)	(2)	(3)	(4)	(5)
1. Foodgrain received (M.T.)	110750	276340	219261	809.00
2. Foodgrain utilised (M.T.)	89518	175612	157914	809.00
3. Mandays generated (in Lakh)	535.95	527.61	515.84	427.70
4. Per manday Food grain utilisation	1.60	3.32	3.06	1.89
5. Wage: Non-wage	1:0.94	1:0.96	1:0.74	1:0.92
6. Total expenditure	11595.00	11749.82	11018.08	12710.00

2.2.18. It has been realized that in most of the works taken up under this scheme, the durability of assets created is not of the desired level. To make assets more lasting a provision of Rs.0.50 crore is proposed in the hill area plan of state

plan for meeting the additional requirement of material component.

2.2.19. This small provision will not only ensure longer life of the assets but will also help in linking up other need based utility works to improve the overall quality of village life.

## 2.3. LAND REFORMS

*Consolidation of holdings* — Consolidation of holdings is an important ingredient of land reforms. It is also one of the pre-requisites for successful agricultural planning. It reduces cost of cultivation, stimulates investment, facilitates proper deployment and utilization of resources and raises agricultural production. Consolidation takes care of the problems arising out of sub-division and fragmentation of holdings. It also improves the quality and credibility of land records. It is also of considerable help in multipurpose development of villages in so far as a provision is made in the course of consolidation for roads, irrigation channels, land for abadi and various community works. The consolidation of land holdings was first started in the state through Co-operative Societies in 1925-26. Till 1950-51, 560 Co-operative Societies consolidated 68,678 hectares of land. In 1989 the United Provinces Consolidation of Land Holdings Act was passed. This Act came into force with effect from 1940. However, because of voluntary character of the scheme under the aforesaid Act, it could not get support from the cultivators. After abolition of Zamindari in the state the scheme was taken up as an integral part of land reforms. The Consolidation of Holding Act, 1953 was passed which made provisions for compulsory consolidation of land holdings. In 1954, the work of consolidation was first started in an organised and planned manner in districts Muzaffarnagar and Sultannur and subsequently it was extended to other districts of the State. The hill areas including 8 districts Nainital, Almora, Pithoragarh, Pauri-garhwal, Chamoli, Tehri Garhwal, Uttar Kashi and Dehradun and Lalitpur district of Bundelkhand Division were excluded from the scheme of consolidation as it was not found feasible to introduce the scheme in these districts.

2.3.2. Initially, villages having 80 per cent cultivated area, were taken up for consolidation. According to a preliminary survey, 146 lakh hectares area was

estimated to have been consolidated in the State. The scheme became so popular that there was pressing demand for consolidation, even from non-consolidation areas. Keeping in view the growing demand for this scheme, the norm of 80 per cent cultivated area of a village was reduced to 60 per cent and later on to 40 per cent. The popularity of the scheme is evident from the fact that the norm of 40 per cent was also reduced to less than 30 per cent. With this change in the norm, the consolidable area has increased enormously. The total area of the state requiring consolidation which was initially estimated to be 146 lakh hectares went up to 159.14 lakh hectares. Besides this, 69.72 lakh hectares of land is also consolidable for the second round. Out of this by the end of Sixth Plan, transfer of possession had been effected over an area of 159.87 lakh hectares.

2.3.3 The following table gives details of work done during each plan up to the end of the Sixth Plan and expenditure incurred on the scheme:—

Period	Area taken up for consolidation (in lakh hectares)	Expenditure (in lakh Rs.)
1. First Five Year Plan	0.76	77.25
2. Second Five Year Plan	21.06	691.30
3. Third Five Year Plan	45.61	1120.40
4. Three Adhoc Plans	21.53	1045.03
5. Adhoc two yearly Plan (1978-79 to 1979-80)	7.19	1615.54
6. Fourth Five Year Plan	26.38	2311.24
7. Fifth Five Year Plan	19.14	2804.60
8. Sixth Five Year Plan	18.20	6411.01
Total	159.87	16076.38

2.3.4. With a view to making the scheme more beneficial to cultivators, some important amendments were made in U. P. Consolidation of Holdings Act for the implementation of rectangulation scheme, compulsory partition of joint holdings, provisions of chak road and irrigation channels to each chak, inter village roads, abadi sites for Harijans etc. The cultivators of different areas, where consolidation work has been completed prior to the aforesaid amendments, pressed for second round of consolidation so as to enable them to avail of the benefits of the amended Act. Hence, it was decided to start second round of consolidation.

2.3.5. In 1979-80 reconsolidation work was started in tehsil Kairana of district Muzaffarnagar and tehsil Musafir-khana of district Sultanpur. Thereafter six tehsils viz. Sardhana (Meerut), Dadri (Ghaziabad), Chhibramau (Farrukhabad), Mohanlalganj (Lucknow), Faizabad and Azamgarh were taken up in 1980-81. Nine tehsils viz. Sikandrabad (Bulandshahr), Iglas (Aligarh), Bilari (Moradabad), Sadar (Bareilly), Sadar (Unnao), Sadabad (Mathura), Deoband (Saharanpur), Shahganj (Jaunpur) and Dumariaganj (Basti) were taken up in 1981-82. Four tehsils viz. Sandila (Hardoi), Soraon (Allahabad), Saidpur (Ghaziabad) and Sadar (Fatehpur) were covered in 1982-83 and five tehsils viz. Ramsanehigat (Barabanki), Auraiva and Bharthana (Etawah), Mahraiganj (Rae Bareilly) and Bindki (Fatehpur) in 1983-84. Thereafter, the Government approved 24 tehsils of 20 districts for reconsolidation. Nine of them viz. Kheragarh (Agra), Bisauli (Budaun), Naugarh (Basti), Sadar (Mathura), Hathras (Aligarh), Nawabganj (Bareilly), Mohamdi (Kheri), Ghatampur (Kanpur) and Rikanpur (Faizabad) were taken up in 1986-87 while five tehsils viz. Sadar (Gorakhpur), Budhana (Muzaffarnagar), Sadar (Sitapur) and Sambhal (Moradabad) in 1987-88. The rest of the tehsils will be taken up for reconsolidation in coming years in a phased manner, depending upon the progress of work and availability of staff.

2.3.6. A large number of the villages of the state which were formerly excluded from the scheme are now fit for consolidation. Thus total consolidation area will come to about 159.14 lakh hectares, out of which delivery of possession of new chaks has taken place in over 155.89 lakh hectares by March 31, 1988. An area of 3.25 lakh hectares is pending for consolidation. About 69.72 lakh hectares of land was estimated for re-consolidation up to this period. Out of this, delivery of possession has taken place in 13.81 lakh hectares and 55.91 lakh hectares of land was pending for re-consolidation on 1-4-1988. The details of areas consolidated and areas to be consolidated are given below :—

- |  |        |
|--|--------|
| 1. Areas available in the 1st round  | 146.00 |
| (lakh ha.)   |        |
| 2. Additional areas available due to change in the norm from 80% to 40% or the villages with even 30% area | 13.14  |
| (lakh ha.)   |        |

Total	159.14
-------	--------

**AREA AVAILABLE IN THE SECOND ROUND (Lakh ha.)**

- |  |       |
|--|-------|
| 1. Area in 26 tehsils which is in progress for the second round.   | 16.72 |
| 2. The left over area of consolidation before 1963 in 24 tehsils of 20 districts which have been approved by the Government for reconsolidation. | 24.00 |
| 3. The left over area of 29 tehsils in which consolidation work was completed prior to the amendment of 1953 and which are yet to be taken up.   | 29.00 |

Total	69.72
-------	-------

**ACHIEVEMENT UP TO MARCH 1988 (Lakh ha.)**

- |   |        |
|---|--------|
| 1. Transfer of possession in the First round.                         | 155.89 |
| 2. Transfer of possession in the second round.                        | 13.81  |
| 3. Area in balance of First round                                     | 3.25   |
| 4. Area in balance of second round                                    | 55.91  |
| 5. Total area of First and Second round in balance on April 11, 1988. | 59.16  |

*The Area Reserved for Public Utility Purpose (till March 1988)*

Purposes	Area reserved in lakh ha.		
	Ist round	2nd round	Total
(1)	(2)	(3)	(4)
1. Extension of Abadi site	0.300	0.220	0.520
2. Harijans and weaker sections abadi site	0.442	0.166	0.608
3. Manure pits ..	0.204	0.080	0.284
4. Threshing floor ..	0.287	0.016	0.303
5. Pasture Land ..	0.239	0.014	0.253
6. Panchayat Ghar	0.131	0.005	0.136
7. Plantation of trees	0.158	0.069	0.227
8. School and Play-ground	0.097	0.016	0.113
9. Hospitals ..	0.078	0.015	0.093
10. Other Public utility purposes.	0.776	0.023	0.799
Total (1 to 10)	2.712	0.624	3.336
11. Chak roads (lakh metres)	24.52	..	..
12. Irrigation channels (lakh metres)	19.85	..	..
Total (11+12)	44.37	..	..

2.3.7. Under point no. 5 of 20 point programme 1986, correction of records is being done in consolidation scheme after disposal of disputes. In 1985-86, correction of records has been completed in 3.17 lakh hectares of land in 1986-87 in 3.35 lakh hectares, and in 1987-88 in 3.30 lakh hectares. The target for 1988-89 is 3.25 lakh hectare and a similar target has been fixed for 1989-90.

2.3.8. There is also provision of voluntary consolidation scheme in section 53-A of Consolidation of Holding Act. The scheme was first started in 1978-79. Under this scheme, villagers themselves prepare the consolidation scheme of their villages with the help of consolidation

staff. Thereafter, this scheme is approved by the Deputy Director of consolidation U/S 53-A of the Consolidation of Holdings Act. Under this scheme the work of consolidation is completed in a very short period of 2 to 3 years. All disputes are settled by conciliation and there is no lengthy litigation. This scheme has proved very beneficial to tenure-holders. Voluntary consolidation scheme has been prepared in 1989 villages up to March, 1988. A target of 160 villages has been fixed for this scheme for 1988-89..

2.3.9. Earlier, 8 hill districts and Lalitpur district of Bundelkhand Division were excluded from the consolidation scheme but now the scheme is being extended to hill areas as well. Thirty-three villages of tehsil Kichha and 115 villages of tehsil Khatima of district Nainital were taken up for consolidation in 1986-87.

2.3.10. The break-up of physical and financial targets of Seventh Plan are given below :—

Year	Actual expenditure (outlay) (lakh Rs.)	Target (in lakh hectares)	Achievement (in lakh hectare)
1985-86	1864.25	3.00	3.17
1986-87	1981.12	3.25	3.35
1987-88	4231.34	3.25	3.30
1988-89	2600.00 (outlay)	3.25	..
1989-90	3216.64 (outlay)	3.25	..
Total	13893.35	16.00	9.82

2.3.11. *Financial Assistance to Ceiling Land Allottees*—Ceiling on land holdings was imposed in the state initially in the year 1960. Important amendments were made in 1972. The amended ceiling Act was enforced since June 8, 1973. Land thus declared surplus was allotted among landless agricultural labourers.

It was felt that most of the allotted ceiling land was not fit for agricultural purposes. Due to paucity of resources the allottees could not apply inputs to effect expected improvements in the allotted land. Consequently, Government of India started a Central Sector Scheme with a view to providing financial assistance to them. The scheme was started in the state in 1977-78. The scheme underwent changes from time to time. In guidelines revised in 1984 applicable to the current financial year also, the amount of assistance has been raised from Rs.1,000 per hectare to Rs.2,500 per hectare.

2.3.12. The financial assistance provided to ceiling land allottees during Seventh Plan has been as under :—

Period	No. of Allotees	Distributed amount (in lakh rupees)
1985-86	24,861	161.99
1986-87	18,975	172.24
1987-88	13,503	119.03

2.3.13. In 1988-89, a sum of rupees 98.89 lakh has been sanctioned for distribution of financial assistance to ceilings of land allottees. A sum of Rs.16.17 lakh has been distributed upto September, 1988. For 1989-90 a sum of Rs.48.10 lakh (state share) has been proposed for this scheme.

2.3.14. *U. P. Survey and Land Record Training Institute, Hardoi — U.P*

Survey and Land Record Training Institute, Hardoi was earlier known as Survey and Land Record Training School. There was provision only for training of Lekhpals and Supervisor Kanoo-gos in this school. After December 1, 1978, this school was upgraded as an institute in order to provide training to P.C.S. and I.A.S. officers also. Now this institute is being expanded and about 28 acres of land has been acquired for the purpose on Lucknow-Hardoi Road. Institute's new building is likely to cost Rs.210.00 lakh. Recently the name of the institute has been changed to "Raja Todarmal Survey and Land Records Training Institute, Hardoi."

2.3.15. The following outlays have been provided in Seventh Plan for this institute :—

Financial year	Approved outlay (Rupees in lakh)
1985-86	9.04
1986-87	9.07
1987-88	30.80
1988-89	55.00
1989-90	135.26 (Proposed)
	<hr/> 239.17 <hr/>

2.3.16. The construction of the new building of the institute is expected to be completed in 1989-90. An outlay of Rs.135.26 lakh has been proposed for 1989-90.

## 2.4. OTHER RURAL DEVELOPMENT PROGRAMMES

### TRAINING

*State Institute of Rural Development*—Training is an important input for improving the quality of planning and implementation. Realising the importance of training in Rural Development Programmes, SIRD the Composite Training Centre Bakshi-ka-Talab Lucknow was strengthened and given the status of State Institute in 1982-83. The

objectives of the institute are as under :—

(1) Design and conduct short term courses, seminar, conference and workshops on various aspects of Rural Development and allied subject of State and Training of Regional and District level functionaries.

(2) Serve as a centre for collection of Information.

(3) Provide consultancy services, evaluation and study on problem of Rural Development and Administration.

(4) Act as an apex institute at state level to advise on course content, examination, evaluation for improving quality to the training in all the training centres of Rural Development.

(5) Undertake action oriented research studies on various aspects of Rural Development.

2.4.2. The Institute conducted training programmes for the officers engaged in the planning and execution of rural development programmes. In this connection, the Institute will be completing training programmes for 2,586 officers by the end of 1988-89. It is also proposed to organise more training programmes for officers in the year 1989-90. It is also proposed to bring out training material for distribution among officers and workers of the Rural Development Department.

2.4.3. An outlay of Rs.100.00 lakh is provided for the Seventh Plan, period against which Rs.58.72 lakh have been utilized during 1985-88 and an anticipated expenditure of 1988-89 is Rs.21.00 lakh. For the year 1989-90, an outlay of Rs.29.00 lakh has been provided and the target is to train 3,240 officers of different departments engaged in Rural Development Programmes.

2.4.4. *Regional and District Institutes of Rural Development*—The name of Extension and Farmers training centres has been changed into Regional Institutes of Rural Development and District Institutes of Rural Development. There were 22 Regional Institutes of Rural Development and 21 district Institutes of Rural Development. However, recently under zero base budgeting by re-organisation and rationalization of all the existing posts in the training cadre, 30 new District Institutes of Rural Development in the remaining 30 plain district of the State have been sanctioned. The question of opening five district Institutes in

the remaining five districts of the hills is also under active consideration. The Regional Institutes of Rural Development conduct, induction, inservice, orientation, specialized and refresher courses for various categories of staff and non-officials, on different aspects of rural development. The training relates to the topics in primary, secondary and tertiary sectors.

2.4.5. An outlay of Rs.665.00 lakh, including Rs.155.00 lakh for hills, has been approved for Seventh Plan (1985-90); against which Rs.338.15 lakh, including Rs.98.15 lakh for hills, have been utilised during first three years of the plan period. For 1988-89 an outlay of Rs.102.00 lakh with Rs.35.00 lakh for hills has been approved and the same is expected to be fully utilised. For the 1989-90 Rs.135.00 lakh, including Rs.35.00 lakh for hills have been proposed.

2.4.6. The Government of India has also started a 100 per cent funded Centrally sponsored scheme of strengthening Regional Institutes of Rural Development. Under this scheme all the 22 regional Institutes of Rural Development will be granted Rs.10.00 lakh (Rs.5.00 lakh recurring and Rs.5.00 lakh non-recurring) during Seventh Plan at the rate of Rs.1.00 lakh per year for recurring and Rs.5.00 lakh for non-recurring expenditure. So far Government of India has provided Rs.70.49 lakh to 21 centres for items of non-recurring expenditure and Rs.21.00 lakh for items of recurring expenditure. It is expected that the Central Government will give the remaining assistance to all the centres by the end of Seventh Plan.

#### PANCHAYATI RAJ

2.4.7. The Gram Panchayat is the primary unit of Panchayati Raj system and it has an important role in the processes of democratic decentralization. Panchayati Raj institutions aim at ensuring people's participation not only in local Government but also in promoting various development programmes according to local needs. Efforts are being made to

revitalize these institutions and make them suitable instruments for meeting local needs of the people.

2.4.8. An outlay of Rs. 825.47 lakh including Rs. 38.00 lakh for hills has been proposed for 1989-90. Schemewise details are given below:

2.4.9. Under the scheme Direction and Administration, 5 posts of Deputy Director and their staff were created and appointments were made in 1986-87. Two or three divisions were allotted to each Divisional Deputy Director. It was felt that the number of districts entrusted to them is too much and the post of Deputy Director is required in each division for proper supervision of Panchayats.

2.4.10. At present there is no proper arrangement for monitoring schemes in Panchayat Raj Directorate. In order to have better monitoring, guidance and supervision, it is proposed to create a Statistical and Monitoring Cell in the Directorate. A post of Deputy Director, (Monitoring) with necessary supporting staff including a Research Officer will be created. An outlay of Rs. 3.78 lakh has been proposed for the year 1989-90.

2.4.11. Seven posts of Gram Panchayat Adhikari were created for tribal areas of Kheri District. This scheme was introduced in 1986-87. The scheme will continue in 1989-90 also for which a sum of Rs. 0.64 lakh has been proposed.

2.4.12. In Sultanpur District seven new Nyaya Panchayats were created as a result of which seven posts of Gram Panchayat Adhikari were created for the district in 1986-87. These posts continue in 1988-89 and will continue in 1989-90 also. An outlay of Rs. 0.70 lakh has been proposed for this purpose.

2.4.13. *Share contribution of U. P. Panchayat Raj Vitta-Evam-Vikas Nigam Limited* :—The Nigam, established with an authorised capital of Rs. 212.00 lakh for advancing loans to Gram Sabhas and Panchayat Udyogs for their productive works, is a continuing scheme and it is proposed to continue the same in 1989-90

also. It is proposed to contribute a share capital of Rs. 1.00 lakh in 1989-90.

2.4.14. *Panch Sammelans, Seminars, Conference and Publicity of Departmental Activities*—Many important schemes are being executed under the supervision of Panchayat Raj Department. Panch Sammelans are organized to publicize various activities of the department at the State and district level. A sum of Rs. 1.00 lakh was provided in the year 1988-89. In the year 1989-90 also a provision of Rs. 1.00 lakh is proposed for the scheme.

#### TRAINING PROGRAMMES

2.4.15. *Training of Office-bearers of Panchayat Raj Institutions* — Under this programme office-bearers of Panchayati Raj Institutions including block pramukhs of Kshetra Samiti and members of Zila Parishad are trained in matters relating to their duties and functions. The duration of training is 6 days. Training camps are organised by District Panchayat Raj Officer at suitable places. There is a provision for payment at the rate of Rs. 30 per day per trainee. Camp expenditure is also estimated at the rate of Rs. 20 per trainee for entire training period. The total expenditure will be about Rs. 200 per trainee. A target of training 2,600 office-bearers has been fixed for 1989-90, for which a sum of Rs. 5.20 lakh is proposed under this scheme.

2.4.16. *Training of Gram Panchayat Adhikaries*—This is a continuing scheme, which will also continue in 1989-90. In all 100 Gram Panchayat Adhikaries will be trained in six monthly training course at various extension training centres of Gram Vikas Vibhag.

2.4.17. *Training of Panchayat Udyog Managers*—Training of Panchayat Udyog Managers is a continuing scheme which will also continue in 1989-90 with provision of 15 days training camps for 175 Panchayat Udyog Managers. During the course of training, managers will be paid stipend at the rate of Rs. 10 per day for fifteen days and technical experts of various

subjects will be paid honorarium of Rs.75 per lecture. Provision is also made for stationary, postage water, electricity and P.O. L. charges etc..

2.4.18. *Training of A.D.Os. (Panchayats)* — This training is organized for newly appointed and promoted A.D.Os (P) of the department for acquainting them with their jobs and improving their efficiency. In 1988-89 Rs.0.50 lakh were provided for training of 100 A.D.Os. (P). This programme is proposed to be continued in 1989-90 also. Trainings of six weeks total duration will be organised with an outlay of Rs.0.50 lakh for 100 A.D.Os. (Panchayat).

The following schemes are proposed under the district sector.

2.4.19. *Assistance to Panchayat Raj Institutions/Construction of Workshops for Panchayat Udyogs*—This is a continuing scheme and will continue in 1989-90 also. The total cost of construction of a workshop is expected to be Rs.1.00 lakh, out of which 90 per cent of the cost, not exceeding Rs.90,000 is given as Government grant and the rest is borne by Panchayat Udyogs. An outlay of Rs.14.90 lakh has been proposed for 1989-90.

2.4.20. *Technical and Managerial Assistance to Panchayat Udyog*—under this scheme, the assistance is provided on a tapering basis, i.e. for the first year Rs.10,000 for second year Rs.7,500 and for the third i.e. last year Rs.5,000. An outlay of Rs.2.68 lakh has been proposed for the year 1989-90.

2.4.21. *Incentives to Gaon Sabhas for raising their Financial Resources by Creation of Productive Assets*—Under this scheme, incentives are provided to best 3 Gaon Sabhas of each district at the rate of Rs.3,000, Rs.2,000 and Rs.1,000 for creation of productive assets. An outlay of Rs.2.94 lakh has been provided for the year 1989-90.

2.4.22. *Construction of Village Pavement and Drains through people's participation*—For execution of these programmes, an outlay of 612.42 lakh is proposed

for 1989-90. The total cost of village pavement and drains per Gaon Sabha is estimated to be Rs.30,000 out of which 90 per cent will be government grant and the rest will be contributed by Gaon Sabha. A sum of Rs.30,000 per Gaon Sabha is being earmarked for village pavement and Rs.10,000 for drains.

2.4.23. *Construction of Panchayat Bhawan at Gaon Sabha Level*— An outlay of Rs.137.25 lakh for plains only has been proposed for the construction of Panchayat Bhawan at Gaon Sabha level. Total cost of each Bhawan is estimated to be Rs.50,000 out of which 90 per cent will be Government grant. Efforts will also be made to tag this programme with NREP to achieve some additionality also.

2.4.24. *Improvement of Hat, Bazar and Melas Managed by Gaon Sabhas*— Under this scheme, the estimated cost of a project is Rs.15,000 out of which 90 per cent will be the grant-in-aid provided by the Government. Remaining 10 per cent will be arranged by the Gaon Sabha concerned in cash or kind. An outlay of Rs.8.10 lakh has been proposed for plains.

2.4.25. *Unties Funds*—A sum of Rs.123.58 lakh is being provided for various developmental schemes of 13 districts of Pilibhit, Muzaffarnagar, Rampur, Gorakhpur, Basti, Varanasi, Bahraich, Faizabad, Moradabad, Etah, Mathura, Hamirpur and Banda under Untied Fund Account. The provision of Untied Funds would encourage district level planners to show greater initiative in realizing the objective of meeting the felt needs of local people within the framework of state plan.

#### COMMUNITY DEVELOPMENT

2.4.26. *Community Development Programme* aims at the over all development of rural areas. The main objective of the programme is to raise the level of living of rural community and to secure peoples' participation in execution of development activities.

2.4.27. In 1981-82 and 1983-84 seven blocks were created during the Sixth Five Year Plan viz. Kaundhiar in Allahabad



district, Bazar Shukul, Sangrampur and Shahgarh in Sultanpur district and Chhato, Shivgarh and Amawan in Rae-Bareilly district. One hundred ninety seven blocks were revived in the plains. Joint Development Commissioner's establishment at Moradabad has been transferred to Non-Plan side in 1988-89. With the creation of Kanpur division, the establishment of new divisional office is required at Kanpur. This expenditure is to be borne on the Plan side. Thirteen vehicles are required for headquarters and one vehicle is required for the new divisional office at Kanpur for which an outlay of Rs.17.00 lakh is being proposed.

2.4.28. Up to end of Sixth Plan there were still 10 blocks without office buildings. By 1989-90, Mohammádpur Deomal of Bijnor district will be the only block, where office building would not have been constructed owing to non receipt of specific proposals. The district authorities have, however, been instructed to arrange for land for the block buildings.

2.4.29. The physical and financial norms for construction of residential buildings in blocks were revised through G. O. No. 6814/38-3-320/74, dated January 14, 1987 and the revised norms were made effective from April 1, 1986. These are as follows :—

Description of buildings	Plinth Area (Sq. m)	No. of buildings	Cost per building (Rs.)
Ka-Type-I	34.2	4	41,040.00
Kha-Type-II	57.7	19	77,318.00
Ga-Type-III	79.0	6	1,05,660.00
Gha-Type-IV	178.55	2	2,49,970.00

2.4.30. The revision of cost shown in column No. 4 of the above table is under consideration. The cost will increase by 15 per cent and 10 per cent in black and salt soil areas respectively. Hence, an outlay of Rs.1428.25 lakh is proposed for residential buildings in blocks of all the 49 districts of plains.

2.4.31. The construction of buildings for district development office has been included under the District Plan from year 1986-87. Year-wise details of funds allotted to districts are given below :

Year	Allotment (in lakh Rs.)	No. of districts to which funds allotted		
		Old	New	Total
1. 1986-87	116.40	..	8	8
2. 1987-88	305.67	8	7	15
3. 1988-89	674.48	14	16	30
Total	1096.55	22	31	53

2.4.32. Under the district Plan of 1989-90, 34 districts including 5 new districts have submitted proposals for construction of district office buildings with proposed total financial outlay of Rs.1154.38 lakh. On the basis of information furnished by districts regarding availabilities of land for construction of these buildings an outlay of Rs.705.11 lakh only is proposed for 22 districts where land is reported to be available.

2.4.33. The following districts have sent 7 proposals (untied funds) amounting to Rs.45.39 lakh.

Districts	Rs. lakh	Programme
1. Sitapur	19.00	Publicity of Development Programme.
2. Lakshimpur Kheri	13.01	Development of Community forests, purchase of Electronic Type Photo State machine.
3. Rampur	2.38	Construction of block buildings.
4. Shahjahanpur	9.00	Reward to workers of A.N.P. programme.
5. Barabanki	2.00	Arrangement of water supply at block H.Q.
Total	45.39	

2.4.34. The untied funds amounting to Rs.43.39 lakh as shown against items 1 to 4 are proposed to be diverted to construction of block buildings.

#### OTHER PROGRAMMES

2.4.35. *Rural Engineering Service*—Rural Engineering Service was created in 1972-73 to execute construction of buildings in rural areas costing less than Rs.1.00 lakh in Plain and Rs.2.00 lakh in Hills. This department was also entrusted with the constructions of link roads having length up to eight kilometers. Since its creation it has constructed works of great utility in remote rural areas. It has also provided technical guidance to various departments, thus providing technical nucleus for development of rural areas. Some of the important works executed by the department are mentioned below :

1. Development of House sites for landless labourers and Harijans.

2. Block Office buildings, Veterinary Hospitals and Stockman Centres.

3. House of Harijans.

4. Link Roads of Mandi Parishad and Command Areas (Gandak and Ram Ganga).

5. School Buildings.

6. Execution of Flood Protection Scheme viz. Strengthening old Zamindari Bonds, Raising of Village Abadi sites.

7. Residential and Non-Residential Buildings of Revenue, Medical, Horticulture, Animal Husbandry, Fisheries and Industries Department.

8. Stadium of Sport Department.

9. Revenue works including other works.

10. Construction of Roads under N.R.E.P. and R.L.E.G.P.

2.4.36. Year-wise performance of the Rural Engineering Service has been given below :

#### Year-wise performance

(Rupees in lakh)			
Year	Amount provided	Actual expenditure	Work constructed
(1)	(2)	(3)	(4)
1972-73	29	29	327
1973-74	60	51	552
1974-75	87	87	334
1975-76	88	89	268
1976-77	114	114	371
1977-78	155	157	462
1978-79	163	145	558
1979-80	182	185	773
1980-81	175	181	1831
1981-82	213	216	2270
1982-83	249	264	2936
1983-84	314	338	3203
1984-85	544	509	4773
1985-86	617	601	4839
1986-87	635	605	5936
1987-88	649	697	7137

2.4.37. The details of physical works completed by the agency since its creation till 1987-88 are given below :

#### Name of the work

1. Block building (No.)	735
2. Harijan houses and shops (No.)	18922
3. Building of Animal Husbandry (No.)	1952
4. Primary and Junior School Building (No.)	6996

<i>Name of the work</i>	
5. School building under RLEGP (No.)	2314
6. Other works (No.)	24382
7. Rural Roads :	
(a) Earth work (km.)	17861
(b) Culverts (No.)	37007
(c) Soling works (km.)	9829
(d) Road construction (km.)	187

2.4.38. Against a total outlay of Rs.4075.00 lakh including Rs.250.00 lakh for hills during the Seventh Plan, Rs.601.43 lakh in 1985-86, Rs.605.10 lakh in 1986-87 and Rs.697.49 lakh in 1987-88 have already been spent. An outlay of Rs.742.00 lakh has been provided for 1988-89 which will be fully utilized. For Annual Plan 1989-90, an outlay of Rs.995.00 lakh in which Rs.45.00 lakh is for hills has been proposed.

## CHAPTER III

### SPECIAL AREA PROGRAMME

#### 3.1. OTHER SPECIAL PROGRAMME

##### THE DIVISIONAL DEVELOPMENT CORPORATION

The Divisional Development Corporations in plains were set up with a total authorised share capital of Rs.1,450.00 lakh to accelerate the pace of development in backward and neglected areas in each division. It was intended that these corporations would mobilize institutional finance to promote development of the region.

3.1.2. The main activities of the corporations are sale of agricultural inputs, such as fertilizers, seed and pesticides etc. The corporations are also engaged in community tube-wells scheme, stone crushing, customer service, dal and rice mill, wheat and rice purchase, diesel and petrol retail outlets, cement supply, vehicle units and distribution of agricultural implements.

3.1.3. Out of Rs.1,450.00 lakh authorised share capital, Rs.921.13 lakh has been released as share money to the corporations so far. The net working capital of the corporations is Rs.531.54 lakh during 1987-88. Institutional finance arranged by the corporations is Rs.196.63 lakh. The turn-over of these corporations was Rs.2,861.14 lakh during 1987-88. At the end of 1987-88 the losses of these corporations were to the tune of Rs.351.84 lakh. All the corporations except those of Lucknow, Meerut, Allahabad and Moradabad Divisions are in loss.

3.1.4. For Seventh Plan, an outlay of Rs.750.00 lakh was provided for these corporations as share capital. During first two years of the plan, Rs.60.00 lakh has been released as share capital. It has been strongly emphasized that these corporations should generate their resources through institutional finance and become self reliance. No amount was provided for these corporations during 1987-88 and 1988-89. No provision has been made for these corporations for 1989-90 also.

##### BUNDELKHAND VIKAS PRADHIKARAN

3.1.5. Bundelkhand Vikas Pradhikaran was constituted in 1981 in order to accelerate pace of development in the economically backward Bundelkhand Region. The Pradhikaran co-ordinates programmes of development in the region and finances some essential programmes and activities which are not covered by normal plan allocations of the concerned departments. During the Sixth Plan an amount of Rs.150.00 lakh was sanctioned for the region, but the actual amount released to different departments was Rs.99.63 lakh only. An outlay of Rs.450.00 lakh has been approved for the Pradhikaran in the Seventh Plan. During the first two years of Seventh Plan, an outlay of Rs.70.00 lakh for 1985-86 and Rs.70.00 lakh for 1986-87 was provided. During 1987-88 and 1988-89, no amount was provided for the Pradhikaran. No provision

has been made for the Pradhikaran in 1989-90 also.

3.1.6. Out of a total of Rs.290.00 lakh sanctioned to the Pradhikaran so far the Pradhikaran has released Rs.269.05 lakh to different departments of the re-

gion up to September, 1988. Out of Rs.269.05 lakh, a sum of Rs.187.36 lakh has been utilized by different departments. The year-wise positions of allocation, amount released and expenditure incurred by implementing department is given below:—

TABLE—Allocation and expenditure

				(Rupees in lakh)		
Year				Amount allotted by State Government	Sanctioned by Pradhikaran	Expenditure
(1)				(2)	(3)	(4)
1981-82	..	..	..	100.00	15.42	15.42
1982-83	..	..	..	..	..	..
1983-84	..	..	..	..	49.50	47.21
1984-85	..	..	..	50.00	0.50	0.58
1985-86	..	..	..	70.00	3.60	3.60
1986-87	..	..	..	70.00	60.99	23.98
1987-88	..	..	..	..	..	..
1988-89	..	..	..	..	139.04 (Up to Sept, 88)	96.57 (Up to Sept. 88)
Total				290.00	269.05	187.36

3.1.7. The Pradhikaran has released the above amount to the departments of Minor Irrigation, Agriculture, Science Technology, P.W.D., Education, Drinking Water, Industry and Urban Development. The Pradhikaran has established one intermediate college, constructed roads and installed hand pumps etc. in the region.

#### INTEGRATED AREA DEVELOPMENT AGENCIES

3.1.8. With a view to minimise regional disparities, raise socio-economic status of families living below poverty line by creating additional job opportunities and required infra-structure, three pilot projects are being operated by the Planning Research and Action Division of the State Planning Institute. These projects are in operation in Ghazipur-Ballia, District Etawah and district Meerut.

The main components of these projects are given below :

- (1) Provision of adequate institutional support
- (2) Provision of basic minimum needs including social services
- (3) Income generating programmes including cattle development, goat and sheep rearing
- (4) Fisheries development
- (5) Sericulture
- (6) Reclamation of usar and ravines land
- (7) Small co-operative tube-wells
- (8) Rural Sanitation
- (9) Rural Small Cottage Industries
- (10) Installation of bio-gas plants and smokeless chulhas

3.1.9. For 1988-89 an outlay of Rs. 37.00 lakh has been approved and is expected to be fully utilized. For 1989-90 an outlay of Rs. 50.00 lakh has been proposed.

#### ACCELERATED PROGRAMME OF DEVELOPMENT FOR DACOITY-PRONE AREAS

3.1.10. Twenty-eight contiguous districts of Uttar Pradesh, Madhya Pradesh and Rajasthan suffer from the problem of acute poverty, un-employment, low level of development. These areas are, therefore, also prone to crimes and dacoity. Twelve districts of Uttar Pradesh declared to be dacoity-prone are—(i) Badaun, (ii) Agra, (iii) Etah, (iv) Mainpuri, (v) Farrukhabad, (vi) Etawah, (vii) Kanpur Dehat, (viii) Jalaun, (ix) Jhansi, (x) Lalitpur, (xi) Hamirpur and (xii) Banda.

3.1.11. In order to find long term solutions to the problem of dacoity in these areas, a working group was set up by the Planning Commission, Government of India. The working group felt that normal share of development assistance received by these areas like any other

areas in the State was not enough to accelerate their development. The working group, therefore, recommended that apart from normal plan assistance, additional assistance should be provided to these areas so that adequate infrastructure facilities for development are created in these areas. These facilities included (i) ravine reclamation, (ii) construction of roads and bridges and (iii) rural electrification. It was also recommended by the working group that substantial investment would be required on ravine reclamation, roads and bridges and rural electrification. It was also recommended by the working group that entire ravine reclamation should be funded from central resources of the centre. The contribution of centre for ravine reclamation can be in the shape of fifty per cent grant and fifty per cent loan. The other two programme viz. construction of roads and bridges and rural electrification will be funded on a sharing basis. The outlays and mode of financing pattern recommended by the working group for Seventh Plan was as given below :—

TABLE 2—Outlays and pattern of financing

Item	Pattern of sharing	Outlays recommended for U.P. for Seventh Plan		
		Total	Central share	State share
(1)	(2)	(3)	(4)	(5)
1. Ravine reclamation	Cent-percent	23.25	23.25	..
2. Construction of roads and bridges	50 : 50	123.29	48.21	75.06
3. Rural electrification	Entire amount is to be contributed by R.E.C.	150.00	20.59	129.41
	Total	296.52	92.05	204.47

3.1.12. The Planning Commission asked State Governments in November, 1985, to accommodate in their Seventh Plan amounts recommended by the working group. Necessary proposals for 1986-87 and 1987-88 were included in State's Draft Annual Plans, but in the absence of any final decision on financing pattern, the programmes could not be taken up in right earnest. In February, 1987, the Planning Commission again re-

quested the concerned ministries to make provisions for additional central assistance in accordance with the recommendations of working group.

3.1.13. The programme-wise details under three infrastructural facilities are as under :

3.1.14. *Ravine Reclamation* — The main object of the scheme is to reclaim in dacoity-prone districts, the ravinous

land for cultivation and to control processes contributing to ravine formation in fertile land. The working group had recommended that priority should be given to the protection of land, followed by afforestation of medium and deep ravines and reclamation of shallow ravines. About 6.02 lakh hectare of the land is under ravines which needs reclamation. Accordingly, the following targets were proposed by the working group for the Seventh Plan :

TABLE 3—*Ravine Development : Physical and Financial Targets*

Items	Targets	
	Physical	Financial (Rupees in crore)
(1)	(2)	(3)
1. Peripheral Bundings (length in kms.)	1000	10.00
2. Table land treatment (in ha.)	10000	2.50
3. Afforestation of medium and deep ravines (in ha.)	10000	2.75
4. Reclamation shallow ravines (in ha.)	10000	8.00
Total ..	1000 Kms. +30,000 ha.	23.25

3.1.15. Out of 12 districts, ravine reclamation schemes had been prepared for 9 districts excluding Etah, Budaun and Lalitpur, and launched in 8 districts except Jhansi. Nine units were established for this scheme in Kanpur, Mainpuri, Farrukhabad, Etawah, Jalaun, Agra,

Firozabad (Agra), Atarra (Banda) and Hamirpur.

3.1.16. It is proposed to cover 30,000 hectares of ravinous area under the scheme. Out of this 20,000 hectares is proposed to be treated by Agriculture Department and 10,000 hectare by the Forest Department. For 1988-89, the following targets of different items have been fixed :—

1. Peripheral bunding (Km.)	173.10
2. Table land protection (ha.)	3195.40
3. Shallow ravine reclamation (ha.)	1557.50
4. Deep ravine reclamation (ha.)	4755.50

3.1.17. For 1989-90 an area of 8,010 hectare is targetted for reclamation.

3.1.18. *Construction of Roads and Bridges*—For containing dacoit menace, a quick communication system is vital to enable authorities to move about quickly and effectively and find out hide-outs of dacoits. A good road system will also open up the area and assist implementation of other development activities such as ravine reclamation, afforestation, agriculture, animal husbandry education, health and village industries. The working group, therefore, recommended a programme of Rs.123.27 crore on 50 : 50 sharing basis for construction of 1,924 km of roads and 111 bridges during Seventh Plan. Financial and physical progress of this scheme together with programmes, proposed for 1989-90 are as under :

TABLE 4—*Roads and Bridges—Financial and Physical Progress*

Item	Seventh Plan (1985—90) target	1985-86 Actual	1986-87 Actual	1987-88 Actual	1988-89 Likely achievement	1989-90 Proposed target
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>A—FINANCIAL (Rupees in crores)</b>						
Total outlay/expenditure ..	123.27	3.84	12.72	8.45	14.43	20.00
Central Share ..	48.21	1.92	7.20	2.40	5.76	15.00
State share ..	75.06	1.92	5.52	6.05	8.67	15.00
<b>B—PHYSICAL</b>						
(i) Construction of roads (Km.)	1924	..	14	60	250	400
(ii) Construction of bridges (No.)						
(a) Major ..	23	..	..	..	..	4
(b) Minor ..	88	..	..	..	..	4

3.1.19. *Rural Electrification*—There are 15,451 inhabited villages in 12 dacoity-prone districts, out of which 3,127 villages were electrified by the end of Sixth Plan. The working group recommended electrification of all the remaining 12,324 villages to achieve cent percent electrification of identified villages by the end of Seventh Plan. Out of 12,324 villages, 6,954 villages were to be covered through the normal programme of rural electrification under energy sector and the balance 5,370 villages were proposed to be covered under this special programme in Seventh Plan. This would require an

investment of Rs.150.00 crore out of which Rs.20.59 crore were to be contributed by the Government of India as additional central assistance to the State and the balance Rs.129.41 crore were to be provided in the state plan to be financed out of loans from R.E.C. through special scheme for this area. For achieving these targets of village electrification, it is necessary to supplement the programme with requisite distribution network which is estimated to cost Rs.60.00 crore, which is required to be arranged through R.E.C. in the shape of loan. Annual phasing of funds and benefits are as follow :

TABLE 5—Financial Outlays and Physical Targets

Period	Financial (Rs. in crores)			Physical (Nos.)	
	Total	Rural electrification	Distribution works	Electrification of villages	Energy-sationo private pump sets/tube-wells
(1)	(2)	(3)	(4)	(5)	(6)
1985-90 Seventh Plan (Target)	150.00	90.00	60.00	5,370	18,500
State share	129.41	69.47	60.00	..	..
Central share	20.59	20.59	..	..	..
1986-87 Total	2.00	2.00	..	15	..
State Share	2.00	2.00	..	..	..
Central Share	..	..	..	..	..
1987-88 Total	2.00	2.00	..	10	8
State Share	2.00	2.00	..	..	..
Central Share	..	..	..	..	..
1988-89 Total	4.00	4.00	..	70	70
State Share	2.00	2.00	..	..	..
Central Share	2.00	2.00	..	..	..
1989-90 Total	4.00	2.40	1.60	67	67
State Share	2.00	0.40	1.60	..	..
Central Share	2.00	2.00	..	..	..

3.1.20. During 1986-87 and 1987-88, no assistance was received either for Government of India or Rural Electrification Corporation (R.E.C.). However, Rs.2.00 crore were spent each year from States'

own resources. The Government of India have been requested from time to time to provide special assistance in terms of the recommendations of the working group.



**CHAPTER IV**  
**IRRIGATION AND FLOOD CONTROL**

**4.1. MAJOR AND MEDIUM IRRIGATION**

The economy of Uttar Pradesh is primarily agriculture based with about 78 per cent of its population dependent on agriculture and allied activities. Rapid increase in the pace of agricultural development is, therefore, essential to bring about desired improvement in the States economy. The resources of cultivable land of the State are, however, limited and agricultural production can, therefore, be increased mainly through multiple cropping and higher productivity of crops. For both these, irrigation is the most important input. High priority has, therefore, been given in the State Plan to the augmentation of additional irrigation facilities through major and medium irrigation projects as well as State and Private minor irrigation works. Creation of additional irrigation is also an important component of the new-20 point programme. The severe droughts of the past and the current year 1987-88 revealed that the irrigation coverage through all sources of irrigation is still very inadequate both as regards total area covered as well as quality of irrigation. The Seventh Plan proposals lay emphasis on both these aspects.

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

4.1.3. Assessment made by the Water Resources Organisation, Government of India indicates that 75 per cent

dependability flow of five major rivers of the State is as below :

TABLE 1--Discharge observation and annual inflow

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

4.1.4. The quantum of water available for irrigation in the State will be 99.06 maf. which is much lower than the annual inflow of 145.10 maf. as provision has to be made for shares of other States, non-irrigation uses and minimum flows from environmental considerations. The break-up of ultimate irrigation potential as now assessed is given below :

	(In lakh ha.)
(i) Major and Medium irrigation schemes	125.00
(ii) Minor surface irrigation schemes	12.00
(iii) Minor Irrigation Schemes (ground-water)	120.00
Total	257.00

4.1.5. On the basis of availability of this potential, the state would be able to achieve only about 145 per cent irrigation intensity ultimately which would be insufficient to meet the requirements of agricultural production in the long-term

perspective. Much greater economy in water use will, therefore, be necessary to meet the needs of irrigated agriculture.

4.1.6. The Upper Ganga, Lower Ganga, Eastern Yamuna, Agra, Betwa and Sarda Canals which irrigate more than 20 lakh hectares are among the largest and oldest canal systems in the country. All these canal systems with the exception of Sarda canal, were built in the 19th century. The Sarda canal was built in the second decade of the present century. In addition to the 5 major canal systems, 10 medium canal systems were constructed during the first-half of the century. Open tanks, medium size reservoirs, State and private tube-wells and a million open wells constituted minor irrigation works of the State up to Pre-Plan period (1950-51). The total irrigation potential created in the State in the Pre-Plan period through major and medium irrigation schemes was 25.53 lakh hectares. This increased to 62.15 lakh hectares at the end of Sixth Plan.

4.1.7. The Matatila Dam across the Betwa was the first major storage work undertaken in the Second Plan. The Ram Ganga River Project which is a multi-purpose facility, the Gandak Project, a joint venture of Bihar and Uttar Pradesh and Sarda Sahayak are other major projects constructed in the State. Large size pump canal schemes on perennial rivers were also taken up such as Dalmau, Bhopali and Zamania Pump Canals from Ram Ganga. Other important irrigation projects started in the Fourth and Fifth Five Year Plans are Adwa Dam, East Baigul Reservoir, Parallel Lower Ganga Canal, Raising Maja Dam, Shahzad Dam, Dohrihat Sahayak and Sone pump Canal. The total investment on major and medium works in this period has been about Rs.1,925.00 crore.

4.1.8. Figures of growth in irrigation potential up to the end of Sixth Plan, the potential proposed for Seventh Plan and the investment made are given below :

TABLE 2— *Expenditure and benefits of major and medium projects*

Plan-period	Expenditure incurred (Rupees in crore)		Potential created (in lakh hectare)	
	During	Cumulative	During	Cumulative
(1)	(2)	(3)	(4)	(5)
1. Pre-Plan	..	..	..	25.53
2. First Plan (1951—56)	..	30.81	3.30	28.83
3. Second Plan (1956—61)	..	25.43	2.71	31.54
4. Third Plan (1961—66)	..	54.90	3.57	35.11
5. Annual Plan (1966—69)	..	48.93	0.96	36.07
6. Fourth Plan (1969—74)	..	172.48	4.73	40.80
7. Fifth Plan (1974—78)	..	371.59	11.17	51.97
8. Annual Plan (1978—80)	..	296.08	3.97	55.94
9. Sixth Plan (1980—85)	..	924.26	6.21	62.15
10. Seventh Plan (1985—90) *	..	1420.00	6.37	68.52

\*Proposed

4.1.9. An outlay of Rs.1,420.00 crore proposed for the Seventh Plan (1985-90) is mainly for spill-over

schemes in the Seventh Plan from previous plans. Year-wise break-up of outlays and potentials proposed during Seventh Plan are given below :—

TABLE 3— Year-wise outlays and Physical benefits

Year		Outlay/ Expenditure (Rupees in cr.)	Creation of additional irrigation potential (in lakh ha.)	Additional utilisation of irrigation potential (in lakh ha.)
(1)		(2)	(3)	(4)
1985-86	.. ..	200.04	0.38	0.40
1986-87	.. ..	238.14	0.64	0.26
1987-88	.. ..	249.95*	1.04	0.40
1988-89†	.. ..	280.54	1.55	1.50
1989-90††	.. ..	320.05	1.71	1.54
	Total	1288.72	5.32	4.10

\*Including Rs. 10.41 cr. spent under employment generation programme

†Anticipated ††Proposed

4.1.10. The position of utilisation of irrigation potential is given as below :—

TABLE 4- Potential creation and utilisation

(in lakh hectare)

Year	Creation of potential		Utilisation of potential		Potential gap (Col. 3-5)	Percentage of utilisation With respect to	
	During	Cumulative	During	Cumulative		Same year	Previous year
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Upto 1979-80	..	55.94	..	49.37	6.57	88.25	..
1980-85	6.21	62.15	5.77	55.14	7.01	88.72	..
1985-86	0.38	62.53	0.40	55.54	6.99	88.82	89.36
1986-87	0.64	63.17	0.26	55.80	7.37	88.33	89.24
1987-88	1.04	64.21	0.40	56.20	8.01	87.52	88.96
1988-89*	1.55	65.76	1.50	57.70	8.06	87.74	89.86
1989-90†	1.71	67.47	1.54	59.24	8.23	87.69	90.02

\*Proposed

†Target

4.1.11. The figures of irrigation potential created during the Sixth Plan have been modified in accordance with the concept that potential creation will be assumed only when the full designed supplies are available up to the canal outlet. Even so the position with regard to utilisation of irrigation potential has shown considerable deterioration during Fifth and Sixth Plan in comparison of earlier plans. A gap of 7.01 lakh hectares persisted between the potential created and utilised at the end of Sixth Plan. Under utilisation is significant mainly in Sarda Sahayak and Gandak Canals. Attempts have been made to bridge up the gaps by construction of water courses for farm blocks of 5 to 8 hectares and proper maintenance of canal distribution systems. It is planned that all the potential created by the end of 1979-80 and except for a small share of the potential created in the Sixth Plan period the rest would be utilised by the end of Seventh Plan. The project-wise position of irrigation potential created and its utilisation is shown in Annexure-I.

#### STRATEGY FOR ANNUAL PLAN 1989-90

4.1.12. In formulating Annual Plan 1989-90 the following priorities of investments have been adopted :

(1) No extra expenditure has been proposed during the Annual Plan 1989-90 for strengthening the Irrigation Department. Higher outlays will be utilised by streamlining the administrative arrangements and suitable increases in norms of workload.

(2) While allocating outlays, preference has been given to those projects which will create potential during the Seventh Plan period and are scheduled for completion.

(3) For Inter-State Projects funds have been provided to the extent of commitments. Similarly, projects linked with external aid are proposed to be funded in accordance with the agreements.

4.1.13. In all there were 71 pre-Sixth Plan schemes which had spilled-over into Sixth Plan. Out of these one multi-purpose, 5 major and 7 medium (total—13) schemes have been completed during Sixth Plan. During the Sixth Plan 4 continuing DPAP medium schemes namely, Gunta Nala Dam, Belan Bakhar Diversion, Bakhar Marihan Feeder and Dhoba Pump Canal were brought under the category of major and medium schemes in order to complete the remaining work and two new schemes namely Khadrar Dam and World Bank Scheme of Modernisation of Upper Ganga Canal were taken up. Thus, a total of 64 schemes spilled-over into Seventh Plan. During the Seventh Plan 8 new medium schemes are proposed to be taken up. Out of the 72 schemes, 11 major, 18 medium, 8 modernisation and 1 new medium schemes are scheduled for completion during Seventh Plan period and most of the remaining schemes will attain an advanced stage of construction. Category-wise break-up of major and medium irrigation schemes is given below —

TABLE 5—Category-wise Schemes of Major and Medium Irrigation

Category of Scheme	No. of Schemes pre-taken up during Seventh Plan schemes	Schemes taken up during Seventh Plan	Schemes to be completed during					
			1985-90	1985-86	1986-87	1987-88	1988-89	1989-90
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>A—PRE-SEVENTH PLAN SCHEMES</b>								
1. Multipurpose irrigation Projects	3	..	..	..	..	..	..	..

Table—5—(Concl.)

Category of Scheme	No. of per- Seventh Plan Schemes	Schemes taken up during Seventh Plan	Schemes to be completed during					
			1985-90	1985-86	1986-87	1987-88	1988-89	1989-90
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2. Major Irrigation Schemes (including schemes of conjunctive use of water)	27	..	11	..	1	..	2	8
3. Medium Irrigation schemes (including 4 DPAP Schemes)	20	..	18	2	2	1	5	8
4. Modernisation Schemes	12	..	8	..	..	3	2	3
<b>B—NEW SCHEMES (TAKEN UP DURING SIXTH PLAN)</b>								
Medium Irrigation Scheme	1	..	1	1	..	..	..	..
<b>C—NEW SCHEMES (TAKEN UP DURING SEVENTH PLAN)</b>								
Medium Irrigation Schemes	..	8	..	..	..	..	..	..
<b>D—WORLD BANK SCHEME</b>								
Modernisation of upper Ganga Canal	1	..	..	..	..	..	..	..
Total ..	64	8	38	3	3	4	9	19

4.1.14. The schemes which have been completed during 1985-86, 1986-87 and 1987-88 and proposed for completion during 1988-89 and 1989-90 are as follows :—

TABLE 6—Schemes completed and proposed for completion

Year	Category of schemes	
	Major Scheme	Medium Scheme
(1)	(2)	(3)
1985-86 ..	..	1. Khatima Irrigation Scheme 2. Dongri Dam 3. Khaprar Dam
1986-87 ..	Kosi Irrigation Scheme	1. Belan Bakhar Diversion Scheme. 2. Rohini Dam.
1987-88 ..	..	1. Dhenkwa Dam. 2. Modernisation of Mat Branch. 3. Modernisation of Upper Sarda Canal. 4. Modernisation of Bwar Feeder.

Table—6—(Concl'd.)

Year	Category of schemes	
	Major Scheme	Medium Scheme
(1)	(2)	(3)
1988-89	<ol style="list-style-type: none"> <li>1. Madho Tanda Irrigation Scheme</li> <li>2. Suheli Irrigation Scheme</li> </ol>	<ol style="list-style-type: none"> <li>1. Bakhar Marihan Feeder.</li> <li>2. Sarju Pump Canal.</li> <li>3. Augasi Pump Canal.</li> <li>4. Dhoba Pump Canal.</li> <li>5. Umarhat Pump Canal.</li> <li>6. Modernisation of Farrukhabad Branch.</li> <li>7. Modernisation of Upper Ganga Canal.</li> </ol>
1989-90	<ol style="list-style-type: none"> <li>1. Okhla Barrage</li> <li>2. Bhimgonda Head works</li> <li>3. Shahzad Dam</li> <li>4. Urmil Dam</li> <li>5. Increasing capacity of Narainpur pump Canal</li> <li>6. Increasing capacity of Deokali Pump Canal</li> <li>7. Raising Meja Dam</li> <li>8. Bewar Feeder</li> </ol>	<ol style="list-style-type: none"> <li>1. Remodelling of Ken Canal.</li> <li>2. Aliganj Irrigation Scheme</li> <li>3. Sajnam Dam.</li> <li>4. Gunta Nala Dam.</li> <li>5. Kishanpur Pump Canal.</li> <li>6. Yamuna Pump Canal.</li> <li>7. Revised Tons Pump Canal.</li> <li>8. Chittaurgarh Reservoir.</li> <li>9. Modernisation of Eastern Yamuna canal</li> <li>10. Modernisation of Anupshahr Branch.</li> <li>11. Modernisation of Bhognipur Branch.</li> </ol>

4.1.15. *Multi-purpose Projects* — Out of three multi-purpose projects which have spilled-over into Seventh Plan, work on Kishau Dam is in preliminary stage and progress will depend on the early finalisation of inter-state agreement with the Himachal Pradesh. The outlay provided for Tehri Dam assures that 75 per cent of outlay for power portion of the project will be available from the Government of India. For Lakhwar Vyasi Project, outlay in the irrigation sector has been provided in accordance with its construction schedule. The total outlay provided for multi-purpose projects is Rs.18.51 crore for the Annual Plan 1989-90.

4.1.16. *Major Irrigation Schemes*— Out of 27 major schemes (including 4 schemes of conjunctive use of water) which have spilled-over into Seventh Plan, one scheme namely; Kosi Irrigation Scheme has been completed and two schemes Madho Tanda Irrigation Scheme and Suheli Irrigation Scheme are scheduled for completion during 1988-89. Total outlay of Rs.217.48 crore has been provided for major irrigation schemes during the Annual Plan 1989-90. The schemes scheduled to be completed during 1989-90,

are Okhla Barrage, Remodelling Bhimgonda Head works, Shahzad Dam. Urmil Dam, increasing capacity of Narainpur Pump Canal, increasing capacity of Deokali Pump Canal and raising Meja Dam.

4.1.17. *Medium Irrigation Schemes*— Out of 21 medium schemes which have spilled-over into Seventh Plan. 6 schemes namely; Dongri Dam, Khatima Irrigation Scheme, Khaprar Dam, Belan Bakhar Diversion, Rohini Dam and Dhenkwa Dam have been completed during the first three years of Seventh Plan, i.e. 1985-86, 1986-87 and 1987-88. Four schemes are proposed to be completed during 1988-89. An outlay of Rs.15.54 crore has been provided for these schemes during 1989-90. Eight schemes are scheduled to be completed during the year.

4.1.18. *Modernisation Schemes* — Twelve modernisation schemes spilled-over into Seventh Plan. Three schemes could be completed during the first three years of Seventh Plan. Two schemes namely Modernisation of Upper Ganga Canal and Modernisation of Farrukhabad Branch are proposed for completion during 1988-89. An outlay of Rs. 7.22 crore has been provided during 1989-90

and three more schemes namely ; Modernisation of Eastern Yamuna Canal, Modernisation of Anupshahar Branch and Modernisation of Bhognipur Branch are expected to be completed during the year.

4.1.19. *Schemes of conjunctive use of water*—Four schemes namely ; Increasing capacity of Deokali Pump Canal, Gyanpur Pump Canal, Chambal Lift Scheme and providing Paddy Channels in Hindon Krishna Doab spilled over into Seventh Plan. None of these could be completed during the first three years of Seventh Plan. An outlay of Rs.12.94 crore has been provided for these schemes during the Annual Plan 1989-90.

4.1.20. *Inter-state Projects*—Two important inter-state projects ; namely Rajghat and Bansagar Dams are under construction at present. An outlay of Rs.11.50 crore has been provided for Rajghat Dam and Rs.8.00 crore for Bansagar Dam with additional Rs.7.21 crore and Rs.0.35 crore for their conveyance system respectively during the Annual Plan 1989-90.

4.1.21. *World Bank Aided Project*—A major programme to rehabilitate and in Western U.P. covering about 40.00 lakh hectares was started in the Sixth Plan with the assistance of the World Bank. The principal components of the project in the first time slice are shown as below :—

(1) Replacement of existing main canal (from mile 3 to 22) by a parallel lined channel and construction of lined channel parallel to the existing main canal common to both Upper Ganga Canal and Madhya Ganga Canal between mile 118 to mile 148. Works would include lining of canal surface, improvement, replacement and modernisation of canal structure and regulators.

(2) Replacement of existing main canal (from 148 to 181) by a parallel lined channel

(3) Lining and improvement of structures for water courses serving about 64,000 hectares

(4) Installation and electrification of 33 augmentation tube-wells

(5) Installation of two way radio system to improve canal communication

(6) Pilot work programme for drainage in the canal Command Area

(7) Replacement of the hydel station on the parallel main canal and construction of civil works of a second station

4.1.22. The total direct cost in the first time slice of about six years would be about Rs.250.00 crore for which the credit from the World Bank would be 117.50 million dollars (Rs.135.00 crore). The total estimated cost of the project is Rs.1,313.50 crore and an additional irrigation potential of 2.83 lakh hectares will be created through augmentation tube-wells in 10 Western Districts of the State. A sum of Rs.50.00 crore has been provided for this World Bank aided project during the Annual Plan 1989-90.

#### CONSTRAINTS

4.1.23. Availability of land and materials are the main constraints in the implementation of Irrigation Projects :—

(1) *Land*—Acquisition of land for construction of irrigation projects and rehabilitation of displaced persons takes a long time. The time lag between the submission of the land acquisition cases and handing over of possession is considerable and there are cases in which the cultivators do not allow the work to proceed even after the possession of land had been officially handed over to the department. Such cases need patient handling.

(2) *Materials* — The execution of irrigation projects requires timely supply of large quantities of construction materials namely ; cement,

coal, diesel, explosives etc. Planning Commission has constituted a working group to assess the requirement of these materials and suggest ways and means for making these

materials available. The requirements for major and medium irrigation projects are indicated in the statement I.F.—7 of guide lines.

#### 4.2. MINOR IRRIGATION

Three departments are involved in the execution of minor irrigation programmes in the state. Ground Water Department provides data regarding the availability and state of exploitation of ground water in the different regions of the State. State Irrigation Department is responsible for the construction, operation and maintenance of larger capacity tube-wells, lift schemes etc. The private Minor Irrigation Department deals with the promotion of privately constructed works which are financed mainly through institutional sources and cultivators own resources with an element of subsidy from the State Government.

4.2.2. By the end of Sixth Five Plan (1984-85), irrigation potential of 126.02 lakh hectares had been created through minor irrigation works comprising 33.43 total hectares of state minor irrigation works and 92.59 lakh hectares of private minor irrigation works. The target of additional irrigation potential of 42.03 lakh hectares is envisaged in Seventh Plan period in which contribution of both private minor irrigation works and State Minor Irrigation Works is 35 lakh hectares and 7.03 lakh hectares respectively.

#### GROUND WATER INVESTIGATION ORGANISATION

4.2.3. The Ground Water Investigation Organisation aiming at ground water investigation and exploration in the State is operating since 1970. The core activities of Ground Water Investigation Organization (G.W.I.O), include Hydrogeological, Photogeological and remote sensing, geophysical and hydrochemical studies. Besides, it also involves nuclear hydrological studies and supplemental mechanical explorations. During 1987-88, photogeological and remote sensing study was conducted in an area of 4880 sq.km. Periodic water level observa-

tion was done on selected hydrograph stations. Microstudies have been completed in 10 dark category blocks. Geophysical survey has been done on 366 sites. Exploratory drilling was done upto a total depth of 4229.74 mts. About 2046 water samples were collected and analysed to determine qualitative suitability. In Bundelkhand and Vindhyan regions technically feasible sites have been selected for construction of 518 minor Irrigation Works. Based on the findings of various types of surveys, 290 technical reports were published and circulated to user departments. The investigation and exploration activities will be continued during 1989-90. These surveys will help in identification and delineation of water bearing zones and also in determining the possibilities of their economic exploitation through deep and shallow minor irrigation works.

4.2.4. The proposed hydrogeological investigations include water table monitoring on about 3500 selected hydrograph stations, computation of ground water availability of 819 blocks, collection of 1200 ground water samples, sample survey of 1000 Minor Irrigation works to determine unit draft, 70 pumping tests to determine storage and yield characteristics of aquifer, preparation of 150 water level contour maps, sieve analysis of soil samples to determine porosity and specific yield, selection of feasible sites for construction of tube-wells and blast wells and micro study in various dark category blocks declared by NABARD.

4.2.5. The photogeological and remote sensing studies have been proposed in an area of 5000 sq.km. It will comprise delineation of buried channels, valleys and potential areas for development of various types of ground water structures, selection of suitable sites for construction of tube-wells and blast wells etc.



4.2.6. The proposed geophysical survey includes resistivity soundings at 400 sites to identify and delineate potential aquifer zones, determine basement configuration as well as saline and fresh water zones. It will also include electric-logging on exploratory holes to determine accurate lithological succession as well as fresh and saline water zones. The hydrochemical study is proposed to determine qualitative suitability for irrigation user by analysing 1200 ground water samples.

4.2.7. The nuclear hydrological study has been proposed for determination of rate of seepage, ground water flow and movement, regeneration and base flow etc. It will include 35 tritium injections, collection of 1600 soil samples, analysis of 1000 tritiated water sample and moisture content, grain size analysis of 600 samples, distillation of 1500 soil samples and counting of tritium intensity in 1500 samples etc. Supplemental Exploratory drilling is also proposed to confirm the inferences of above studies. More or less every drilling will be followed by electric-logging and pumping test. Successful drilling may be converted into production well. It is also proposed to publish literature on the subjects of general interest for cultivators in local and simple language and it will be widely circulated. With a view to induct high technology in the organisation, it is proposed to computerise all the data. Conjunctive use studies will also be taken up in various Canal Command areas. Research and training activities will be stepped up for bringing in qualitative improvement.

4.2.8. Some specific area problem projects have also been proposed. Village-wise hydrogeological investigations in

Bundelkhand and Vindhyan regions are proposed to combat drinking and irrigation water problems. Special studies will be conducted in the state for delineation of saline areas, periodic monitoring of water quality and demarcation of fresh water zones.

4.2.9. Due to transfer of the establishment budget from plan to non-Plan schemes at the end of sixth plan, a provision of Rs.85.00 lakh only was made as plan outlay for the seventh plan period. The provision of Rs.85.00 lakh covered expenditure on going survey and investigation activities of the department. A sum of Rs.32.08 lakh was spent on the survey and investigation programmes during 1985-86. In the year 1986-87 a sum of Rs.84.00 lakh was spent which includes Rs.20.00 lakh as central share under centrally sponsored scheme. An expenditure of Rs.166.92 lakh was incurred during the year 1987-88 including Rs.50.00 lakh as central share under centrally sponsored scheme. A sum of Rs.154.00 lakh is anticipated to be spent during the year 1988-89 against the approved outlay of Rs.114.00 lakh. It includes Rs.70.00 lakh as state share under centrally sponsored scheme for purchase of special equipments. A plan outlay of Rs.150.00 lakh has been proposed for 1989-90.

4.2.10. Minor Irrigation Works are the most important input of assured irrigation. Minor Irrigation Works based on ground water are also a means of conjunctive use of surface and ground water.

STATE MINOR IRRIGATION

4.2.11. State Minor Irrigation which comprises large capacity tube-wells, small lift canals, hill channels and bundhies, is managed by Irrigation Department. These works with a short gestation period provide quick irrigation facilities. They

benefit mainly small and marginal farmers who are not in a position to construct their own source of irrigation. The ex-

penditure incurred and potential created in various plans through State Minor Irrigation Works is given below :—

TABLE 7—Financial and Physical achievement

Period	Expenditure (Rs. in cr.)		Potential (In lakh ha.)	
	Additional	Cumulative	Additional	Cumulative
(1)	(2)	(3)	(4)	(5)
1. Pre-Plan	..	..	4.82	4.82
2. First Plan (1951—56)	..	17.25	3.92	8.74
3. Second Plan (1956—61)	..	13.39	4.34	1308
4. Third Plan (1961—66)	..	37.10	3.48	16.56
5. Three Annual Plans (1966--69)	..	42.97	1.81	1837
6. Fourth Plan (1969—74)	..	78.62	1.43	19.80
7. Fifth Plan (1974—78)	..	94.38	4.00	23.80
8. Annual Plan (1978—80)	..	68.42	2.86	26.66
9. Sixth Plan (1980—85)	..	278.01	6.77	33.43
10. 1985-86 (Actual)	..	100.79	1.34	34.77
11. 1986-87 (Actual)	..	108.58	1.42	36.19
12. 1987-88 (Actual)	..	117.26	1.09	37.28
13. 1988-89 (Anticipated)	..	134.45	1.04	38.32
14. 1989-90 (Proposed)	..	124.74	1.29	39.61

4.2.12. State Minor Irrigation Works can broadly be classified under the following three main components :—

1. State Tubewells
2. Minor Lift Schemes
3. Other Minor Works

4.2.13. By the end of Sixth Plan (1984-85), irrigation potential of 33.43 lakh hectares had been created through all

components of State Minor Irrigation Works. For the seventh plan, the target of creation of irrigation potential is 7.03 lakh hectares, of which ground water component accounts for 6.75 lakh hectares and surface water 0.28 lakh hectare. The following table shows potential created through each component upto the end of Sixth Plan, target for Seventh Plan, actual achievements during first three years of Seventh Plan. anticipated achievement in

1988-89 and the target for 1989-90.

TABLE 8—Component-wise creation of irrigation potential

Name of Programme	Potential created to end of Sixth Plan (1984-85)	Target for Seventh Plan (1985-90)	Actual achievement during			Anticipated achievement during 1988-89	Target for 1989-90
			1985-86	1986-87	1987-88		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. State tube-wells including World Bank aided project	2744.22	675.00	127.70	134.10	99.90	97.50	120.00
2. Minor Lift Irrigation Scheme	209.34	28.00	6.30	7.78	9.30	7.00	9.00
3. Other Minor works (i) Hill channels (ii) Other works (Bundhies)	389.44						
Total	3343.00	703.00	134.00	141.88	109.20	104.50	129.00

4.2.14. State Tube-wells are the most important component accounting for roughly 90 per cent of outlay and irrigation potential. The present norm of potential per tube-well is 100 hectares. This norm is based upon power supply of 16 to 18 hours per day. On account

of low and erratic availability of power, the actual utilization is well below the norm. There is little scope of improvement in utilization till the power supply improves considerably. The position of creation of potential and its utilisation is given below:—

TABLE 9—Utilization of Irrigation Potential

Year	Irrigation potential created	Utilization	Percentage Utilization	
			With respect to same year	With respect to previous year
(1)	(2)	(3)	(4)	(5)
1977-78	..	23.80	13.00	55
1978-79	..	24.96	14.00	56
1979-80	..	26.66	15.00	56
1980-81	..	27.95	16.00	57
1981-82	..	29.18	16.00	55
1982-83	..	30.61	16.00	52
1983-84	..	32.08	16.00	50
1984-85	..	33.43	16.00	48
1985-86	..	34.77	16.40	47
1986-87	..	36.19	16.72	46
1987-88	..	37.28	17.14	46
1988-89 (Anticipated)	..	38.33	17.57	46
1989-90 (Proposed)	..	39.62	18.11	..

4.2.15. *Outlay and Expenditure*—The total outlay for state minor irrigation works for seventh plan (1985–90) is Rs.483.15 crore, which includes Rs.58.00 crore for hills. The outlay for ground water is Rs.427.65 crore and for surface water Rs.55.50 crore. During the first three years of seventh plan, an expenditure

of Rs.309.76 crore has been incurred. Against an approved outlay of Rs.116.45 crore during 1988-89 for this sector, an anticipated expenditure is Rs.134.45 crore. For 1989-90, an outlay of Rs.124.74 crore has been proposed. The details of outlay and expenditure are shown as below :—

TABLE 10—Componentwise outlays and expenditure

Programme	Seventh Plan outlay (1985–90)	Actual expenditure during			Anticipated expenditure during 1988-89	Proposed outlay for 1989-90
		1985-86	1986-87	1987-88		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>1. State Tubewells :</b>						
(i) Normal ..	15700	4583.34	4487.00	4408.81	4557.00	4314.00
(ii) World Bank ..	21965	4320.00	5068.00	4730.78	5600.00	3700.00
(iii) Indo-Dutch Project ..	5100	..	..	900.20	2000.00	3000.00
Sub-Total ..	42765	8903.34	9555.00	10039.79	12157.00	110100
<b>2. Minor Lift Irrigation Schemes</b>						
..	200	13.44	23.00	41.74	38.00	175.00
<b>3. Other Minor works (Bundhies and hill channels etc.)</b>						
..	5350	1162.73	1280.00	1644.26*	1250.00	285.00
Sub-Total ..	5550	1176.17	1303.00	1686.00	1288.00	1460.00
Total ..	48315	10079.51	10858.00	11725.79*	13445.00	12474.00

\*Includes expenditure of Rs. 271.46 lakh under employment generation programme.

4.2.16. Component-wise position of State Minor Irrigation programme is given in the following paragraphs :—

#### STATE TUBE-WELLS

4.2.17. State Tubewells are meant to provide assured year round irrigation facilities in their command, specially to weaker sections of society who can not afford their own source of irrigation. Unlike shallow private tube-wells, state tube-wells are independent of fluctuations in the water table level due to paucity of rainfall and are thus especially useful during periods of prolonged drought. The popularity of State Tubewells can be gauged from the ever increasing demand for their installation throughout the State. In the beginning of the first plan there were 2303 State tube-wells only. This number had increased to 23,226 by the end of the Sixth plan,

reflecting a ten-fold increase. The cumulative number of State tubewells in operation at the end of different plans is shown below :—

Plan period	State tubewells in operation (No.)
Pre-Plan ..	2305
End of First Plan ..	4260
End of Second Plan ..	6668
End of Third Plan ..	8235
End of Fourth Plan ..	12,447
End of Fifth Plan ..	14,560
End of Sixth Plan ..	23,226
End of 1985-86 ..	24,022
End of 1986-87 ..	25,003
End of 1987-88 ..	25,775
End of 1988-89 (Anticipated) ..	26,750
End of 1989-90 (Proposed)	27,950

4.2.18. The seventh plan envisages drilling of seven thousand tube-wells out of which 6,750 tube-wells will be energised. These include tube-wells being constructed with World Bank aid as well as those proposed for construction under the Indo-Dutch scheme. Out of the above, 1127 tube-wells have been drilled and 1277 energised creating irrigation potential of 1.277 lakh hectares, during 1985-86, including those constructed with World Bank aid. During 1986-87, 873 tube-wells were drilled and 1341 tube-wells energised creating irrigation potential of 1.341 lakh hectares. During 1987-88, 697 tube-wells were drilled and 999 tubewells were energised creating irrigation potential of 0.999 lakh hectare. The anticipated achievement in 1988-89 is drilling of 1000 tube-wells and energization of 975 tubewells creating irrigation potential of 0.975 lakh hectare. The target for 1989-90 is drilling of 1200 tube-wells and energization of 1200 tubewells, creating irrigation potential of 1.20 lakh hectares.

4.2.19. During the seventh plan, the target for energization of tube-wells was 6750. Against this target, the anticipated achievement is 5792. This includes 70 tubewells of 3 cusecs capacity with a potential of 200 hectares instead of 100 hectares for a tubewell of 1.5 cusec capacity. The

irrigation potential created will thus, be 5.862 lakh hectares. There will be a short fall of 0.888 lakh hectare in irrigation potential of 6.75 lakh hectare envisaged for the seventh plan period. The shortfall in creation of additional irrigation potential is mainly due to steep rise in prices of equipment and material.

4.2.20. A large number of tubewells have failed after completing their life and have been reconstructed. During the seventh plan, 1050 tubewells are likely to be reconstructed creating irrigation potential of 1.05 lakh hectares with would have otherwise disappeared. The year wise position of reconstructed tube-wells is given as below :—

Year	Tubewells reconstructed (No.)
1. 1985-86	226
2. 1986-87	207
3. 1987-88	204
4. 1988-89	201
5. 1989-90	212
Total	1050

4.2.21. The position of number of tubewells under different stages of construction is shown below. This includes normal tubewells, World Bank aided tube-wells as well as Indo-Dutch tube-wells.

TABLE 11 - Tubewells under different stages of construction

Year	(Number)			
	State tubewells drilled	Pump houses constructed	Pump sets installed	State tubewells energised
(1)	(2)	(3)	(4)	(5)
End of 1979-80	19,954	18,882	18,390	17,887
End of 1980-81	21,449	19,993	19,692	19,125
End of 1981-82	22,977	21,457	20,891	20,304
End of 1982-83	23,905	22,996	22,473	21,683
End of 1983-84	24,531	23,943	23,204	23,098
End of 1984-85	26,252	25,388	24,858	24,782
End of 1985-86	27,379	26,696	26,331	26,059
End of 1986-87	28,252	27,676	27,500	27,400
End of 1987-88	28,949	28,676	28,500	28,399
End of 1988-89 (Anticipated)	29,949	29,651	29,475	29,374
End of 1989-90 (Proposed)	31,149	30,851	30,675	30,574

4.2.22. The position of tubewells constructed under World Bank Schemes although included in the table—11 is shown below separately also :—

TABLE 12 Tubewells of construction under World Bank aided Projects

Year	(Number)			
	Tubewells drilled	Pump houses constructed	Pump sets installed	Tubewells energised
(1)	(2)	(3)	(4)	(5)
End of 1980-81	306	33	33	33
End of 1981-82	557	277	277	277
End of 1982-83	559	559	559	520
End of 1983-84	959	784	559	559
End of 1984-85	1396	1086	942	883
End of 1985-86	2169	1790	1726	1390
End of 1986-87	2774	2445	2245	2245
End of 1987-88	3093	3026	2998	2979
End of 1988-89 (Anticipated)	3673	3500	3423	3379
End of 1989-90 (Proposed)	4089	3939	3889	3889

4.2.23. From the above table it is evident that the gap of back log between drilling and energisation is being reduced leading to better utilization of investment on this programme.

4.2.24. In case of normal tube-wells considerable back log of work, mainly in the area of distribution system has taken place, resulting in poor utilization of irri-

gation potential. It was decided, therefore, to give greater emphasis on the completion of spill-over works and a major portion of outlay is being spent on completion of spill over works. The position of spill-over works at the end of Sixth Plan, first three years of Seventh Plan and likely position at the end of 1988-89 and 1989-90 is given below :—

TABLE 13—Position of spillover works

Year	Develop-ment No.	quantity of spill over works					
		Pump house No.	Pump set No.	Energised No.	Lined gul Km.	Unlined gul Km.	P.V.C. pipe line Km.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
End of Sixth Plan	210	401	543	792	2464	4430	4656
End of 1985-86	75	131	208	384	1724	3381	4174
End of 1986-87	34	94	106	158	1185	1918	4324
End of 1987-88	17	219	211	277	932	568	4888
End of 1988-89 (Anticipated)	..	3	4	5	906	606	3470
End of 1989-90	..	..	..	5	600	300	2500

The total overall requirement for the spill over works at the end of 1988-89 is about Rs. 38.42 cr.

4.2.25. *U. P. Public Tube-wells, Phase-II* — This project was started in April, 1983 with the help of the World Bank. Under this project, 2,000 tube-wells of 1.5 cusecs and 200 tube-wells of 3.00 cusecs were proposed to be constructed in 45 districts of the State in addition to modernisation of 100 old tube-wells and providing independent feeders to 650 existing tube-wells. A special feature of these tube-wells is that they are being built in clusters of about 25 tube-wells to ensure their proper aftercare and maintenance, both electrical as well as mechanical. 101.00 million dollars aid from I.D.A. and 35.30 million dollars aid from IFAD has been promised for this project. The project is under implementation.

4.2.26. Besides construction of above tube-wells, the World Bank has also sanctioned 1,000 additional tube-wells under this project. This has become possible because of savings and also due to change in rate of exchange of dollars with respect to Indian rupees. The work is proposed to be completed by March, 1990. The target for 1989-90 is based on the assumption that another 200 tube-wells will be sanctioned in 1989-90 in addition to above 1,000 tube-wells.

4.2.27. *Indo-Dutch Project*—Under this scheme construction of 750 new tube-wells, modernisation of 125 tube-wells and connection of 200 tube-wells with independent feeders is envisaged during a period of three years at a cost of Rs.53.00 crore, creating an additional irrigation potential of 0.75 lakh hectare. Due to price escalation the revision of project is in progress and the revised cost is likely to be Rs.77.05 crore. A provision of Rs.20.00 crore has been made for 1988-89 and a provision of Rs.30.00 crore is proposed for 1989-90. The work on this project has been taken up. The anticipated achievement for 1988-89 is drilling of 250 tube-wells and energisation of 75 tube-wells. The proposal for 1989-90 is drilling of 400 tube-wells and energisation of 400 tube-wells.

4.2.28. *U. P. Public Tube-wells Phase-III*—This project has been submitted with an estimated cost of Rs.208.00 crore. It envisages construction of 3000 new tube-wells, modernisation of 600 tube-wells and connection of 900 tube-wells with dedicated feeders having about 18 hours assured supply of electricity. The sanction of project by World Bank is still awaited.

4.2.29. *Minor Lift Irrigation Scheme*—An outlay of Rs.2.00 crore has been provided for these schemes in the Seventh Plan for the completion of spill-over works from the last plan in order to augment irrigation facilities. There are some areas in the State where there is no source of irrigation and construction of tube-wells is also not possible. In such areas, there is no way out except to construct Lift Canals. Therefore, a number of such new schemes are proposed to be taken up for construction in these areas. An outlay of Rs.1.75 crore has been proposed for 1989-90.

4.2.30. *Bundhies*—A project for construction of 34 bundhies with potential of 6.73 thousand hectares in district Mirzapur was taken up. The latest estimated cost is Rs.12.87 crore. A potential of 5.92 thousand hectares has been created up to 1987-88 with an expenditure of Rs.9.20 crore. For 1988-89, an outlay of Rs.0.50 crore has been provided. Project for construction of 49 bundhies has been prepared. The estimated cost of this project is Rs.27.06 crore. The creation of irrigation potential of 14.34 thousand hectares is envisaged. The outlay proposed for 1989-90 is Rs.25.00 lakh.

4.2.31. *Hill Channels* — In the hill districts of Naini Tal, Almora, Pithoragarh, Pauri, Chamoli, Dehradun, Uttarakashi and Tehri, small hill channels are being constructed. The provision for Seventh Plan is Rs.50.00 crore envisaging creation of additional irrigation potential of 21.27 thousand hectares. The outlay for 1988-89 is Rs.12.00 crore and proposed for 1989-90 is Rs.12.60 crore.

4.2.32. The district-wise number of normal tube-wells, public tube-wells and small lift canals in-operation on April 1, 1988 is given in Annexure-II.

#### PRIVATE MINOR IRRIGATION PROGRAMME

4.2.33. Apart from State Minor Irrigation Works, Private-Minor Irrigation are yet another major and assured source of providing irrigation for agriculture. Private Minor Irrigation Works have many

advantages. They cost too little to Government. They take shorter time to complete and start giving benefits early. They are also better utilized and managed with greater efficiency.

4.2.34. The total irrigation potential of 14.44 lakh hectares was created in the pre-plan period through different private minor irrigation sources in the State. By the end of Sixth Plan, this increased to 92.59 lakh hectares. Plan-wise creation of irrigation potential is given below :

TABLE 14—Irrigation Potential Created through Private Sources

Plan Period	Irrigation potential (in lakh hectare)		
	During	Depreciation	Cumulative (after depreciation)
(1)	(2)	(3)	(4)
1. Pre-Plan ..	..	..	14.44
2. First plan (1951-56) ..	0.76	:	15.20
3. Second plan (1956-61) ..	1.45	..	16.65
4. Third plan (1961-66) ..	8.48	..	25.13
5. Annual plan (1966-69) ..	15.61	5.37	35.37
6. Fourth Plan (1969-74) ..	31.26	11.31	37.12
7. Fifth plan (1974-79) ..	26.23	5.66	57.69
8. Annual plan (1979-80) ..	8.62	1.44	64.87
9. According to census 1980 ..	..	..	62.67
10. Sixth plan (1980-85) ..	39-33	9.41	92.59

4.2.35. The main objective of Seventh Plan is to benefit under this programme those small and marginal farmers who due to their financial constraints could not construct their own irrigation sources during previous plans. A special programme of free borings was launched in 1984-85 on a massive scale for the benefit of poorer section of the cultivators including small and marginal farmers. Besides this, other works like construction of blast wells, check dams, hauzes and guls,

atrison wells and hydrans are undertaken in hard rock areas of Bundelkhand, Mirzapur and parts of Agra, Allahabad and Varanasi districts and hills. Facilities are also available for the drilling of tube-wells by rigs in the hard rock areas and deep and difficult areas of the state. In addition to the above minor irrigation structures like masonry wells, persian wheels, installation of pump sets on surface water resources and on borings and tube-wells etc. are undertaken by the farmers themselves.



4.2.36. *Physical Achievement* — A target of creation of 35 lakh hectares additional irrigation potential has been fixed for the Seventh Plan. Achievement during Sixth Plan, first three years of

Seventh Plan and anticipated during the year 1988-89 are as under. The item-wise physical progress is shown in Annexure-IV.

TABLE 15 — *Target and achievement of irrigation Potential*

Item	Irrigation Potential (in lakh ha.)					
	Sixth Plan	Seventh Plan	1985-86	1986-87	1987-88	1988-89
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>IRRIGATION POTENTIAL</b>						
(a) Target .. .. .	33.79	35.00	6.80	6.90	6.95	6.13
(b) Achievement .. .. .	39.33	39.40*	7.10	7.29	7.67	6.13*
(c) Utilization .. .. .	39.33	39.40	7.10	7.29	7.67	6.13

\*Anticipated

4.2.37. During previous Five Year Plans, the role of Minor Irrigation Department under Rural Development was almost advisory. Big farmers had already installed their sources of irrigation. They seldom require the assistance from the department. Then came the period when subsidy was granted to small and marginal farmers to allure the farmers to have their own source of irrigation. At this stage department was involved in issuing technical plans and boring certificates to farmers willing to take loan from financing institutions. Even this could not meet the vast demand of the state. Thus, Seventh Five Year Plan aimed at increasing and extending facilities to small and marginal farmers and also covering the hard rocky and difficult areas, where drilling is problematic, water is saline and source of water is scare. With this object in mind, free boring scheme was

launched in the state, where in department had a big task to perform. At this stage, the role of the department remained no more advisory but it had to shoulder the entire responsibility of planning, execution and implementation of the scheme. It is in this background that the department needs strengthening for carrying out the new task.

4.2.38. *Financial Achievement*—Finance for the development of Minor Irrigation Programme is arranged through (a) State Plan Outlay, (b) Land Development Bank and Commercial Bank and (c) Cultivators themselves. In addition DRDA, Harijan Social Welfare Department, Agriculture Department and other institutions also provide assistance for the Minor Irrigation Programme. Expenditure during Sixth Plan and Outlay for Seventh Plan for different items are as under :—

TABLE 16 — *Expenditure and outlays*

Item	(Rupees in lakh)					
	Expenditure of Sixth Plan	Outlay Seventh Plan	Expenditure 1985-86	Expenditure 1986-87	Expenditure 1987-88	Anticipated Expenditure 1988-89
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Loan (Hills) .. .. .	256.29	111.00	33.90	21.99	20.90	22.00
2. Subsidy .. .. .	1000.76	3676.00	562.07	611.68	594.94	634.00
3. Boring Godown .. .. .	94.59	160.00	54.36	92.64	81.76	75.00
4. Tools and plants (for borings and blast wells etc.) .. .. .	619.05	1060.00	302.36	412.94	359.58	225.00
5. Other expenditure .. .. .	396.45	1294.00	11.90	47.23	64.56	220.00
6. Hydram etc. .. .. .	339.10	699.00	109.65	116.81	127.48	115.00
Total .. .. .	2706.24	7000.00	1074.24	1303.29	1249.22	1291.00

4.2.39. *Facilities* — The following facilities are being provided to the cultivators for the construction of their own source of irrigation.

(1) *For the whole State :*

(a) Under the Centrally sponsored SMF and IRD Programme, facility of free boring is provided to small and marginal farmers up to the cost of Rs.3,000 and 25 per cent to 33-1/3 per cent subsidy is also available to small and marginal farmers respectively under this scheme for pump-sets/tube-wells.

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

(2) *Regional :*

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

(b) In the hard rock area of Bundelkhand, Allahabad, Varanasi, Mirzapur and Agra, subsidy at the

rate of 50 per cent subject to a maximum of Rs.5,000.00 is admissible for the construction of new blast wells and at the rate of Rs.10.00 per hole for deepening of wells by blasting.

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

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

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

(3) *Hilly Region :*

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

(b) Hydram in hilly areas and artesian wells in tarai area of Nainital district are constructed by the department at cent per cent grant from Government.

*Annual Plan 1989-90*

*Physical Targets*

4.2.40. During the first four years of Seventh Plan it is expected that 28.19 lakh hectares irrigation potential will be created as against the target of 35.00 lakh hectares during the Seventh Five Year Plan. A target of 11.21 lakh hectares

additional irrigation potential is proposed to be created during the year 1989-90. Under the Special Food Production Programme sponsored by Government of Indira, a target of 2.12 lakh free borings has been fixed for the year 1989-90. This

will contribute in creation of additional irrigation potential of 10.60 lakh hectares. Achievement of first three years of Seventh Five Year Plan, anticipated achievement during 1988-89 and proposed target for the year 1989-90 is given as below :

TABLE 17—Sourcewise targets and achievements

Item	Unit	Norms ha./unit	Achievement			Antici- pated achieve- ment 1988-89	Proposed target 1989-90
			1985-86	1986-87	1987-88		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>A—DEPARTMENTALLY EXECUTED</b>	No.	5	62016	66379	81221	100000	212000
1. Deposit Works							
(a) Boring for small/ Marginal Farmers	No.	5	54808	61027	65047	100000	212000
(b) Others deposits ..	No.	..	7208	5852	16174	..	..
2. Tubewells by Rig ..	No.	12	32	40	128	190	200
3. Gul, Hauz, Check Dam and Hydrant	ha.	..	3513.24	5364.96	4572	2975	3000
4. Irrigation potential	Lakh ha.	..	3.14	3.41	3.34	5.05	10.65
<b>B—PRIVATELY EXECUTED</b>							
1. Masonary well	No.	1	5508	2279	2576	1940	1000
2. Persian wheel ..	No.	1/2	981	626	343	370	350
3. Surface water pump set	No	2	8303	7985	7483	3115	2500
4. Boring on pumpset/ Tubewells	No.	5	74966	72047	83233	19910	10000
5. Irrigation potential	Lakh. ha.	..	3.96	3.88	4.33	1.08	0.56
<b>C—TOTAL IRRIGATION POTENTIAL (A+B)</b>	Lakh. ha.	..	7.10	7.29	7.67	6.13	11.21

#### Financial Proposal

4.2.41. A total outlay of Rs.70.00 crore, including Rs.10.00 crore for hills, has been allocated for Seventh Plan. Out of this outlay an

expenditure of Rs.49.18 crore is expected to be incurred by the end of 1988-89. An outlay of Rs.10.64 crore including Rs.2.00 crore for hills has been proposed for 1989-90. The

scheme-wise break-up of proposed outlay for the year 1989-90 is as under :—

Item	(Rupees in lakh)		Item	(Rs. in lakh)	
	Total outlay	Hills		Total outlay	Hill
1. Loan (Hills)	22.00	22.00	3. Other expenditure (Establishment)	354.00	11.00
2. Subsidy :			4. Tools and Plants	238.00	5.00
(a) Rig Borings	100.00	-	5. Boring Godowns	100.00	-
(b) In well Rig borings	45.00	-	6. Hydrants and Artesian wells	150.00	150.00
(c) Blast wells	25.00	-			
(d) General Subsidy	15.00	-	Total	1064.00	200.00
(e) Saline water	2.00	-			
(f) Artesian wells	1.00	-			
(g) Guls, Hauzetc.	12.00	12.00			
Sub—Total	200.00	34.00			

#### Centrally Sponsored Scheme

4.2.42. During 1989-90, an amount of Rs.264.50 lakh has been proposed for purchase of special equipment, establishment of workshop and stipend for degree and diploma holders under Centrally sponsored scheme for strengthening of ground water under minor irrigation scheme. The details of Centrally sponsored scheme are shown as below :—

TABLE 18—Amount and quantity under centrally sponsored scheme

Item	(Rupees in lakh)		
	Rate	Quantity	Amount
(1)	(2)	(3)	(4)
1. Purchase of special equipments.			
(i) Slotting M/C for workshop to be used in fabrication of PVC strainers in free boring scheme	5.00	20	100.00
(ii) D. C. Rig (Small)	9.00	10	90.00
(iii) R. R. Bits	..	30	27.00
(iv) Button Bits	..	30	3.00
(v) Compressors (Replacement)	4.00	5	20.00
Sub-Total	..	..	240.00
2. Workshop	..	..	20.00
3. Stipend	..	..	4.50
Total	..	..	264.50

#### 4.3. COMMAND AREA DEVELOPMENT PROGRAMME

Command area development programme aims at increasing agriculture production and productivity of the area through full and better utilisation of irrigation potential created by the major and

medium irrigation projects and thus bridging the gap between creation and utilisation of irrigation potential. For achieving this objective, Command Area Development Authorities are undertaking

on farm development (O.F.D.) works which includes among other things construction of field channels, water control structures and field drains as also the lining of channels. This is preceded by soil surveys, topographical survey, planning and designing and following by warabandi and crop planning for optimum agriculture production and remunerative return to farmers.

4.3.2. This programme was initiated in 1974-75 on three major canal systems, Sharda Sahayak, Ramganga and Gandak. Up to 1984-85, 24.72 lakh hectares area (revised after joint verification) has been developed through construction of field and drainage channels and water control structures etc.

4.3.3. During the Seventh Plan period it is proposed to cover 22.53 lakh hectares area under OFD works and 34.15 lakh hectares area under Osrabandi. This includes 2.15 lakh hectares area of new command which is not being sanctioned by planning Commission. Due to non-availability of new area, the target of O.F.D. works fixed for Seventh Plan will not be achieved as new command is

not accorded by the Government of India. It was also planned to complete the spill-over works of the three commands.

4.3.4. During the first three years of Seventh Plan, an area of 6.76 lakh hectares has been covered under 'On Farm Development' works under which 51.74 thousand kms. of field channels, 7.18 thousand kms. field drains and 149.89 thousands kms. water control structures were constructed. This was preceded by soil survey in 12.49 lakh hectares, topographical survey and planning and designing in 5.47 lakh hectares and 5.46 lakh hectares respectively followed by warabandi in an area of 8.70 lakh hectares. For the year 1988-89 a target of 2.16 lakh hectares for On, Farm Development Works and 5.40 lakh hectares for osrabandi has been fixed. Against these target an area of 1.60 lakh hectares and 3.50 lakh hectares is expected to be covered under OFD works and osrabandi respectively. The details of achievements during the first three years of Seventh Plan along with anticipated achievement during 1988-89 and targets for 1989-90 are given as under :

TABLE 19—Physical Targets and Achievements

Item	Unit	Seventh Plan 1985-90 Targets	Achievement			Anticipated achievement 1988-89	Proposed target 1989-90
			1985-86	1986-87	1987-88		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Execution of D.F.D works	'000 ha.	2253.00	222.15	231.37	222.96	160.00	155.50
2. Construction of field channels	'000 kms.	112.65	23.40	18.39	12.95	12.80	12.44
3. Construction of field drains	'000 kms.	11.26	2.49	2.64	2.05	1.42	1.24
4. Construction of water control structures	'000 no.	225.30	49.94	49.23	50.72	28.43	24.88
5 Warabandi	'000 ha.	3415.00	232.16	301.00	336.76	350.00	540.00

4.3.5. An outlay of Rs.107.00 crore has been approved for this sector as states share for the Seventh Plan against which Rs.104.80 would be the central share on 50 : 50 basis. Thus, the total Seventh

Plan outlay for the Command Area Development Programme would be of the order of Rs.211.80 crore. The expenditure during first three years of Seventh Plan, anticipated expenditure during

1988-89 and proposed outlay for 1989-90 are given below :

TABLE 20—Financial outlay and expenditure

(Rupees in crore)

State share/central share	Seventh Plan outlay	Expenditure			1988-89 Antici- pated expen- diture	1989-90 Proposed outlay
		1985-86	1986-87	1987-88		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. State share	107.00	12.12	21.48	23.60	23.75	22.77
2. Central share	104.80	12.00	21.14	20.79	22.90	21.68
Total	211.80	24.12	42.62	44.39	46.65	44.45

4.3.6. The objectives and strategy for 1989-90 are proposed to be kept in line with overall strategy for the year 1987-88 and 1988-89. Apart from O.F.D. works, crop planning will also be undertaken by the soil conservation units. Efforts are being made to establish all the sanctioned Osrabandi units to expedite effective water ro storing. Development of infrastructure, better agriculture expansion through training of field staff and farmers and adoption of suitable cropping patterns would be taken up by three Command Area Projects on priority. In order to involve better water management for optimum utilisation of irrigation potential, one pilot project has been selected in each Command Area Development Authority which will also continue in 1989-90. With the view of better monitoring of Command Area Development Programmes, a project regarding the wireless communication system has been formulated in co-ordination with the Irrigation Department. Renovation of O.F.D. works will also be undertaken by the three Command Area Development Authorities for which Planning Commission has agreed to give Central assistance on matching basis under Special Food

Production Programme during 1988-89 and 1989-90.

4.3.7. For the year 1989-90 the O.F.D. works have been planned in area of 1.55 lakh hectares. Osrabandi will be done in 5.40 lakh hectares. Total expenditure for achieving the above works alongwith completion of spill-over works of the previous years has been proposed as Rs.44.44 crore to be shared by State and Central Government on 50 : 50 basis. An outlay of Rs.22.77 crore has been proposed for the year 1989-90 as State share by the State Government. As sufficient area for O.F.D. works is not forthcoming from Irrigation Department to the Sarda Sahayak Command, the proposed outlay will suffice the requirement of the year. The programme will help in generating employment approximately 5.00 lakh mandays.

4.3.8. Ministry of Water Resources, Government of India\* also agreed to foreclose the on-going Sarda Sahayak Project at an area 14.08 lakh hectares and include Sarda Canal Project with a CCA of 8.33 lakh hectares in the Centrally sponsored Command Area Development Programme.

\* Letter no. 13-1/88-CAD, dated September 9, 1988

## 4.4. FLOOD CONTROL AND DRAINAGE

Uttar Pradesh faces the menace of floods every year. The damages on account of floods in this state are the highest in the country. It has been observed that out of the total area of 294.40 lakh hectares, an area of 43.43 lakh hectares, on an average, had been affected by floods annually between the years 1978 to 1982. In 1978, which was a year of heavy floods, as much as 73.36 lakh hectares area and 23 per cent population were affected. The loss to crops, property and cattle were estimated at Rs.70.72 crore in an average year, which was well over Rs.300.00 crore in 1978. Again in the years 1980, 1982, 1983, 1984, 1985, 1986 the state experienced very heavy floods due to incessant rains.

4.4.2. In the year 1988, the monsoon set in the state on 16.6.88 and since than rainfall has been quite wide spread occasionally heavy in some parts of the state. The 39 districts of the State have experienced more than normal rainfall ranging from 171 per cent to 103 per cent and this excessive rainfall has caused major rivers of the State to flow above bank level exerting heavy pressure on flood works.

VIS-A-VIS OTHER STATES  
FLOOD PROTECTION IN U.P.

4.4.3. A comparison of areas affected by floods and areas have been provided protection in some of severely affected States in the northern part of the country can be seen in the following table :—

TABLE 21—Areas effected by floods in various States

						(Area in lakh ha.)	
State		Flood prone area	Protectable area	Area protected by the end of 3/85	Balance area to be protected	Percentage area protected up to 3/85	
(1)		(2)	(3)	(4)	(5)	(6)	
1. Uttar Pradesh	..	73.36	58.72	13.67	45.05	18.60	
2. Bihar	..	42.60	34.08	19.80	14.28	46.40	
3. West Bengal	..	37.66	30.13	16.35	13.78	43.40	
4. Punjab	..	37.00	37.00	25.53	11.47	69.00	
5. Haryana	..	23.50	23.50	16.15	7.55	68.70	
Total for the country	..	386.34	276.25	132.89	146.10	34.40	

NOTE : Figures revised on the basis of data circulated by Government of India recently.

4.4.4. The above figures will show that the state of the Uttar Pradesh is the worst flood affected state in the northern part of the country and that where as Bihar, West Bengal, Punjab and Haryana have been able to provide protection to 50 per cent (approximately) or more of their protectable areas, the area protected in U.P. by the end of sixth five year plan is 18.6 per cent only. Even after protection of an additional area of 0.72 lakh

hectare in 1985—88, the total protected area remains 19.6 per cent and the balance 44.33 lakh hectare (80 per cent) is still to be provided protection.

4.4.5. *Achievements during the Pre-Sixth Plan period*—Flood works comprising 1389 km. long marginal embankments, 12433 km. length of drainage channels, 4500 nos. raising of villages and protection works for 58 towns were completed in

U.P. in the pre-sixth plan period at a cost of Rs. 120.10 crore providing protection to an area of 11.56 lakh hectares.

4.4.6. *Progress during Sixth Five year plan*:—An outlay of Rs. 230 crore was proposed by the state for flood management during Sixth Five Year Plan period but the planning commission approved an outlay of Rs. 134.00 crore in view of constraints of funds, against which Rs. 86.44 crore could be available for flood protection works and 2.11 lakh hectares area could be benefitted by constructing 277 km. long marginal embankments, 315 km. long drainage channels and Providing Protection to 6 towns during the Sixth Plan period.

4.4.7. *Seventh Plan and Annual Plan 1985-89*:—Considering the severe flood problems of the state the Working Group on flood control for Seventh Plan (1985-90) Constituted by Government of India recommended a provision of Rs. 500 crore. However, due to constraints of funds, a provision of Rs. 164.50 crore was made for flood sector to protect an area of 3.0 lakh hectares.

4.4.8. Annual Plan for 1985-86 with a provision of Rs. 14.70 crore envisaged protection of 0.20 lakh hectare by constructing 20 km. of marginal embankments, 40 km. of drains and other anti-erosion works. A Central loan assistance of Rs. 134 lakh was made available for protection of Chitauni, Railway and Amwahas embankments along right bank of Gandak in Deoria district. The Annual

Plan for 1986-87 for Rs. 2209 crore (including Rs. 94 lakh for industrial drainage) provided protection to 0.30 lakh hectare by constructing 35 km. of marginal embankments, 50 km. of drains and other anti-erosion works. An additional outlay of Rs. 81.27 lakh was also available under sectoral project for construction of flood and drainage Schemes under RLEGP. The schemes under RLEGP would provide flood protection to an additional area of 4200 hectares during 1986-87 to 1988-89. The cost of land of these flood management projects under RLEGP has to be met out from flood sector, provision for which has been made in the annual plan. The Annual Plan 1987-88 with a provision of Rs. 23.29 crore including Rs. 3.00 crore for industrial drainage envisaged protection of 0.22 lakh hectare area by constructing 22 km. of marginal embankments, 40 km. of drains and anti-erosion works. An expenditure of Rs. 24.84 crore including Rs. 5.00 crore for industrial drainage is anticipated during the year 1988-89 and it envisages flood protection of 0.22 lakh hectare by constructing 20 km. long marginal embankments, 40 km. long drains and anti-erosion works. Financial and physical progress of flood management works under different plan periods is shown in Annexure-III.

4.4.9. The workwise break up of outlay for Seventh Plan, expenditure during first three Annual Plans and anticipated expenditure in the year 1988-89 is given below:—

TABLE 22—*Outlay and expenditure*

Name of work	Seventh Plan (1985-90) outlay	Actual expenditure			Anticipated expenditure
		1985-86	1986-87	1987-88	1988-89
(1)	(2)	(3)	(4)	(5)	(6)
<b>I. FLOOD CONTROL SCHEMES</b>					
(a) Marginal embankment	5588.54	920	1471.72	1078.09	1185.67
(b) Town protection	2850.00	120	134.54	302.61	161.63
(c) Anti-erosion	2411.46	372.58	382.86	372.52	368.11

+Includes Rs. 134 lakh of Central loan Assistance.



Table—22—(Concl'd.)

(Rs. in lakh)

Name of work	Seventh Plan (1985-90) outlay	Actual expenditure during			Anticipated expenditure during 1988-89
		1985-86	1986-87	1987-88	
(1)	(2)	(3)	(4)	(5)	(6)
2. DRAINAGE					
(a) Drainage Schemes (General)	4800.00	172.00	96.04	253.81	193.68
(b) Industrial Area drainage	..	..	94.00	300.00	500.00
3. Survey and Investigation ..	200.00	..	..	..	..
4. Emergent and unforeseen schemes	200.00	52.00	29.84	21.97	50.00
5. Reservoir, Disaster preparedness, Flood Fighting Flood Forecasting, Hydrological Analysis, preparation of Master Plans, monitoring etc.	400.00	..	..	..	..
6. Village raising .. ..	..	..	..	..	24.91
Total .. ..	16450.00	1636.58	2209.00	2329.00	2484.00

4.4.10. *Objective and Strategy of 1989-90*—The main elements of flood control as far as structural measures are concerned are :—

- (a) Construction of marginal embankments to contain the floods within the embankments.
- (b) River improvement work to increase their discharge carrying capacities
- (c) Construction of drains to improve the drainage of flood affected area
- (d) Construction of anti-erosion works on various rivers to check erosion of soil
- (e) Construction of town protection works to save important abadies and town
- (f) Construction of Drains of industrial area

4.4.11. All these structural measures have been employed in framing schemes included in the plan. Emphasis has been laid on completion of pre-seventh-Plan period schemes so that benefits of the schemes could be drawn at the earliest and reducing the flood havoc to some extent. During the year 1989-90 priority has been given to Drainage Improvement Schemes of western and Central Uttar

Pradesh as these regions are suffering due to acute waterlogging. Marginal Embankment Schemes of Eastern Uttar Pradesh have also been given special attention.

4.4.12. Annual Plan for 1989-90 provides Rs. 26.25 crore for flood including Rs. 5.00 crore for industrial drainage. The workwise break up of proposed outlay is as follows :—

		(Rupees in lakh)	
Name of works		Annual Plan (1989-90) Proposed outlay	
1.	<i>Flood Control Schemes</i>		
	(a) Marginal embankment ..		880.46
	(b) Town Protection ..		367.00
	(c) Anti-erosion ..		441.25
2.	<i>Drainage</i>		
	(a) Drainage Schemes ..		301.66
	(b) Industrial drains ..		500.00
3.	Survey and Investigation ..		50.00
4.	Emergent and unforeseen schemes ..		50.00
5.	Reservoir, disaster, preparedness flood fighting, flood forecasting hydrological analysis, preparation of master plans, monitoring etc.		..
6.	Village raising ..		34.63
	Total ..		2625.00

4.4.13. It is planned that with a provision of Rs. 26.25 crore, 0.41 lakh hectare of new area will be protected from floods by constructing 25 km. long marginal em-

bankments and 50 km. long drainage channels during 1989-90. The cost per hectare area benefitted is expected to be about Rs. 7500/-.

*Irrigation Potential and Utilisation*

Name of the Project	Ultimate Irrigation potential	Potential created up to 1984-85		1985-90 Target		1985-86 Achievement	
		Potential	Utiliza- tion	Potential	Utiliza- tion	Potential	Utiliza- tion
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>I. Continuing Projects</b>							
<b>A—MAJOR PROJECTS</b>							
1. Gandak Canal ..	308.39	287.39	280.00	21.00	26.61	..	..
2. Sarda Sahayak ..	1582.00	1003.00	650.00	70.00	274.90	..	12.00
3. Kosi Irrigation Scheme	48.80	48.80	45.80	..	2.00	..	2.00
4. Madhya Ganga Canal Stage-I	178.00	6.00	..	110.00	42.50	12.00	..
5. Sarju Nahar Pariyojna	1404.00	..	..	70.00	0.02	..	..
6. Suheli Irrigation Scheme	17.50	17.50	6.60	..	10.90	..	2.0
7. Eastern Ganga Canal	105.00	..	..	48.00	9.60	..	..
8. Bewar Feeder ..	9.80	..	..	7.00	..	..	..
9. Madho Tanda Irrigation Scheme	17.60	17.00	5.00	0.60	5.89	..	..
10. Raising Meja Dam	17.83	..	..	10.00	0.42	..	..
11. Shauzad Dam ..	20.24	..	..	16.00	1.19	..	..
12. Jamrahi Dam ..	64.50	21.00	15.00	..	6.00	..	..
13. Maudaha Dam ..	27.70	..	..	5.00	..	..	..
14. Urmil Dam ..	4.77	..	..	4.30	..	..	..
15. Increasing Capacity of Narainpur Pump Canal	73.14	10.00	2.50	63.14	15.36	13.70	0.80
16. Sone Pump Canal ..	30.06	1.60	..	29.06	1.62	2.50	0.20
17. Increasing Capacity of Zamania Pump Canal	25.72	10.00	..	13.12	13.19	..	4.10
18. Increasing Capacity of Deokali Pump Canal	73.60	32.30	20.00	41.30	16.12	..	2.40
19. Gyanpur Pump Canal	65.42	6.00	..	12.00	3.47	..	0.04
20. Chambal Liftscheme	55.40	..	..	5.00	..	..	..
<b>Total—A</b>	..	<b>1439.99</b>	<b>1024.90</b>	<b>525.52</b>	<b>429.79</b>	<b>28.20</b>	<b>23.54</b>

—I

—Project-wise details

('000 Hectare)

1986-87 Achievement		1987-88 Anticipated		1988-89 Target		1989-90 Proposed		1985-90 Anticipated	
Potential	Utiliza- tion	Potential	Utiliza- tion	Potential	Utiliza- tion	Potential	Utiliza- tion	Potential	Utiliza- tion
(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
..	..	12.75	..	1.50	2.50	2.00	3.00	16.25	5.50
..	16.50	36.00	..	22.50	70.30	25.00	72.00	83.50	170.80
..	..	..	..	..	..	..	..	..	2.00
42.00	..	8.22	..	15.00	15.00	22.00	20.00	99.22	35.00
..	..	..	..	20.00	..	20.00	5.00	40.00	5.00
..	1.00	..	..	..	2.20	..	2.50	..	7.70
..	..	..	..	15.00	..	25.00	4.00	40.00	4.00
..	..	..	..	..	..	2.50	..	2.50	..
0.60	0.70	..	..	..	1.54	..	1.65	6.60	3.89
..	..	..	..	6.00	..	10.00	1.50	16.00	1.50
..	..	10.00	..	6.00	2.50	3.24	2.00	19.24	4.50
..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	2.50	..	2.50	..
..	..	..	..	..	..	0.50	..	0.50	..
7.00	..	9.00	8.40	13.00	6.25	6.00	3.50	48.70	18.95
..	0.30	..	0.70	..	..	2.50	..	5.00	1.20
..	0.90	..	4.70	2.00	..	2.00	0.20	4.00	9.90
2.50	1.10	17.68	4.30	14.00	3.00	6.32	2.80	41.00	13.60
..	0.60	..	2.20	5.00	0.93	5.00	..	10.00	3.77
..	..	..	..	..	..	5.00	..	5.00	..
52.10	21.10	93.65	20.30	120.00	104.22	140.06	118.15	434.01	287.31

## ANNEXURE-1--(Contd.)

Name of the Project	Ultimate irrigation potential	Potential created up to 1984-85		1985-90 Target		1985-86 Achievement	
		Potential Utilization	Potential Utilization	Potential Utilization	Potential Utilization	Potential Utilization	Potential Utilization
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>B—MEDIUM PROJECTS</b>							
1. Aliganj Irrigation Scheme	38.70	20.00	12.00	18.70	12.31	..	..
2. Khatima Irrigation Scheme	9.33	9.33	5.00	..	4.33	..	1.10
3. Belan Bakher Diversion	5.70	..	..	5.70	1.62	5.70	..
4. Bakhar Marihan Feeder	2.07	..	..	2.07	0.54	2.07	..
5. Chitvaurgarh Reservoir	13.76	..	..	9.00	0.07	..	..
6. Rohini Dam	1.31	1.00	0.10	0.31	1.26	0.31	0.20
7. Sajan Dam	7.27	3.00	0.80	4.27	3.45	..	0.50
8. Dongri Dam	0.98	..	..	0.98	0.27	0.98	..
9. Dhanawa Dam	1.41	1.31	0.50	0.10	0.36	..	..
10. Gunta Nala Dam	3.88	..	..	3.88	1.18	..	..
11. Sarju Pump Canal	24.40	4.00	2.80	10.40	3.55	..	1.20
12. Kishanpur Pump Canal	30.66	28.64	25.00	2.02	5.90	..	..
13. Augasi Pump Canal	12.70	12.70	5.00	..	7.70	..	..
14. Yamuna Pump Canal	37.16	30.10	12.00	7.06	10.25	..	2.40
15. Umarhat Pump Canal	3.90	..	..	3.90	1.89	..	..
16. Revised Kwano Pump Canal	10.60	..	..	9.60	..	..	..
17. Dhoba Pump Canal	4.05	..	..	4.05	1.30	..	..
Total—B	..	110.08	63.20	82.04	54.67	9.06	5.40
<b>C—MODERNISATION PROJECTS</b>							
1. Lining of Channels	14.70	4.82	1.20	..	3.62	..	..
2. Modernisation of Agra Canal	64.00	5.00	4.00	10.00	0.95	..	..
3. Modernisation of Upper Sarda Canal	69.00	61.00	12.00	8.00	15.44	..	..

('000 Hectares)

1986-87 Achievements		1987-88 Anticipated		1988-89 Target		1989-90 Proposed		1985-90 Anticipated	
Potential Utilization	Potential Utilization	Potential Utilization	Potential Utilization	Potential Utilization	Potential Utilization	Potential Utilization	Potential Utilization	Potential Utilization	Potential Utilization
(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
1.00	1.90	4.66	..	4.50	4.96	8.04	3.00	18.20	9.86
..	1.13	..	2.10	..	..	..	..	..	4.33
..	..	..	..	..	0.36	..	0.50	5.70	0.86
..	..	..	..	..	0.13	..	0.20	2.07	0.33
..	..	..	..	6.00	..	5.00	..	11.00	..
..	0.77	..	..	..	0.09	..	0.20	0.31	1.26
3.00	0.90	1.10	..	0.13	0.40	..	0.50	4.23	2.30
..	..	..	..	..	0.06	..	0.60	0.98	0.66
..	..	..	..	0.10	0.12	..	0.10	0.10	0.22
..	..	..	..	..	..	3.88	..	3.88	..
..	0.20	..	1.00	18.40	0.75	..	4.50	18.40	7.65
..	..	..	..	..	2.80	1.72	1.20	1.72	4.00
..	..	..	..	..	4.00	..	2.50	..	6.50
..	..	5.32	0.60	1.74	2.77	..	3.00	7.06	8.77
3.90	..	..	..	..	0.19	..	0.20	3.90	0.39
..	..	..	..	4.00	..	2.00	..	6.00	..
4.00	..	..	..	0.05	0.19	..	0.20	4.05	0.39
11.90	4.90	11.08	3.70	34.92	16.82	20.64	16.70	87.60	47.52
..	..	..	..	..	1.12	2.00	0.10	2.00	1.22
..	..	..	..	..	0.45	2.50	0.50	2.50	0.95
..	..	..	..	..	5.49	..	3.00	..	8.49

## ANNEXURE-I—(Concid.)

Name of the Project	Ultimate irrigation potential	Potential created up to 1984-85		1985-90 Target		1985-86 Achievement	
		Potential Utilization	Potential Utilization	Potential Utilization	Potential Utilization	Potential Utilization	Potential Utilization
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
4. Modernisation of Eastern Yamuna Canal	27.00	..	..	6.02	..	..	..
Total (C)	..	70.82	17.20	24.02	20.01	..	..
Total (A+B+C)	..	1640.89	1105.30	631.58	504.47	37.26	28.94
<b>II—New Scheme of Seventh Five-year Plan</b>							
<b>D—MEDIUM PROJECTS</b>							
1. Khaprar Dam	0.59	..	..	0.59	0.15	0.59	..
2. Pathrai Dam	2.11	..	..	0.40	..	..	..
3. Kurar Dam	0.90	..	..	0.20	..	..	..
4. Lakeri Dam	2.23	..	..	0.40	..	..	..
5. Resin Dam	2.36	..	..	0.50	..	..	..
6. Charkhari Dam	2.00	..	..	0.39	..	..	..
Total (D)	..	..	..	2.48	0.15	0.59	..
<b>E—Completed Schemes</b>							
1. Schemes completed prior Sixth Plan	1166.50	1163.50	1163.50	3.00	3.00	..	..
2. Schemes completed during Sixth Plan	857.79	857.79	692.30	..	92.38	..	11.56
Total (E)	2024.29	2021.29	1855.80	3.00	95.38	..	11.56
F—Benefit Pre-Plan schemes	2552.96	2552.96	2552.96	..	..	..	..
GRAND TOTAL (A to F)	..	6215.14	5514.06	637.00	600.00	37.85	40.50

('000 Hectare)

1986-87 Achievement		1987-88 Anticipated		1988-89 Target		1989-90 proposed		1985-90 Anticipated	
Potential Utiliza- tion	Potential Utiliza- tion	Potential Utiliza- tion	Potential Utiliza- tion	Potential Utiliza- tion	Potential Utiliza- tion	Potential Utiliza- tion	Potential Utiliza- tion	Potential Utiliza- tion	Potential Utiliza- tion
(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
..	..	..	..	..	..	6.02	..	6.02	..
..	..	..	..	..	7.06	10.52	3.60	10.52	10.66
64.00	26.00	104.73	24.00	154.92	128.10	171.22	138.45	532.13	345.49
..	..	..	..	..	0.03	..	0.05	0.59	0.08
..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	0.03	..	0.05	0.59	0.08
..	..	..	..	..	..	..	..	..	..
..	..	..	16.00	..	21.85	..	15.50	..	64.91
..	..	..	10.00	..	21.85	..	15.50	..	64.91
..	..	..	..	..	..	..	..	..	..
64.00	26.00	104.73	40.00	154.92	149.98	171.22	154.00	532.72	410.38



## ANNEXURE—2

Districtwise statement of normal public tubewells and small lift canals in operation on April, 1988

Name of district	Tubewells in operation		Small Lift Canals	Name of district	Tubewells in operation		Small Lift Canals
	Normal	World Bank			Normal	World Bank	
(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
1. Meerut ..	605	17	..	20. Jhansi ..	54	..	3
2. Saharanpur	671	98	..	21. Lalitpur ..	1	..	..
3. Muzaffarnagar	528	51	..	22. Hamirpur	380	22	10
4. Ghaziabad	292	14	..	23. Jalaun ..	356	54	6
5. Bulandshahr	560	47	..	24. Banda ..	331	54	14
<b>Total, Meerut Division</b>	<b>2656</b>	<b>227</b>	<b>..</b>	<b>Total, Bundelkhand Division</b>	<b>1122</b>	<b>130</b>	<b>33</b>
6. Agra	371	..	..	25. Lucknow ..	276	45	10
7. Mathura	17	..	1	26. Unnao ..	101	46	5
8. Mainpuri	440	89	..	27. Sitapur ..	540	79	20
9. Etah ..	535	78	..	28. Raebareli	245	103	8
10. Aligarh	653	96	..	29. Lakhimpur	591	98	..
<b>Total, Agra Division</b>	<b>2016</b>	<b>263</b>	<b>1</b>	30. Hardoi ..	410	129	..
11. Moradabad	1008	55	..	<b>Total, Lucknow Division</b>	<b>2163</b>	<b>500</b>	<b>43</b>
12. Bijnor ..	587	51	..	31. Kanpur (Rural)	328	89	9
13. Rampur ..	245	25	..	32. Kanpur (Urban)	24	..	..
<b>Total, Moradabad Division</b>	<b>1840</b>	<b>131</b>	<b>..</b>	33. Allahabad	950	126	13
14. Garhwal	6	..	..	34. Farrukhabad	367	..	1
15. Dehradun	50	..	..	35. Etawah ..	302	98	—
<b>Total, Garhwal Division</b>	<b>56</b>	<b>..</b>	<b>..</b>	36. Fatehpur	390	56	3
16. Bareilly	435	117	2	<b>Total, Allahabad Division</b>	<b>2361</b>	<b>369</b>	<b>26</b>
17. Pilibhit ..	53	24	..	37. Nainital ..	175	50	..
18. Shahjahanpur	344	48	2	<b>Total, Kumoun Division</b>	<b>175</b>	<b>50</b>	<b>..</b>
19. Badaun ..	919	119	1	38. Varanasi	1252	109	32
<b>Total, Rohel Khand Division</b>	<b>1751</b>	<b>308</b>	<b>5</b>	39. Mirzapur ..	268	..	22
				40. Ghazipur ..	600	96	17
				41. Balia ..	625	27	9
				42. Jaunpur ..	479	51	13
				<b>Total, Varanasi Division</b>	<b>3224</b>	<b>283</b>	<b>93</b>

## ANNEXURE-2—(Concl'd.)

Name of district	Tubewells in operation		Small Lift Canals	Name of district	Tubewells in operation		Small Lift Canals
	Normal	World Bank			Normal	World Bank	
(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
43. Faizabad	704	103	..	49. Gorakhpur	741	185	2
44. Barabanki	200	45	12	50. Basti ..	829	99	2
45. Gonda ..	546	51	7	51. Deoria	747	69	..
46. Bahraich ..	430	16	..	52. Azamgarh	548	91	3
47. Sultanpur ..	525	70	1	<b>Total, Gorakhpur Division</b>	<b>2865</b>	<b>444</b>	<b>7</b>
48. Pratapgarh	151	..	4	<b>Total, State ..</b>	<b>22785</b>	<b>2990</b>	<b>232</b>
<b>Total, Faizabad Division</b>	<b>2556</b>	<b>285</b>	<b>24</b>				

**ANNEXURE-3**

*Progress of Flood Management Works under different Plan periods*

Plan Period	Financial Progress (Rs. in lakh)							Physical Progress				
	Marginal embank- ment]	Town protection	Avi- Bression	Drains	Village raising	Others	Total	Marginal embank- ment (Km.)	Town protec- tion (No.)	Drains (Km.)	Village raising (No.)	Benefi- fited area (lakh ha.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. First Plan (1951-56)	104.90	23.70	13.90	16.30	127.80	19.30	275.90	168	3	288	1140	1.17
2. Second Plan (1956-61)	230.00	107.70	25.50	59.60	344.60	25.80	799.20	378	12	2723	3076	3.37
3. Third Plan (1961-66)	189.00	213.70	30.30	143.18	31.50	12.40	620.00	304	23	6535	284	0.62
4. Annual Plan (1966-67)	10.10	39.70	2.80	17.00	0.20	46.10	115.90	2	..	528	..	0.01
5. Annual Plan (1967-68)	34.70	30.50	5.60	10.00	0.30	33.20	114.30	8	..	310	..	0.01
6. Annual Plan (1968-69)	43.00	21.00	0.10	8.60	..	7.20	80.70	9	..	269	..	0.01
7. Fourth Plan (1969-74)	566.30	725.90	71.40	241.40	..	575.00	2180.00	120	3	635	..	0.97
8. Fifth Plan (1974-78)	1401.70	1216.62	692.74	457.94	..	..	3769.00	185	12	665	..	3.00
9. Annual Plan (1978-80)	1504.61	350.55	1031.85	1123.72	..	40.62	4061.35	215	5	480	..	2.40
<b>Total up to Fifth Plan (March '80)</b>	<b>4090.31</b>	<b>2740.17</b>	<b>1864.19</b>	<b>2057.60</b>	<b>594.40</b>	<b>749.62</b>	<b>12016.35</b>	<b>1389</b>	<b>58</b>	<b>12433</b>	<b>4500</b>	<b>11.56</b>
10. Sixth Plan (1980-85)												
(i) First year (1980-81)	607.23	331.18	455.85	364.74	..	..	2059.00	80	2	72	..	0.70
(ii) Second year (1981-82)	687.60	298.79	530.33	335.86	..	..	1182.58	67	2	118	..	0.51
(iii) Third year (1982-83)	474.77	82.05	410.55	162.06	..	..	1129.43	30	2	30	..	0.30
(iv) Fourth year (1983-84)	693.80	22.70	432.29	135.29	..	..	1274.08	30	..	25	..	0.25
(v) Fifth year (1984-85)	1153.02	120.26	773.93	248.48	..	28.31	2329.00	70	..	70	..	0.35
<b>Total of Sixth Plan</b>	<b>3905.42</b>	<b>854.98</b>	<b>2607.95</b>	<b>1246.43</b>	<b>..</b>	<b>28.31</b>	<b>8644.09</b>	<b>277</b>	<b>6</b>	<b>315</b>	<b>..</b>	<b>2.11</b>
<b>Total up to Sixth Plan (March '85)</b>	<b>7996.73</b>	<b>3595.15</b>	<b>4472.14</b>	<b>3314.09</b>	<b>594.40</b>	<b>777.93</b>	<b>20560.44</b>	<b>1666</b>	<b>64</b>	<b>12748</b>	<b>4500</b>	<b>13.67</b>

11. Seventh Plan (1985—90)														
(i) First year	(1985-86)	920.00	120.00	372.58	172.00	..	52.00	1636.58	20	..	40	..	0.20	
(ii) Second year	(1986-87)	1471.72	134.54	382.86	190.04††	..	29.84	2209.00	25	..	50	..	0.30	
(iii) Third year	(1987-88)	1078.09	302.61	372.52	553.81††	..	21.97	2329.00	22	..	40	..	0.22	
(iv) Fourth year	(1988-89)*	1185.67	161.63	368.11	693.68††	24.91	50.00	2484.00	20	..	40	11	0.22	
(v) Fifth year	(1989-90)†	880.46	367.00	441.25	801.66††	34.63	100.00	2625.00	25	..	50	6	0.41	
Total of Seventh Plan		5535.94	1085.78	1937.32	2411.19	59.54	253.81	11283.58	112	..	220	17	1.35	

\*Expected

†Proposed

††Includes expenditure of Industrial Dains

**ANNEXURE—4**

*Private Minor Irrigation — Physical Targets and Achievements*

Item	Unit	Norm ha./unit	Achieve- ment upto 1984-85	Target for Seventh Plan	Achievement during			Target 1988-89	Anticipated Achieve- ment 1988-89	Target 1989-90
					1985-86	1986-87	1987-88			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
<b>GROUND WATER</b>										
1. Masonary well	.. No.	1	71,7,485	30,000	3,508	2,279	2,576	1,500	1,940	1,000
2. Persian Wheel	.. No.	5	2,60,405	20,000	981	626	343	370	370	350
3. Boring (Total)	..		18,08,406	6,60,000	1,18,779	1,13,262	1,28,990	1,19,910	1,19,910	2,22,000
(a) Free Boring	.. No.		5,481	3,00,000	54,808	61,027	65,047	1,00,000	1,00,000	2,12,000
(b) Other Boring	.. No.		3,56,044	..	7,211	5,852	16,174	19,910	19,910	10,000
(c) Departmental Boring	.. No.		3,61,525	..	62,019	66,879	81,221	1,00,000	1,00,000	2,12,000
(d) Boring by Private Agencies	.. No.		14,46,881	..	56,760	46,383	47,769	19,910	19,910	10,000
4. Boring Pumpsets	.. No.	5	10,77,353	4,80,000	1,04,461	1,07,386	1,15,134	1,01,030	1,01,030	2,12,000
5. Tube wells	.. No.	5	7,05,440	1,80,000	32,521	33,340	33,146	18,883	18,880	10,000
			17,82,793	6,60,000	1,36,982	1,40,726	1,48,280	1,19,913	1,19,910	2,22,000
6. Deep Tube wells	.. No.	12	..	..	32	40	53	140	140	200
7. Artisian well	.. No.	5	..	..	90	79	75	70	70	75
8. Irrigation Potential	.. 000ha.		9,025.00	3,387.00	692.00	707.50	745.00	601.00	601.00	1112.00
<b>SURFACE WATER</b>										
1. Surface Pump sets	.. No.	2	1,02,482	45,000	8,303	7,983	7,483	3,115	3,115	2,500
2. Wind Mill	.. No.	2	..	..	14	..	..	..	..	..

3. Guls/Hauzes/Hydrams	.. No.	51,175	17,200	1,320	2,965	2,886	5,200	5,200	4,000
4. Check Dams	.. No.	..	1000	447	2170	4572	..	..	..
5. Irrigation Potential	.. 000 ha.	255.59	113.00	18.37	21.50	22.00	12.00	12.00	9.00
6. Total Irrigation Potential	.. 000 ha.	1,0201.00	3,500.00	710.00	729.00	767.00	613.00	613.00	1121.00
7. Irrigation Potential available after 25% Depreciation	.. 000 ha.	9,259.00	..	9,737.50	10,223.10	10,734.52	11,079.16	11,079.16	11,923.00

---

## CHAPTER V

### ENERGY

The State's Seventh Five-Year Plan has accorded high priority to energy. An outlay of Rs. 3458.00 crore out of the total plan outlay of Rs. 11,000 crore has been allotted for it, representing 31.4 per cent.

5.0.2. During first three years of the plan, an amount of Rs. 1615.79 crore has been spent, which is 46.7 per cent of of seventh plan outlay. An outlay of Rs. 805.57 crore (Rs. 801.06 crore under power and Rs. 4.51 crore under non-conventional sources of energy) has been approved for 1988-89, which includes an earmarked outlay of Rs. 310.00 crore for Anpara 'B' project. This project is being executed with Japanese assistance on turn-key basis. It was stipulated that State Electricity Board (SEB) and Rajya Vidyut Utpadan Nigam (RVUN) would raise Rs. 240.58 crore and Rs. 8.34 crore respectively from their internal resources for financing the approved outlay of Rs. 801.06 crore. But on account of decline in revenue receipts and some

increases in revenue expenditure, there is likely to be a substantial shortfall in their internal resources. Due to late finalisation of tenders of Anpara 'B' project, the likely expenditure on this project during the year would be now Rs. 223.10 crore only yielding a shortfall of Rs. 86.90 crore in likely expenditure on this project. The anticipated expenditure in 1988-89 would be, thus, Rs. 589.79 crore only, out of which Rs. 585.28 crore will be spent on power and Rs. 4.51 crore on non-conventional sources of energy.

5.0.3. An outlay of Rs. 1062.39 crore is proposed for 1989-90. The likely expenditure during seventh plan would add-up to Rs. 3267.97 crore against the approved outlay of Rs. 3458.00 crore. This works out to 94.5 per cent of the approved outlay. Major head-wise and broad category-wise financial progress and proposed allocations during 1989-90 are summarised below :

TABLE 1 : *Category-wise Details of Outlay and Expenditure*

Category	(Rupees in crore)							
	Seventh Plan		1985-86	1986-87	1987-88	1988-89		1989-90
	Outlay	Likely expenditure	Expenditure	Expenditure	Expenditure	Outlay	Likely expenditure	Proposed outlay
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>A. POWER</b>	3440.00	3247.82	572.00	578.81	454.16	801.06	585.28	1057.57
<b>I—GENERATION PROJECTS</b>	2041.35	1967.54	321.82	332.73	220.45	508.70	375.18	717.36
(a) Completed	50.57	91.16	33.69	34.41	18.67	8.42	4.39	..
(b) For benefit in Seventh Plan	806.94	939.70	239.97	250.05	167.67	141.28	122.05	159.96
(i) Approved	735.00	806.89	222.45	224.98	136.06	116.28	100.90	122.50
(ii) Unapproved	71.94	132.81	17.52	25.07	31.61	25.00	21.15	37.46
(c) For benefit beyond Seventh Plan	1183.84	936.68	48.16	48.27	34.11	359.00	248.74	557.40
(i) Approved	1116.34	928.18	48.16	48.27	34.11	359.00	248.74	548.90
(ii) Unapproved	67.50	8.50	..	..	..	..	..	8.50

TABLE 1—(Concl'd.)

Category	(Rupees in crore)							
	Seventh Plan		1985-86	1986-87	1987-88	1989-90		1989-90
	Outlay	Likely expenditure	Expenditure	Expenditure	Expenditure	Outlay	Likely expenditure	Proposed outlay
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>II—TRANSMISSION AND DISTRIBUTION</b>	987.72	813.67	134.56	148.64	137.21	214.00	148.26	245.00
(a) Major Transmission	528.00	332.38	65.89	67.03	61.13	89.90	45.83	92.50
(b) Secondary and distribution	359.72	330.57	51.15	59.33	67.01	64.00	53.08	100.00
(c) System Improvement	100.00	124.87	17.52	22.28	9.07	41.10	35.00	41.00
(d) Capacitors	..	25.85	..	..	..	19.00	14.35	11.50
<b>III—RURAL ELECTRIFICATION</b>	284.53	351.25	77.42	79.82	80.33	53.22	53.22	60.46
<b>IV—RENOVATION</b>	100.40	72.68	23.42	14.05	10.94	17.14	2.52	21.75
<b>V—RESTORATION</b>	13.00	14.22	11.81	0.66	0.75	0.50	1.00	..
<b>VI—MINI/MICRO HYDEL</b>	10.00	25.33	2.44	2.91	4.48	6.00	4.50	11.00
(a) UPSEB		4.46	0.57	0.91	0.98	1.00	1.00	1.00
(b) Mini/Micro Hydel Corporation		20.87	1.87	2.00	3.50	5.00	3.50	10.00
<b>VII—OTHERS</b>	3.00	3.13	0.53	..	..	1.50	0.60	2.00
<b>B. NON-CONVENTIONAL SOURCES OF ENERGY</b>	18.00	20.15	2.58	4.25	3.99	4.51	4.51	4.82
(a) Department of Additional Sources of Energy	17.50	19.88	2.54	4.21	3.94	4.44	4.44	4.75
(b) PRAD	0.50	0.27	0.04	0.04	0.05	0.07	0.07	0.07
<b>Total (A+B) : Energy</b>	<b>3458.00</b>	<b>3267.97</b>	<b>574.58</b>	<b>583.06</b>	<b>458.15</b>	<b>805.57</b>	<b>589.79</b>	<b>1062.39</b>

5.0.4. In allocating outlays to projects/schemes, priority has been given to those generation projects which are likely to be completed in seventh plan. Total funding of these projects has been, therefore, provided. Similarly, adequate provisions have been made for projects that

have been taken up with external assistance. Priority has also been given to transmission and distribution works as well as urgent works needed for system improvements to meet short term requirements of power system.

### 5.1. POWER

One of the main constraints in development of the State has been the continuing low level of power availability to industries, agriculture, domestic and other

usages. This would be evident from the fact that the State's *per capita* consumption of power in 1986-87 was 131 Kwh against all-India average of 191 Kwh. The



State ranked 15th amongst 17 major states of the country. The position of states in descending order in respect of *per capita* consumption of power is given below :

State	Per Capita consumption in 1986-87 (Kwh)
1. Punjab	481
2. Maharashtra	327
3. Gujarat	320
4. Haryana	272
5. Tamilnadu	238
6. Andhra Pradesh	205
7. Karnataka	197
8. Madhya Pradesh	182
9. Rajasthan	155
10. Orissa	146
11. Himachal Pradesh	145
12. Jammu and Kashmir	140
13. West Bengal	137
14. Kerala	135
15. Uttar Pradesh	131
16. Bihar	95
17. Assam	51
ALL-INDIA	191

### Generation

5.1.2. To increase availability of power, efforts are being made to create additional generation capacity and to improve generation capability of existing stations through programmes of renovation and modernisation.

### Installed Capacity

5.1.3. The total installed capacity in the state in public sector at the end of the sixth plan was 4136 MW, of which 1422 MW was from hydro units and 2714 MW from thermal units. The Seventh plan target of additional installed capacity is 1638 MW, of which 148 MW is from hydro and 1490 MW from thermal units. In the first three years (1985-88), 740 MW were added by commissioning all the 3 units of 210 MW each of Anpara 'A' and first unit of 110 MW of Tanda thermal projects. During the current year, 1988-89, 540 MW are likely to be added through commissioning of one unit in Tanda and two units in Unchahar thermal projects besides re-installation of one unit of 10 MW at Talkatora Power House, Lucknow, which was retired from Yamuna Bank Power House at Agra in March, 1981. It is proposed to add another 292 MW in 1989-90 by commissioning 2 units (110 MW each) of Tanda thermal and all the three units (24 MW each) of Khara hydroelectric projects. The project-wise achievements and likely benefits during seventh plan period are given below :

TABLE 2 : Additions in Installed Capacity during Seventh Plan (MW)

Project	Installed Capacity involved	Level at the end of Sixth Plan	Seventh Plan Target	1985-86 Achievement	1986-87 Achievement	1987-88 Achievement	1988-89 Likely achievement	1989-90 Proposed target
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(a) Hydro	376	1422	148	..	..	..	..	72
1. Khara	3×24		72	..	..	..	..	72
2. Maneri Bhali-II	4×76		76	..	..	..	..	..

TABLE 2—(Concl'd.)

Project	(MW)							
	Ins- talled Capacity involved	Level at the end of Sixth Plan	Seventh Plan Target	1985- 86 Achie- vement	1986- 87 Achie- vement	1987- 88 Achie- vement	1988- 89 Likely achieve- ment	1989-90 Proposed target
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(b) Thermal	1500	2714	1490	210	210	320	540	220
1. Anpara 'A'	3×210		630	210	210	210	..	..
2. Unchahar	2×210		420	..	..	..	420	..
3. Tanda	4×110		440	..	..	110	110	220
4. Talkatora*	1×10		..	..	..	..	10	..
Total	1876	4136	1638	210	210	320	540	292

\* Re-installation of retired unit of 10 MW capacity

It is evident from the above table that one unit (76 MW) of Maneri Bhali-II, which was planned for commissioning in Seventh plan will spill-over to the Eighth plan. In 1987-88, one small thermal power station of Sohawal of 15 MW was retired and thus, the net achievement in the Seventh plan is likely to be 1557 MW against the target of 1638 MW.

#### State's Share in Central Projects

5.1.4. A capacity of 2390 MW was created by the end of sixth plan in the following central sector projects in northern region :

Project	Capacity (MW)	Period of Commissioning
1. Baira Siue! hydel	180	3, 3/80, 9/81
2. Badarpur thermal	720	11/73, 8/74, 3/75, 12/78, 12/81
3. Singrauli, Phase I Thermal	1050	2, 11/82, 3, 11/83, 2/84
4. Rajasthan Atomic (RAPP)	440	1973-74 and 1980-81
Total	2390	

5.1.5. Except for Singrauli, Phase I, the share for UP has not yet been allocated so far from other three schemes. The state's share in first 3 units and last 2 units of Singrauli is 25 per cent and 50 per cent respectively. Thus, a capacity of 367.50 MW, out of a total of 2390 MW, has been

made available to the state from central projects.

5.1.6. In first three years of seventh plan, another 1845 MW capacity has been added in central projects of northern region by commissioning Singrauli Phase II (2×500 MW) thermal in 1986-87, Salal (3×115 MW) hydel and one unit of 500 MW of Rihand thermal in 1987-88. However, no share has been allocated to the state as yet from Salal hydel project. A share of 50.375 per cent in Singrauli Phase II has been allocated to the state so as to assign an overall share of 42.5 per cent (871.25 MW) to the state in the total capacity of 2050 MW of Singrauli super thermal power station. Allocation of share to states in Rihand super thermal, Phase I (2×500 MW) is yet to finalise. But according to be central formula, a share of 42.5 per cent in first 500 MW unit that was commissioned in March, 1988, is expected to be assigned to the state during 1988-89. For Narora atomic power project (NAPP), 100 per cent of the power generation is assumed to be available to the state. The assumption is based on account of the facts that not only the state has contributed very valuable agricultural land for this project but is also bearing the entire risk of its operation. Benefits from other projects that are expected to be commissioned in 1988-89 and 1989-90

along with the state's shares as per central formula are given below :

TABLE 3—Phasing of Benefit under Central Sector Projects

Project	Total capacity involved	Capacity at the end of Sixth Plan	Seventh Plan					Total	Total capacity at the end of Seventh Plan
			1985-86	1986-87	1987-88	1988-89	1989-90		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<b>A—HYDEL</b>	1005	(180)	..	..	(345)	..	237 (660)	237 (1005)	237 (1185)
1. Salal (Share - Nil)	3x115		..	..	(345)	..	..	..	(345)
2. Chamera I (Share : 33.7%)	3x180		..	..	..	..	112 (540)	182 (540)	
3. Tanakpur (Share: 45.7%)	3x40		..	..	..	..	55 (120)	55 (120)	
<b>B—THERMAL</b>	3050	367.50 (1770)	..	252 (500)	474.75 (1000)	223 (500)	..	949.75 (2000)	1317.25 (3770)
1. Singrauli (Share : 42.5%)	5x210+ 2x500	3675 (1050)	..	252 (500)	215.75 (500)	..	..	503.75 (1000)	871.25 (2050)
2. Rihand (Share: 44.6%)	2x500		..	..	223 (500)	223 (500)	..	446 (1000)	
<b>C—ATOMIC</b>	470	.. (440)	..	..	..	235 (235)	235 (235)	470 (470)	470 (910)
1. Narona (Share: 100.0%)	2x235		..	..	..	235 (235)	235 (235)	470 (470)	
<b>D—GAS</b>	1030	..	..	..	..	..	282.20 (700)	282.20 (700)	282.20 (700)
1. Auraiya (Share : 44.6%)	4x100+ 2x100		..	..	..	..	178.40 (400)	178.40 (400)	
2. Anta (Share : 34.6%)	2x100+ 1x130		..	..	..	..	103.80 (300)	103.80 (300)	
<b>Total</b>	<b>5555</b>	<b>367.50</b> <b>(2390)</b>	<b>..</b>	<b>252</b> <b>(500)</b>	<b>474.75</b> <b>(1345)</b>	<b>458</b> <b>(735)</b>	<b>754.20</b> <b>(1595)</b>	<b>1938.95</b> <b>(4175)</b>	<b>2306.45</b> <b>(6565)</b>

N.B.: Figures in bracket indicate the installed capacity of the project.

### POWER SITUATION DURING SEVENTH PLAN

5.1.7. On the basis of the demand as assessed by Central Electricity Authority (CEA) through Twelfth Annual Power Survey (XII APS) the energy avail-

ability from State's own generation and its share in generation from central projects and also imports from other states, yearly shortages in energy availability and peaking capability of the state power system work out as under :

TABLE 4: Power Situation during Seventh Plan

Year	Energy Availability (MU)						Peaking capability (MW)			
	Demand	Availability			Shortage		Demand	Availa- bility	Shortage	
		Net Generas tion	Imports	Total	In MU	As % of demand			In MU	As % of demand
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1985-86	21375	11169	3791	14960	6415	30.0	3622	2962	660	18.2
1986-87	21145	13642	3591	17233	3912	18.5	3793	3152	641	16.9
1987-88	25000	15261	4839	20100	4990	19.9	4001	3301	700	17.5
1988-89 Target	28174	19806	5568	25374	2800	9.9	5545	3754	1791	32.3
Likely achievement	28174	17090	4670	21769	6405	22.7	5545	3558	1987	55.8
1989-90										
Seventh Plan target	30749	24192	5660	29852	897	2.9	6052	4330	1722	28.5
Annual Plan target	30749	19994	6098	26002	4747	15.4	6052	4081	1971	48.3

5.1.8. The energy and peak demands for first three years in the above table are actual restricted demands worked out on the basis of rostering and actual supplies. However, the demands for 1988-89 and 1989-90 based on XII APS has been substantially reduced in the XIII APS as would be clear from the following :

	XII APS	XIII APS
Energy Requirement (MU)		
1988-89	28174	22824
1989-90	30749	25053
Peak load demand (MW)		
1988-89	5542	4779
1989-90	6052	5251

5.1.9. The following norms have been adopted for assessing the availability

from state's own generating units and losses on its distribution system :

- (1) Estimates of generation new units has been made on the basis of CEA norms.
- (2) Average plant load factor (PLF) of all thermal units was envisaged to increase from 47 per cent in 1987-88 to 55 per cent during 1988-89. PLF proposed for 1989-90 is 52.4 per cent (UPSEB 54.7 per cent) and (UPRVUN 30.1 per cent) as against the likely achievement of 50.3 per cent (UPSEB 50.7 per cent) and (UPRVUN 28.8 per cent) during 1988-89.
- (3) Transmission and distribution losses proposed for 1989-90 are 24 per cent as against 27.3 per cent anticipated for 1988-89.

*Projects accruing Benefits in Seventh Plan*

5.1.10. Project-wise physical progress and proposed programme for 1989-90 is given in the following paragraphs.

5.1.11. *Anpara 'A'* (3×210 MW) — The first two units of this power station have already been taken on commercial load on March 24, 1986 and February 28, 1987 respectively. The third unit, which has been commissioned on March 12, 1988, is also expected to be taken on commercial load by January, 1989. The remaining works to be completed for the unit to run on commercial load and their expected date of completion are as below :

Activity	Expected Date of Completion
1. Completion of balance pressure parts and critical piping including Anchor modification and Auxiliary modification.	November 4, 1988
2. Structural platforms, ladders, insulation and sheeting of ducts and critical piping.	December 15, 1988
3. Erection of E.P. Passes and Commissioning	December 15, 1988
4. Control and instrumentation of auxiliary PRDS, SADC, FSSS, SN/RH attemperation, valves and dempers	December 12, 1988
5. Erection and commissioning of mills and coal piping	December 20, 1988
6. Unit on coal firing	12/88
7. Unit on Commercial load	1/89

5.1.12. *Tanda* (4×110 MW) — The first unit of this power station has been commissioned on March 21, 1988. Upto March, 1988 the percentage physical progress in respect of unit numbers 2, 3 and 4 were 77, 67 and 53 per cent respectively. The second unit is now expected to be commissioned by December, 1988. An outlay of Rs.60.00 crore has been provided for this project during the current year, against which only Rs.41.21 crore is expected to be utilised mainly for supply of equipments, construction and erection works and for establishment.

5.1.13. *Unchahar* (2×210 MW) — Commissioning of units one and two are likely to take place in November, 1988 and March, 1989. The first unit will also be taken on commercial load by March, 1989. The cost of project is now estimated Rs.522.67 crore, based on July, 1988 price level. This project is being constructed by the Rajya Vidyut Utpadan Nigam and on completion, the power station will also be operated by the Nigam. An outlay of Rs.47.50 crore is proposed for 1989-90 to complete the balance works. The project is expected to generate about 2310 million units of energy per year, which will be sold to UPSEB at station bus base. The Nigam has entered into an agreement with UPSEB for the sale of its generated energy.

5.1.14. *Khara* (3×24 MW) — The main civil works of power channel, intake, by-pass, power house and tailrace channel are in advance stage of construction. The erection of bay has been completed. In unit bays, the main columns have been completed and the roofing work is in progress. The concreting in unit one has reached a level of two metres below the turbine floor. All necessary piping and embedments work has been completed. In unit number two the concreting of scroll case is in progress. In unit number three erection of scroll case has been completed and testing work is in progress. Earth-mat laying is in progress in the switchyard area. Foundation of main columns are being cast. The order for main generating equipment was placed on Bharat Heavy Electricals Ltd. (BHEL), Hardwar in March, 1983. So far, about 95 per cent of generating equipment has been delivered by BHEL. The orders for power house auxiliaries and switchyard equipment have been placed and orders for remaining equipments such as power and control cables, fire fighting system, etc. are under process which are likely to be placed during 1988-89.

5.1.15. The BHEL, Hardwar is also doing erection work of the plant with the help of EOT crane, which was commissioned during October, 1987. All the three units are scheduled to be commissioned in 1989-90.

5.1.16. Forest and environmental clearances have been obtained. The project has not yet been approved by the Planning Commission, though its outlays were earmarked each year. The state has accorded high priority to this project and has requested Planning Commission for early approval of this project.

*Projects likely to accrue benefits after Seventh Plan*

5.1.17. The four long gestation projects include two multi-purpose hydro electric projects viz. Tehri and Lakhwar Vyasi and two hydro electric projects of Maneri Bhali, Stage II and Vishnu Prayag. These projects were approved by planning commission in fourth and fifth five year plans and the main work was started in sixth plan.

However, due to constraint of financial resources, delay in environmental clearances and various other bottle-necks, the desired progress could not be achieved. During seventh plan, new projects of Srinagar Composite (6×55 MW), Anpara 'B' (2×500) MW and Unchahar Extension (2×210 MW) have been taken up for execution and are targetted for completion in eighth plan.

5.1.18. *Multi Purpose Projects*—The shares of power sector in the total project cost in Tehri Dam, Stage-I and Lakhwar Vyasi are 80 per cent and 60 per cent respectively. The balance cost of these projects will be met from outlays provided in irrigation sector. Financial progress and outlays proposed for the 1989-90 are given in table below :

TABLE 5 : *Multipurpose Projects—Outlay and Expenditure :*

Project	Latest estimated Cost			Expenditure up to 1984-85	Seventh Plan outlay	1985-	1986-	1987-	1988-	1989-
	Total	Central share	State Share			86	87	88	89	90
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(A) TEHRI COMPLEX	2963.80	2004.49	959.31	188.25	120.00	20.86	29.34	32.28	218.33	..
Power Share	2672.65	2004.49	668.16	55.04	60.00	15.51	19.14	25.07	218.32	..
Central share	2004.49	2004.49	..	..	..	..	..	21.17	218.00	n.a.
Stage share	668.16	..	668.16	55.04	60.00	15.51	19.14	3.90	0.32	1.00
Irrigation share	291.15	..	291.15	133.21	60.00	5.35	10.20	7.21	0.01	..
1. Tehri Stage I	1455.73	873.44	582.29							
2. Tehri Stage II	617.60	463.20	154.40							
3. Koteshwar	285.47	214.10	71.37							
4. Associated Transmission works	503.00	375.00	125.00							
5. Environmental Improvement	105.00	78.75	26.25							
(B) LAKHWAR Vyasi	424.99	..	424.99	49.80	145.00	9.46	18.03	23.73	14.94	18.00
Power Share	254.99	..	254.99	22.95	70.00	4.52	6.34	9.73	3.44	..
Irrigation share	170.00	..	170.00	26.85	75.00	4.94	11.69	14.00	11.50	18.00

5.1.19. *Tehri Complex* (4×250+4×100+4×250 MW)—Advance action on the project was started as early as in 1971-72. However, no appreciable progress could be achieved on account of financial stringencies and non-availability of land for colonies and works. The construction of actual work was started in 1979-80. Even thereafter, not much head way could be made due to financial constraints. In view of the importance of the project, construction is now being taken-up jointly with Government of India, for which a new Tehri Hydro Development Corporation Ltd. has been registered on 12-7-1988 for this purpose. Seventh-five per cent cost of the power share will be met by the Government of India and balance 25 per cent cost and complete cost of the irrigation share will be contributed by the State Government. An agreement has been signed between Government of India and Government of USSR for technical and financial co-operation for addition of installed capacity of 2,400 MW under Tehri Complex. The complex includes :

(i) Tehri Stage I comprising four generating units of 250 MW each with annual generation of 3,029 MU of energy and creation of irrigation potential of 2.70 lakh hectares.

(ii) Koteshwar Dam with four generating units of 100 MW each.

(iii) Tehri Dam Stage-II will include four 250 MW units with reversible turbines for meeting peak-load requirement and for stabilisation of power system of the state and,

(iv) Associated 800 kV transmission system for evacuation of power from Tehri Complex.

5.1.20. The USSR will provide technical know-how and credit for financing a part of local expenses in connection with construction of 260.5 metre high rock fill dam and spill way of Tehri Dam, Stage I. Two underground power houses of installed capacity of 1000 MW each (one under Tehri, Stage I and another under Tehri Stage II), 103.2 m. high concrete dam and surface power house of

400 MW installed capacity at Koteshwar and 800 kV power evacuation system will be constructed by USSR on turn-key basis. The value of works to be executed by USSR on turn-key basis and by Government of India is Rs.1,386.17 crore and Rs.1,557.63 crore respectively. The break-up of these amounts is given below :

Component	Total cost	(Crore Rupees) Estimated cost of the work to be done by	
		USSR	India
1. Tehri, Stage I	1455.73	319.93	1135.80
2. Tehri Stage II	617.60	401.52	216.08
3 Koteshwar Dam	285.47	214.72	70.75
4. Transmission system (800 kv.)	500.00	450.00	50.00
5 Environment Improvement	105.00	..	105.00
Total	2963.80	1386.17	1577.63

Thus, external aid will be of 4,000 million roubles (Rs.1,500.00 crore) for Tehri Complex. This is inclusive of Rs.113.83 crore which is a part of local cost and Rs.1,386.17 crore which is the cost of turn key works. Basic infrastructure works comprising construction of railway siding, stores, work-shop, colonies, approach roads, etc. have already been completed at Rishikesh and Tehri. Temporary colonies are being constructed at Vishwa Karmapuram. Works of construction of permanent colony at Bhagirathi Puram is in progress. Construction of approach roads to work sites has been completed. An alternative provincial road connecting Chamba to Deoprayag through new Tehri town and a permanent project colony is also being constructed. Out of a length of 42 km, as stipulated in the project, 37 km, of road has been completed while work on remaining five kilometres is held up for want of land.

5.1.21. Progress under main civil works is as under :

(a) *Diversion Works*—Left bank diversion tunnels have been completed. Installation of gates is in progress and is expected to be complete during the current year. The work of two right bank diversion tunnels has been completed. The work of installation of gates is in progress. These tunnels will be utilized to divert non-monsoon flow of river Bhagirathi during the current year.

(b) *Dam* — The core and shell stripping work of main dam and coffer dam is in progress. Out of 25.50 lakh cubic metres excavation, about 14.50 lakh cubic metre is expected to be complete by the end of this year. During the current year, the work of desilting river bed, construction of up-stream and down stream dykes for diverting flow of river Bhagirathi will also be completed.

(c) *Spill-way*—The excavation of spill-way is in progress. Out of about 80 lakh cubic metres of excavation about 16.00 lakh cubic metres is expected to be complete by the end of the year.

(d) *Head Race Tunnel* — The underground excavation of two head race tunnels for Tehri, stage-I has been completed. About 90 per cent of the lining work is expected to be complete during the current year.

5.1.22. *Lakhwar Vyasi (3×100+2×60 MW)* — The main infrastructure works, i.e. construction of roads, bridges and erection of lines for construction power have been nearly completed. The work on construction of two diversion tunnels for Lakhwar dam, excavation for dam abutment, foundation and infrastructure facilities like colonies, roads, etc. was started in 1979. Three agreements for the main works of (i) Lakhwar dam and power house (ii) Vyasi dam intake and half of head race tunnel and (iii) Hathiari power house and other half of head race tunnel, were

signed in 1987-88. Construction of main works has now started. Work on Katapathar barrage is to start shortly, and it is proposed to complete it simultaneously with Vyasi dam. After completion of Vyasi Complex comprising dam, Hathiari power house and Katapathar barrage, partial benefits of power generation from Hathiari power house can be realized in 1992-93. Power generation from Lakhwar power house and irrigation benefits are targetted for 1994-95.

5.1.23. Programmes envisaged for 1988-89 and works proposed for 1989-90 are given below :

(i) construction of coffer dam at Lakhwar which includes excavation and concreting of dam,

(ii) acquisition of land, construction of building and payment of compensation,

(iii) construction of Lakhwar under ground power house and its appartement works.

(iv) diversion arrangements, excavation and concreting of Vyasi dam,

(v) construction of intake and head race tunnel,

(vi) construction of Surge Tank and Hathiari Power House and

(vii) construction of Katapathar Barrage.

5.1.24. The letter of intent for the supply of generating equipments has been placed with M/s BHEL in 1981 and 10 per cent advance payment has also been released to them. Contracts for major civil works have been awarded. Electrical works would also be taken in hand accordingly.

5.1.25 *Vishnu Paryag (4×120 MW)* —It is a run-of-river scheme which envisages utilisation of a drop of 947.4 meters for power generation by constructing a barrage across river Alaknanda at a place near village Lambagarh in district Chamoli. The power station will consist



of 3 machines of 120 MW each with provision for installing fourth machine of 120 MW in future. The latest estimated cost of the project is Rs.345.95 crore at March, 1986 prices. The cost per KW capacity installed works out to Rs.9,610.00. The total annual energy generation from this project will be 2,349 MU on 90 per cent water availability basis. The State Government has proposed that this project should be executed by Tehri Hydro Development Corporation and costs shared between the State Government and Government of India as has been agreed upon for Tehri complex. About 113 hectares of land is required for this project, against which 24 hectares land has been acquired and 85 hectares compensatory afforestation is proposed in district Jhansi. Action is being taken for acquisition of balance land also. The progress of construction of roads is at a stand-still at present due to delay in acquisition of land. Modification of roads between Tehri-Maletha and Maletha-Halang is being carried out by the Border Road Organisation. Against the total requirement of 1,645 houses, 372 houses have been constructed. Power required during the stage of construction is being arranged and about 2 per cent works for this purpose have been completed till July, 1988 against a target of 2.6 per cent. The project is now expected to be commissioned in 1996-97.

5.1.26. *Maneri Bhali—Stage-II (4×76 MW)*—The main reason of delay in completion of this project has been slow progress in excavation of Head Race Tunnel (HRT). Up to August, 1988 8.14 km. length, out of a total of 16 km., has been excavated. The average rate of progress has thus been 1.1 km. per year. Due to poor rock conditions, the HRT at intermediate upstream face of Dhanagad had collapsed in November, 1987. There has not been any further progress on HRT so far. As per programme, excavation and concreting, cleaning and plugging of HRT is to be completed by June, 1994 and, therefore, commissioning of the machines can be completed by March, 1995 only. To achieve this commissioning schedule,

required rate in the tunnel excavation should be 1.8 km. per year. The construction programme for power house and electrical equipments installation has now been deferred. The main activity during 1988-89 will be construction of barrage, intake structure, sedimentation chamber and HRT works on another 851 feet. The land for compensatory afforestation proposed in Jhansi district has been handed over to the Forest department. The status of electrical works is as follows :

(i) *Power House Cranes* — Two 125/25 ton EOT cranes including gantry girders and rails etc. have been procured.

(ii) *Main Generating Equipment* —Detailed order for embedded parts, turbines, generators and other associated equipment including cooling water supply amounting to Rs.32.87 crore had been placed with BHEL in March, 1983. Detailed order for four spherical valves and other remaining equipment amounting Rs.5.90 crore had also been placed in March, 1985 with BHEL.

5.1.27. Modifications in design finalized after experience gained in Maneri Bhali Stage-I are as under :

(a) Sedimentation tank to extract particle size up to 0.015 m. instead of 0.25 m. as per earlier design.

(b) Individual penstock for each machine instead of one penstock emanating from surge tank for two machines.

(c) Provision of runner and guide vane removal from bottom.

(d) Renewable and replaceable type of labyrinth design to be adopted. Renewable and replaceable type of liners for top cover and lower ring.

(e) Use of 13 per cent chromium and 4 per cent Nickel stainless steel material for runners, guide vanes, labyrinth etc. hard facing coating material to be used wherever possible.

Under erection of first stage embedments of machines, erection work of pier nose liners, dewatering pipe of draft tube, spherical valve, sealing water discharge pipe, penstock, dewatering pipe and laying of drainage and dewatering and main header for all the machines has been completed. The deliveries and erection of equipment has been linked with the progress of civil works.

5.1.28. *Srinagar Composite* (6x55 MW) — The Government of India have entered into an agreement with the World Bank on July, 27, 1988 under which World Bank has agreed to extend a loan amounting to US \$ 350 million (Rs. 455 crore approx.) to cover a package of projects

which include Srinagar Hydro Electric Project, additional coal handling plant at Obra 'B' Thermal Power Station, replacement of steam boilers by fluidized boilers at Harduaganj 'A' and associated transmission system for evacuation of power alongwith related consultancy, training etc. The loan has become effective from September 22, 1988. The cost of the project is now estimated Rs. 597.60 crore. However, inclusive of physical and financial contingencies as well as interest which will accrue during construction period, as required under the World Bank norms, the total cost is estimated to be Rs. 1,106.60 crore. Component-wise break-up of the cost is given below :

TABLE 6—Component-wise Break-up of cost under Srinagar Composite Project

Component/Item	Cost in Million U.S. Dollars			Cost in Crore Rupees		
	Local	Foreign	Total	Local	Foreign	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>A. SRINAGAR HYDEL</b>	145.30	112.80	258.10	188.90	146.40	335.30
1. Land Environment and Rehabilitation	5.20	..	5.20			
2. Civil works	85.90	37.60	123.50			
3. Electrical Equipment	35.60	73.00	106.60			
4. Erection Works	20.60	2.20	22.80			
<b>B. HARDOGANJ 'A' NEW BOILER INSTALLATION</b>	13.10	24.10	37.20	17.00	31.40	48.40
1. Boilers	5.90	13.80	19.70			
2. Coal, Oil and Ash Handling	4.20	7.40	11.60			
3. Civil Works and Chimny	0.50	0.30	0.80			
4. Electrical Auxiliary	2.50	2.60	5.10			
<b>C. INSTALLATION OF COAL HANDLING PLANT AT OBRA 'B'</b>	18.80	21.80	40.60	24.40	28.40	52.80
1. Coal Handling System	10.70	16.90	27.60			
2. Wagon	7.40	4.90	12.30			
3. Civil and Auxiliary Works	0.70	..	0.70			
<b>D. TRANSMISSION AND TELECOMMUNICATION SYSTEM</b>	40.30	41.20	81.50	52.40	53.60	106.00
<b>E. TRAINING AND CONSULTANCY</b>	0.80	1.30	2.10	1.00	1.70	2.70

TABLE-5 (Concl d.)

Component/Item	Cost in Million U.S. Dollars			Cost in crore Rupees		
	Local	Foreign	Total	Local	Foreign	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>F. MISCELLANEOUS WORKS</b>	37.90	2.30	40.20	49.40	3.00	52.40
1. Meter	0.60	2.30	2.90	0.80	3.00	3.80
2. Engineering and Administration	37.30	..	37.30	48.60	..	48.60
Estimated : Project Cost (A to F)	256.20	203.50	459.70	333.10	264.50	597.60
<b>CONTINGENCIES</b>	78.50	53.90	132.40	160.00	114.70	274.70
1. Physical (15% for Civil works 7% on equipment)	26.30	14.30	40.60	34.20	18.60	52.80
2. Price (6%)	52.20	39.60	91.80	125.80	96.10	221.90
Cost including contingencies	334.70	257.40	592.10	493.10	379.20	872.30
<b>INTEREST ON</b>	89.00	73.30	162.30	128.00	106.30	234.30
1. World Bank Financing	35.90	73.30	109.20	52.00	106.30	158.30
2. Other financing	53.10	..	53.10	76.00	..	76.00
<b>Total Requirement with interest</b>	423.70	330.70	754.40	621.10	485.50	1106.60

5.1.29. Component-wise financial progress, outlay proposed for 1989-90 and ultimate benefits which will accrue are shown in below :-

TABLE 7 : Component-wise provision Under Srinagar Composite Project

(Rs. in crore)

Component	Estimated cost	Seventh Plan outlay	1986-87 Expenditure	1987-88 Expenditure	1988-89 Likely expenditure	1989-90 Proposed outlay	Benefit involved
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Srinagar Hydro Electric Project	335.30	106.00	2.27	2.05	9.30	38.50	Generation : 1296 MU
2. Replacement of Boilers at Harduaganj 'A'	48.40	27.60	..	..	0.20	6.50	Additional Generation : 379 MU
3. Additional Coal Handling Plant at Obra 'B'	52.80	25.00	..	..	0.50	11.00	Additional Generation : 1880 MU
4. Associated Transmission System	106.00	..	..	..	..	3.75	
5. Training and Consultancy	2.70	..	..	..	..	..	
6. Miscellaneous Works	52.40	..	..	..	..	0.25	
<b>Total</b>	597.60	158.60	2.27	2.05	10.00	60.00	
<b>Re-imbursment (World Bank)</b>	455.00	..	..	..	2.50	32.00	

5.1.30. Preliminary construction works were taken up in 1985-86 and development of infra-structure, which comprises land acquisition, construction of roads, construction of buildings, construction power supply arrangements etc. is under progress.

Programme of work proposed for 1989-90 :

(a) *Srinagar*—The following civil works are proposed :

(i) Invitation and finalization of tenders for execution of main works.

(ii) Acquisition of forest and private lands.

(iii) Construction of steel bridge on river Alaknanda.

(4) Widening of Maletha-Srinagar road.

(v) Diversion of Srinagar Badrinath and Kirtinagar-Badyargarh roads.

(vi) Construction of residential and non-residential buildings.

(vii) Geological investigation and collection of hydrological and metrological data.

(viii) Afforestation in lieu of forest land coming under submergence.

(b) *Replacement of Boilers at Harduaganj 'A'*— After the order for various works, such as boilers, coal, ash and fuel oil handling, electrical auxiliary, civil works and chimney has been placed, ten per cent advance payment to respective contractors will be made. The work of fuel oil

handling system as well as yard work will also be completed. Provision for payment of Rs.0.50 crore to principal and retainer consultant has been made. Cash flow details are :

<i>Item</i>	<i>Creore Rupees</i>
(i) Boiler	3.10
(ii) Coal Handling, Ash Handling and Fuel oil facilities	1.76
(iii) Miscellaneous civil works and Chiminy	0.35
(iv) Electrical and Auxiliaries	0.74
(v) Consultancy, Design and Engineering	0.55
Total	6.50

(c) *Additional Coal Handling Plant at Obra 'B'*—An investment of Rs.6.00 crore. will be required for the civil works portion of the coal handling plant and yard etc. Rs.7.00 crore will be required for payment to the consultant and supplier of the equipment for coal handling plant. The bottom discharge wagons will be owned and procured by the Railways

5.1.31. *Anpara 'B'* (2×500 MW) — The project is being executed with Japanese loan assistance under Overseas Economic Corporation Fund (OECF) of 100 Billion Yen and Non-OECF Exim Bank assistance of 48 Billion Yen on turn-key basis. The latest cost of the turnkey portion of the project based on the exchange rate of 100 yen.=Rs.10.11, works out to Rs.2060 crore which also includes custom duty and establishment expenses etc. Central Electricity Authority (CEA) has been appointed as Principal Consultant for the project while Tokyo Electric Power Services Co. Ltd. (TEPSCO), Japan are the retainer consultant. Estimated year

wise phasing of requirements of fund is given below :

TABLE 8— Estimates of Year-wise Requirements of Funds Under Anpara 'B'

Year	Foreign Currency (Exchange Rate : 100 B.Yen— Rs.10.11 as on 11-12-87)						Local Currency		Total works (Crore Rs.)	Estab- lish- ment Cost (crore Rs.)	Total cost (Crore Rs.)
	OECF		NON OECF		Sub-Total		Other Works*	Custom Duty			
	B. Yen Crore Rs.	B. Yen Crore Rs.	B. Yen Crore Rs.	B. Yen Crore Rs.	B. Yen Crore Rs.	B. Yen Crore Rs.					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Seventh Plan	33.719	340.90	8.74	88.30	42.459	429.20	144.20	60	633.40	29.35	662.75
1985-86	..	..	..	..	..	..	..	..	..	0.41	0.41
1986-87	..	..	..	..	..	..	0.16	..	0.16	0.53	0.69
1987-88	0.119	1.20	..	..	0.119	1.20	0.04	..	1.24	0.41	1.65
1988-89	12.200	123.30	4.04	40.80	16.240	164.10	44.00	10	218.10	5.00	223.10
1989-90	21.400	216.40	4.70	47.50	26.100	263.90	100.00	50	413.90	23.00	436.90
Eighth Plan	69.121	698.80	18.19	183.90	87.311	882.70	249.55	173	1305.25	92.00	1397.25
1990-91	33.000	333.63	9.00	90.99	42.000	424.62	100.00	95	619.62	23.00	642.62
1991-92	25.200	254.77	4.80	48.53	30.000	303.30	90.00	73	466.20	23.00	489.30
1992-93	10.500	106.15	32.50	25.28	13.000	131.4	26.00	5	162.43	23.00	185.43
1993-94	0.421	4.25	1.89	19.10	2.311	23.35	33.55	..	56.90	23.00	79.90
Total	192.840	1039.70	26.93	272.20	129.770	1311.90	393.65	233	1938.65	121.35	2060.00

\*Includes Civil and other departmental work, in land transportation, Insurance, local taxes etc.

5.1.32. The letter of intent has been issued to Mitsui and Co., Japan on 30-9-88. The contract agreement is expected to be finalized by 30-11-88. The first unit of this project is scheduled to be commissioned with 46 months (by Sept. 1992) and the second unit in 55 months (by June, 1993) from the date of signing of the agreement.

5.1.33. Only advance payment is likely to be made to the firms during

1988-89 for OECF and non-OECF packages. Some supplies of the construction equipments and the structural steel may also be made. Besides, the work of construction of residences, and 60 bedded hospital, levelling of is site and construction of roads is also expected to start during this period. It is anticipated that only Rs.223.10 crore will be utilised against an approved outlay of Rs.310.00 crore

during the current financial year. Details of likely expenditure are given below :

TABLE 9—Programme of Expenditure during 1988-89

(Rupees in crore)

Item	Likely Expenditure			Japanese Assistance			Sources of Funding		
	OECF	Non-OECF	Total	OECF	Non-OECF	Total	Additionality*	Other sources	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<b>A — REIMBURSIBLE</b>	98.50	54.80	153.30	98.50	..	98.50	68.95	84.35	153.30
(i) Foreign Currency	84.00	54.80	138.80	84.00	..	84.00	58.80	80.00	138.80
1. Interim Advance for Equipment	74.00 @ 10 %	40.80† @ 15 %	114.80	74.00	..	74.00	51.80	63.00	114.80
2. Supply of construction equipment	10.00	14.00†	24.00	10.00	..	10.00	7.00	17.00	24.00
(ii) Local Currency									
Advance for supply of equipment	14.50	..	14.50	14.50	..	14.50	10.15	4.35	14.50
<b>B — NON REIMBURSIBLE</b>			69.80					69.80	69.80
1. Civil and erection works	16.50	5.00	21.50					21.50	21.50
2. Custom Duty									
3. Consultancy			48.30					48.30	48.30
4. Establishment									
Total (A+B)			223.10	98.50	..	98.50	68.95	154.15	223.10

\* 70% of additionality under OECF package.

† No additionality available

5.1.34. For 1989-90, an outlay of Rs.436.90 crore has been proposed which would include interim advance payments, technical services in Japan, supply of

equipments, civil works, departmental works, custom duty etc. as per details below :

TABLE 10—Financial Programme Proposed for 1989-90

Item	Requirement			Japanese Assistance			Sources of Funding		
	OECF	Non-OECF	Total	OECF	Non-OECF	Total	Additionality*	Other sources	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<b>A— REIMBURSIBLE</b>	216.40	47.50	263.90	216.40	47.50	263.90	198.98	64.92	263.90
(i) Foreign Currency	176.40	47.50	223.90	176.40	47.50	223.90	170.98	52.92	223.90
1. Equipment	141.40	47.50	188.90	141.40	47.50	188.90	146.48	42.42	188.90
(a) Interim Advance (10%)	66.00	..	66.00	66.00	..	66.00	46.20	19.80	66.00
(b) Supplies	75.40	47.50	122.90	75.40	47.50	122.90	100.28	22.62	122.90

Table—10—(Contd.)

Item	Requirement			Japanese Assistance			Sources of Funding		
	OECF	Non-OECF	Total	OECF	Non-OECF	Total	Addi-tionality*	Other Sources	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2. Technical services in Japan	35.00	..	35.00	35.00	..	35.00	24.50	10.50	35.00
(ii) Local currency	40.00	..	40.00	40.00	..	40.00	28.00	12.00	40.00
BHEL equipment									
(a) Interim Ad- vance(10%)	13.00	..	13.00	13.00	..	13.00	9.10	3.90	13.00
(b) Supplies	27.00	..	27.00	27.00	..	27.00	18.90	8.10	27.00
<b>B—NON-REIMBRSIBLE LOCAL CURRENCY</b>			173.00				..	173.00	173.00
1. Civil and erection works			60.00				..	60.00	60.00
2. Departmental works			20.00				..	20.00	20.00
3. Inland transportation, insurance local taxes, etc.			20.00				..	20.00	20.00
4. Custom Duty			50.00				..	50.00	50.00
5. Establishment			23.00				..	23.00	23.00
<b>Total : (A+B)</b>			<b>436.90</b>	<b>216.40</b>	<b>47.50</b>	<b>263.90</b>	<b>198.98</b>	<b>237.92</b>	<b>436.90</b>

\*70% and 100% of additionality under OECF and Non-OECF packages

5.1.35. The works that will be taken up under the programme proposed for 1989-90 are as under :

(i) A provision of Rs.20 crore has been kept for departmental works which are not included in the scope of Mitsui and Co. These works include construction of lines and sub-stations for construction power, laying of water mains for supply of drinking water, completion of part of Merry-Go-Round (MGR) system for supply of coal to power station, completion of 60 beded field hostel, construction of temporary site office, completion of office building and residential buildings for officers and staff, purchase of vehicles, tools and plants (T & P) etc.

(ii) Japanese engineers and staff and officers of sub-contractors for doing civil works and erection will be fully mobilised at site. Provision has been kept for carrying out civil works in the project area to the worth of Rs. 60.00 crore. After soil investigation are completed, work of foundation of power house building, various equipments, boiler, turbine and feed pumps will be taken up. Foundation for power house building would be completed in 1989-90 itself while works relating to foundation of boilers and turbine and fabrication and erection of building structure would be partially completed.

(iii) Equipments worth Rs.149.90 cr. both imported and indigeneous,

will be procured and part of it will be received at site.

5.1.36. Priority has been fixed up for dispatch of structural steel for power house, main building and construction of equipment and machinery. Besides, the following important is scheduled for dispatch from manufacturers in Japan :

(a) Two EOT cranes including their rails and fittings.

(b) Boiler structure and high pressure parts.

(c) L.P. casing of turbine.

In respect of indigeneous equipment, these shall be supplied by BHEL including condensers, feed heating plant and equipment.

5.1.37. *Unchahar* Extension (2x210 MW)—Project was techno-economically cleared by CEA in May, 1985. Cost of project based on December, 1987 prices is estimated Rs. 517.80 cr. The Asian Development Bank has agreed to finance the project to the extent U.S.\$ 160 million (Rs. 208 cr.) for which loan negotiations with Bank authorities were successfully concluded in August, 1988. The balance funds (Rs. 309.80 cr.) for the project will be provided by the State. It is expected that work on this project will start in 1989-90, for which an outlay of Rs. 50.00 crore has been proposed.

5.1.38. *Gas-based Thermal Projects*  
—In order to meet increasing demand of

power, it is necessary to have a number of short gestation generation projects. Thermal projects, based on natural gas, are reliable and can be completed in about 2 to 3 years only. Natural gas is available to the state through Hazira-Bijaipur-Jagdishpur (HBJ) pipeline and the Government of India has been requested for allocating gas to the state for gas-based power projects.

5.1.39. Feasibility report of Jagdishpur gas-based project (2x35 MW GT+1x35 MW HT) has been submitted to CEA for approval. Based on 5000 running hours per year 78 cu.m. natural gas will be required for this project, gas will be available for the project from HBJ gas pipe line, which has already been completed. The first and second unit of this project may be commissioned after 22 and 24 months from the date of approval of the project. The third unit may be commissioned after 36 months from the date of start. Work for selection of site for this project is in progress.

Proposals, each with an installed capacity of 600 MW, for three more new gas-based projects are also being finalized. The proposed sites for these projects are Dadri (District Ghaziabad), Shahjahanpur and Babrala (District Badaun). The work of survey and investigation for the projects is in progress. The status of each project is given below :

TABLE 11—*Status of Proposed Gas Based Projects*

Project	Installed capacity (MW)	District	Estimated cost (Crore Rs.)	Location of the Project	Re-quire-ment of Land (Hec-tares)	Water Re-quire-ment (Cusecs)	Cost of Gene-ration* (Paise kwh.)	Service Area
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Jagdishpur	105	Raebareli	126.30	Near village chandigarh Tehsil Tloi	40	5	111	Sultanpur and a part of Rae Bareli and Sul anpur
2. Dadri	600	Ghaziabad	500.00	Reconnai-ssance of sites in Dadri near NTPC site identified	120	20	103	Chaziat ad ar d part of Meerut dis-trict.



TABLE 11—(Concl'd.)

Project	Installed capacity (MW)	District	Estimated cost (Crore Rs.)	Location of the Project	Requirement of Land (Hectares)	Water requirement (Cusecs)	Cost of Generation (Paise Kwh.)	Service Area
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
3. Babrala	600	Badaun	500.00	Likely site is Babrala where gas line has an outlet	120	20	103	Bulandshahr, Budaun and Aligarh districts
4. Shahjahanpur	600	Shahjahanpur	500.00	Likely site is Shahjahanpur where gas line has an outlet	120	20	103	Shahjahanpur, Farrukhabad and part of Bareilly districts

\*At 63% Plant load factor (PLF)

5.1.40. Apart from new gas-based power projects, possibilities are also being explored for utilisation of gas for power generation at River Side Power House (RPH), Kanpur. For maximising generation, all the gas projects will be of combined cycle system and will be operated as base load stations. Studies are being made for operating RPH, Kanpur thermal units on gas either by modification or change in boiler and making them suitable for combined cycle operation.

#### RENOVATION AND MODERNISATION

5.1.41. With a view to improve capacity utilisation of major thermal power stations of Obra, Harduaganj and Panki, special schemes have been formulated under 'centrally sponsored programme' of renovation and modernisation of thermal power stations. These schemes broadly cover all the 27 generating units at these power stations along with associated coal and ash handling systems. The original cost of these schemes was Rs. 156.80 crore which was approved by Planning Commission after techno-economically cleared by the Central Electricity Authority (CEA). The costs were revised in November, 1986 with the approval of Central Electricity Authority and some additional activities were included in central as well as in states shares of Harduaganj and Obra thermal power stations. The approved

revised cost of these schemes has now been raised to Rs. 185.68 crore. A break up of this cost is given below :

Complex	Cost in Crore Rupees		
	Total	State share	Central share
1. Obra	65.70	27.00	38.70
2. Panki	37.03	15.04	21.99
3. Harduaganj	82.95	46.40	36.55
Total	185.68	88.44	97.24

5.1.42. The above schemes were proposed to be completed in three years, by March, 1988. But due to paucity of funds and non-availability of shut-downs of certain units in periods of drought in the state, the schemes could not be completed in time. The work programme of renovating 50 MW units which was to be drawn up by BHEL with Russian assistance, could also not be finalised. The execution of work also requires equipment and spares from USSR. The scheme is now expected to complete in 1990-91.

5.1.43. It is expected that on completion, additional 2375 MU of energy would be generated which would mean an addition of 425 MW in installed capacity. The plant load factor will improve by 10 to 15 per cent and oil consumption reduced by about 10 per cent. Complex-

wise physical progress and details of works to be undertaken are as described in the following paragraphs.

5.1.44. *Obra Complex*—All activities, except installation of Electro-Static Precipitators (ESPs), replacement of pressure parts of Russian units, have been completed and rest are likely to complete by March, 1989. The completed activities are replacement of air pre-heater block of 5 units of 50 MW each and 3 units of 100 MW each, replacement of high pressure parts of three 100 MW units, renovation of ball mills and repair of generator rotor of units 1, 3, 5 and 7, renovation of water treatment plant and installation of seal air fans, H. P. valves and turbonisery instruments in five units of 200 MW each. Activities to be completed in 1988-89 are :

(i) Replacement of journal assembly in ball mills of five 50 MW units.

(ii) Replacement of C and I systems of one unit of 50 MW unit.

(iii) Renovation of C and I of five 200 MW units.

(iv) Modification of coal chutes.

(v) Provision of line magnetic separators.

(vi) Replacement of complete switch-gears on reserve section and replacement of ABCB with SF-6 circuit breakers of five units of 50 MW each.

5.1.45. *Panki Thermal Complex*—Almost all works except, installation of ESPs and provision of back washing of condenser on units 3 and 4 (110 MW each), have been completed. These completed activities include replacement of high pressure parts, air heaters, arresting of air ingress in the boilers. Replacement of M.P. cyclones, replacement of condenser tubes of 110 MW units, renovation of cooling water pipes, I.D. fans and renovation of C and I system and replacement of unserviceable instruments of both units of 32 MW and replacement of un-

serviceable material handling equipments. Activities yet to be carried out are :

(i) Installation of ESPs and associated ash handling system of unit 3 and 4.

(ii) Installation of fire fighting system for power station.

(iii) Provision of back-washing of condenser units 3 and 4.

(iv) Provision of oxygen analysis on units 1 and 2.

5.1.46. *Harduaganj Complex*—Most of the activities except installation of Electro Static Precipitators (ESPs), ash handling system and fire fighting equipments, have been completed. Completed works include complete renovation or replacement of pressure parts, ball mills, stoppage of air ingress in boilers, replacement of air heater blocks, replacement of turbine blades and rewinding of generator rotors and high tension (HT) motors etc. of units 4 (60 MW) and 7 (110 MW) of Harduaganj 'B' power station. Activities pertaining to other units are likely to be completed by March, 1989. Work is yet to be done in following activities :

(i) Replacement of worn out parts of mills and P.C. pipes of unit 3 of Harduaganj 'A' Power Station.

(ii) Replacement of pr. parts and arresting of air ingress in the boilers of units 3,5 and 6 of Harduaganj 'B'.

(iii) Repair of H.P. roter and replacement of damaged turbine roter blades of units 1, 2 and 3, of Harduaganj 'B'.

(iv) Replacement of C and I system of unit 3 of Harduaganj 'B'.

(v) Replacement of 6.6 kV station unit switch gears and 220 kV generator breakers of units 1 and 2.

(vi) Renovation of C and I of water treatment plant of Harduaganj 'B'.

(vii) Augmentation of fire fighting arrangement of power complex.

(viii) Augmentation of coal handling plant at Harduaganj 'B'.

(ix) Replacement of batteries and AVR of units 3 and 4 of Harduaganj 'B'.

5.1.47. Activities proposed to be executed under the programmes included in state plan during 1989-90 are given below :

Activity	Allocation Proposed (Rupees in crore)	Activity	Allocation Proposed (Rupees in crore)
		(5) Replacement of Rail track	0.20
		(6) Provision of ESPs and associated coal Handling System of units 1 to 7 of Harduaganj 'B'	2.88
<b>I—OBRA 'A'</b>			
(1) Replacement of MPs and EPs with new ESPs alongwith associated ash handling system (x 100 MW units).	1.42	Sub-Total	8.35
(2) Installation of discharge electrodes, collecting plates and associated equipment in dummy field of ESPs.	0.60		
(3) Replacement of three 0.25 T/hr. DM streams by two 50 T/hr. capacity IM Stream	0.10	Total (I+II+III)	17.37
Sub-Total (A)	2.12		
<b>II—PANKI</b>			
(1) Fire fighting arrangements for power station	1.80		
(2) Provision of disposal of ash by slurry system	1.43		
(3) To provide air wash unit	0.17		
(4) Provision of alternative arrangements for C.W. system by having radial well collectors for units 3 and 4	3.50		
Sub-Total (B)	6.90		
<b>III—HARDUAGANJ</b>			
(1) Renovation of W.T. Plant of Harduaganj (B)	0.34		
(2) Augmentation of fire fighting arrangements in thermal power stations	1.20		
(3) Provision of additional air canon system in the Bunkers and S.S. lining of Bunkers	0.60		
(4) Provision of additional coal feeding point in Harduaganj 'B'	3.13		

#### TRANSMISSION AND DISTRIBUTION

5.1.48. Development of transmission system is a continuous process to keep pace with load growth of each area and additions to the generating capacity. In order to evolve an optimum power system at any time from consideration of power flow, system stability, reliability, etc. computer studies are regularly done in the Computer Centre at IIT, Kanpur. Presently, the existing transmission voltage levels in Uttar Pradesh are 132 kV, 220 kV and 400 kV. In the context of long distance transmission of bulk power, the necessity of introducing higher voltage than existing 400 kV is being strongly felt. This will reduce transmission losses and will also make transmission of power more economical. Accordingly, proposals to evacuate large quantum of power of Anpara, Obra complex of the State and NTPC thermal power from south-east have been techno-economically approved by CEA. For evacuation of 2400 MW power from Tehri Complex construction proposal for a 800 kV transmission system has been included in the total Tehri Complex estimate and it envisages two 200 kilometres of single circuit lines from Tehri to Meerut alongwith its associated sub-stations.

5.1.49. *Transmission System*—To cope-up with anticipated increase in load growth and generation programme during Seventh Plan, CEA have technically agreed to a programme of transmission and distribution works. But due to financial

constraints all the works approved by CEA could not be taken up so far. The works detailed below were taken up in Seventh Plan, which also include spillover works of Sixth Plan.

TABLE 12 - *Physical Progress and Programme under Transmission Works*

Voltage Level (kV)	Base year (1984-85) level	Seventh Plan Requirement as per CEA	Target	1985-86 Achievement	1986-87 Achievement	1987-88 Achievement	1988-89 Anticipated achievement	1989-90 Proposed target
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>A - LINES (Ckt Km.)</b>								
400	1625	3415	2139	242	..	10	..	..
220	4558	1753	1589	271	277	83	169	410
132	9064	1418	1882	128	224	48	140	235
<b>B SUB-STATION (No.)</b>								
400/220	7	..	5	..	..	..	..	..
220/132	22	..	10	1	2	1	2	1
132/33	137	..	18	9	3	9	11	4
<b>C SUB-STATION CAPACITY (MVA)</b>								
400/220	4783	5650	1575	120	240	240	..	..
220/132	4918	3252	1630	305	380	..	440	440
132/33	6400	2160	560	424	255	285	320	255

5.1.50. *Power Evacuation*—Almost all the works required for evacuation of power for the units commissioned or proposed to be commissioned in the Seventh Plan have been completed. For Anpara 'A', 400 kV transmission line from Anpara to Azamgarh and for Tanda, two lines of 200 kV from Tanda to Sultanpur and Tanda to Basti have already been energised. For Unchahar two 200 kV lines are required to evacuate power, of which one from Unchahar to Lucknow has been completed and the other from Unchahar to Fatehpur is proposed for completion in 1989-90, in time for the second unit. For

Khara hydro-electric project likely to be commissioned in 1989-90, two 220 kV lines are required for evacuation, one line from Khara to Saharanpur is targetted to be completed in March, 1990 and the second line from Khara to Shamli is to be commissioned in early period of Eighth plan. To evacuate power from central project of Narora Atomic Power Project (NAPP), which will become critical early next year, the required 220 kV lines from NAPP to Simbholi and to Khurja are planned for completion in February, 1989 and March, 1990 respectively.

5.1.51. For evacuating power from Anpara 'B' project, which will come into operation during Eighth plan, system studies have been carried out. These indicate need for a 800 kV transmission system between Anpara and Unnao, with

underlying 400 kV system. Based on the above recommendations, the following transmission system, has been identified along with yearly investment requirements in order to match commissioning of first unit of Anpara 'B' :

TABLE 13 - Power Evacuation System for Anpara 'B' : Requirement of Funds

Work	Length (Ckt. km.)	Total esti- mated cost	Yearly Phasing				
			1988-89	1989-90	1990-91	1991-92	1992-93
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>A -800 kV LINE</b>	450	112.50	5.63	16.87	33.75	45.00	11.25
Anpara-Unnao (SC)	450	112.50	5.63	16.87	33.75	45.00	11.25
<b>B -400 kV LINES</b>	785	119.73	5.98	17.97	35.92	47.90	11.96
1. Unnao-Lucknow (SC)	55	6.65	0.33	1.00	2.00	2.66	0.66
2. Unnao-Panki (SC)	40	4.84	0.24	0.73	1.45	1.94	0.48
3. Unnao-Bareilly (DC)	250	55.00	2.75	8.25	16.50	22.00	5.50
4. Unnao-Agra (SC)	250	30.25	1.51	4.54	9.08	12.10	3.02
5. Agra-Muradnagar(SC)	190	22.99	1.15	3.45	6.89	9.20	2.30
<b>C -4 MAJOR RIVER CROSSING*</b>		1.60	..	0.32	0.48	0.64	0.16
(@ Rs.0.40 crore for each crossing)							
<b>D -400 kV SUB-STATION</b>	1775	65.90	1.31	5.71	13.04	32.80	13.04
(i) New	1775	61.67	1.22	5.35	12.20	30.70	12.20
1. Unnao (400/220 and 220/132kV)	2x315 + 2x100	27.21	0.54	2.27	5.40	13.60	5.40
2. Agra (400/220 kV)	1x315	15.16	0.30	1.36	3.00	7.50	3.00
3. Bareilly (400/220 kV)	2x315	19.30	0.38	1.72	3.80	9.60	3.80
(ii) Extension		4.23	0.09	0.36	0.84	2.10	0.84
1. Lucknow		1.41	0.03	0.12	0.28	0.70	0.28
2. Panki		1.41	0.03	0.12	0.28	0.70	0.28
3. Muradnagar		1.41	0.03	0.12	0.28	0.70	0.28
<b>E -400 kV REACTORS ON NEW SUB-STATIONS</b>	313 (MVAR)	11.17	..	..	..	10.00	1.17
<b>F -MISCELLANEOUS</b>		67.71	3.39	10.16	20.31	27.78	6.77
<b>Total: (A to F)</b>		378.61	16.31	51.03	103.50	163.42	44.35

\*On rivers Sone and Ganga in Anpara-Unnao line on river Ganga in Unnao-Panki line and on river Ganga in Unnao-Agra line.

5.1.52. With the commissioning of first unit (500 MW) of Anpara 'B' thermal project, Anpara 'B'—Unnao line will be initially operated at 400 kV, which would provide additional power transmission capacity of 700 MW. When this is energised at 800 kV on completion of Anpara 'B', it is assumed to operate at 765 KV+5 per cent.

On account of paucity of funds, it is not possible to fully fund this project to complete it within the stipulated time frame. The project has been posed to World Bank for financial assistance. However, in anticipation of its

acceptance, an outlay of Rs.42.13 crore has been proposed for 1989-90.

5.1.53. *Secondary Transmission and Distribution System*—This forms a vital link between primary distribution system and consumers. Therefore, for maintaining satisfactory supply conditions at consumers premises, its strengthening commensurate with the load being added in the system, is essential.

5.1.54. The status of secondary and distribution system at the end of sixth plan and achievements and targets of the Seventh Plan are given below :

TABLE 14—Secondary and Distribution System ; Targets and Achievements

Item	Unit	Base Year (1984-85) level	Seventh Plan 1985-86			1986-87		1987-88		1988-89		1989-90
			Target	Target	Achievement	Target	Achievement	Target	Achievement	Target	Likely achievement	Proposed Target
(1)	(2)	(3)	(4)	(5)	(5)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
<b>A. 33 kV WORKS</b>												
(a) Lines	Ckt km.	21,552	5,000	750	231	841	239.1	100	238	700	430	1415
(b) Sub-Stations	No.	977	1250	..	123	..	131	..	147	..	153	..
New	No.	..	350	52	19	54	19	73	31	50	33	107
Extension	No.	..	950	..	104	..	12	..	116	..	120	..
(c) Additions in Capacity MVA		..	3300	..	317	..	355	..	393	525	450	755
New Sub-stations	MVA	..	1100	..	79	..	82	500	125	225	150	375
Existing Sub-stations	MVA	..	2200	400	238	480	273	..	268	300	300	380
<b>B. 11 kV WORKS</b>												
(a) Lines	Ckt. km.	144528	..	750	541	430	537	480	499	475	395	830
New	Ckt. km.	..	630	485	400	472	430	399	425	345	655	..
Upgradation	Ckt. km.	..	120	56	30	65	50	100	50	50	175	..
(b) Sub-Stations	No.	..	610	795	533	1076	930	1079	985	665	1620	..
New	No.	..	345	540	295	783	630	802	670	350	1000	..
Extension	No.	..	265	255	238	293	300	277	315	315	620	..
(c) Additions in capacity	MVA	..	127	142	83	164	132	168	145	80	245	..
New Sub-stations	MVA	..	80	105	52	118	92	123	100	50	155	..
Existing Sub-stations	MVA	..	47	37	31	46	40	45	45	30	90	..
<b>C. LT Works</b>												
(a) Lines	Ckt. km.	154972	..	685	822	607	850	700	731	735	635	1085
New	Ckt km.	..	470	630	500	627	540	581	550	450	810	..
Upgradation	Ckt. km.	..	215	192	107	223	160	150	185	185	275	..
(b) Service connections	No.	..	..	..	..	..	..	..	..	..	..	..
(i) Industrial	No.	131167	..	5800	..	7247	7000	8937	8300	3961	83770	8370
(ii) Light and Fan	'000	1805	..	62	107	90	131	125	139	120	120	166

5.1.55. It will be seen from the table 14 that achievements during three years of the seventh plan were much below the targets. However, additions to the

connected load were much more than increases in the transformation capacity during the same period.

TABLE-15—Transformation capacity of sub-station vis-a-vis connected load

Years	(MVA)					
	Connected Load		Transformation Capacity		Gap in Load and Capacity	
	Additions	Cumulative	Additions	Cumulative	Additions	Cumulative
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Base year (1984-85) level	865	7,895	307	5,624	558	2,271
1985-86	660	8,555	307	5,931	353	2,624
1986-87	750	9,305	342	6,273	468	3,032
1987-88	428	9,733	400	6,673	28	3,600
1988-89 (Anticipated)	935	10,668	760	7,433	175	3,235

5.1.56. According to the programme for 1989-90, 725 MVA of load will be added to 11 kV and LT systems based on following estimates :

TABLE 16—Proposed additions in connected load

Consumer category	Target (No.)	Connected Load (kW)	
		Average per consumer	Total load
(1)	(2)	(3)	(4)
1. Private Tube-wells	15,000	5	77,500
2. State Tubewells	1,000	15	15,000
3. Long and Heavy power	200	200	40,000
4. Meidum and Small power	9,000	40	3,60,000
5. Domestic	1,40,000	0.25*	35,000
Total			5,27,500 (725 MVA)

\*Based on utilization of 8 hours a day.

5.1.57. Due to gap in peak demand and peak generation, only limited hours of supply is given to rural areas and for small towns. Therefore, the entire load connected in the system is likely to run simultaneously and the system at 33 and 11 kV. levels is devoid of any diversity. As such it is necessary to provide transformation capacity at least equivalent to the load that is likely to come up in coming years. Therefore, during 1989-90 for matching the balance between additions to connected load and transformation capacity, the requirement is to add another 725 MVA capacity. But due to paucity of funds, it is not possible to plan even for this capacity and only 530 MVA capacity is proposed to be added in 33 and 11 kV. systems as shown in the table 14, leaving a gap of 195 MVA against estimates of additions in 1989-90. Thus, instead of reduction in the existing gap, the same will increase further in 1989-90. In order to restore the system, it is necessary to provide for additional investments in system improvement works in the coming years.

5.1.58. Programme of System Improvement proposed for 1989-90—At the beginning of Seventh Plan, the need was felt for improvement in old and depleted

system of transmission and distribution by replacement of old and worn-out equipment, provision of certain protective devices for protection of costly equipment and for doing some additional works to augment capacity of the existing system, in order to ensure reliability of supply of energy to consumers. For such system improvement, an outlay of Rs.100.00 crore was provided in Seventh Plan. During first three years (1985-88), a sum of Rs.48.87 crore has been spent. During the current year (1988-89) an outlay of Rs.41.10 crore has been approved, against which a sum of Rs.35.00 crore is likely to be utilised. Programmes proposed to be taken up in 1989-90 is as below :

(a) An outlay of Rs.10.00 crore has been proposed to carry out the following works :

<i>Work</i>	<i>Target (No.)</i>
1. Replacement of wooden supports by P. C. C. Pole/S. T. Poles	5,000
2. Replacement of 11 kV switchgears	600
3. Replacement of L. T. P. C. B.	1,000
4. Guards at Crossing	10,000

(b) Presently, communication facilities are not available between 132 kV Grid sub-stations and 33 kV sub-stations being fed through it. To overcome these difficulties, development of a very high frequency (VHF) communication system has been proposed. An amount of Rs.1.00 crore has been proposed, under which 440 sub-stations (33/11 kV), 40 per cent of

existing 1100 sub-stations, would be connected to their feeding 132 kV sub-stations.

(c) *Rural Areas*—To improve supply position in rural areas, reduce technical losses on transmission and distribution and to reduce pilferage of energy, a number of schemes have been prepared. Efforts are being made to obtain financial assistance for these system improvement schemes from Rural Electrification Corporation (REC) and other financial institutions. REC have so far sanctioned 25 schemes costing Rs.35.66 crore, but in most of these schemes, assistance is limited to about 50 per cent of cost of works, Matching provisions are therefore, to be provided in the plan. Due to limited availability of resources, only a small sum of Rs.10.00 crore for 14 districts could be proposed for this in 1989-90†, against a much larger annual requirement of about Rs.100.00 crore.

(d) *Towns*—Due to rapid urbanisation and consequent expansion in size and population of major towns, the distribution system in most of the towns has become overloaded, resulting into frequent interruptions, excessive voltage fluctuations and line losses. For 40 towns of the state,\* special projects are being prepared for strengthening power distribution system. Scheme for 12 towns have already been formulated. The total estimated cost of these schemes is Rs.161.47 crore. These are proposed to be taken up in 1989-90, for which an outlay of Rs.10.00 crore has been provided pending finalisation of assistance from financial institutions @. Commercial banks are also being approached for assistance. But their response have not been encouraging so far.

†Annexure 1 : District-wise Financial and Physical Programme

\*Annexure 2 : List of Town identified for system improvement.



5.1.59. Item-wise break-up of works and system improvement programmes in which will be carried out under normal 1989-90 is given below:—

TABLE 17 - Program-wise Proposals for 1989-90 under Secondary and Distribution System

Work	Unit	Normal Programme		System		Improvement		Total	
		Outlay (Crore Rs.)	Target	Outlay (Crore Rs.)	Target	Outlay (Crore Rs.)	Target	Outlay (Crore Rs.)	Target
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
A—33 kV Works		58.00		7.50		2.50		68.00	
(a) Lines	Ckt. km.		1265		130		20		1415
(b) Sub-Stations (33/11kV)	No.		212		40		7		259
New	No.		92		12		3		107
Extension	No.		120		28		4		152
(c) Additions in Capacity	MVA		622		112		21		755
New Sub-stations	MVA		322		42		11		375
Existing sub-stations	MVA		300		70		10		380
B—11 kV Works		25.00		1.50		4.50		31.00	
(a) Lines	Ckt. km.		665		40		125		830
New	Ckt. km.		525		30		100		655
Upgradation	Ckt. km.		140		10		25		175
(b) Sub-stations (11/0.4 kV)	No.		1280		120		220		1620
New	No.		800		50		150		1000
Extension	No.		480		70		70		620
(c) Additions in capacity	MVA		195		18		32		245
New Sub-Stations	MVA		125		8		22		155
Existing Sub-stations	MVA		70		10		10		90
C—LT Works		15.00		1.00		3.00		19.00	
(a) Lines	Ckt. km.		870		55		160		1085
New	Ckt. km.		650		40		120		810
Upgradation	Ckt. km.		220		15		40		275
(b) Service connections									
(i) Industrial	No.		8,800		565		16,35		11,000
(ii) Light and Fan	No.		1,33,000		8,000		25,000		1,66,000

5.1.60. *Installation of shunt capacitors*—During the last two to three years, the number of serious disturbances in regional grid have increased. In order to stabilise the transmission and distribution system, reduce transmission and distribution losses and improve the supply voltage at consumer's end, a special programme of installation of capacitors in the transmission as well distribution net-works has been taken up from this year. The Planning Commission has earmarked a separate outlay of Rs. 19.00 crore for this programme in 1988-89. At present, 571 MVAR capacitors have been installed on 33 kV in transmission system, out of which capacitors of about 541 MVAR capacity are in working condition. According to system study carried out, capacitors of about 2300 MVAR capacity are required to be commissioned in transmission and distribution system by the end of Seventh Plan. But due to inadequate manufacturing capacity available in India and shortage of funds, only following capacitors are likely to be commissioned.

(a) *Transmission*—Out of the funds earmarked for 1988-89, 100 MVAR capacitors have been ordered on BHEL, which are likely to be commissioned by April, 1989. Another order for 150 MVAR capacitors has been placed as per recommendation of Northern Regional Electricity Board (NREB), which will also be commissioned during 1989-90. Yet another order for capacitors of 250 MVAR proposed to be commissioned during 1989-90 is

under finalisation. An outlay of Rs. 7.50 crore has been proposed for 1989-90 to complete these works.

(b) *Secondary and Distribution*—The total requirement of capacitors in state sector in 1989-90 for transmission and distribution is estimated to be 462 MVAR. Out of this, about 100 capacity is needed at 11 kV system, for which an outlay of Rs. 4.00 crore has been proposed in 1989-90.

#### RURAL ELECTRIFICATION

5.1.61. For accelerating integrated rural development, high priority has been given to electrification of villages in Seventh Plan. By the end of Sixth Plan, 63,075 villages, 56.0 per cent of the total of 1,12,566 inhabited villages as per 1981 census, were electrified according to CEA definition. It was envisaged to raise this percentage to 78.4 in Seventh Plan by electrifying another 25,170 villages. Out of these, 12,674 villages have been electrified in first three years and 2,688 villages are likely to be electrified in 1988-89. A target for electrifying 2747 villages has been proposed for 1989-90. The other important activity is energisation of private tubewells and pump sets. Against Seventh Plan target of energizing 2,47,950 private tubewells/pump sets, only 94,978 private tubewells are likely to be energised during the first four years (1985-89). A target of energisation of 15,567 private tubewells has been proposed for 1989-90. Year-wise and work-wise physical progress and programme for 1989-90 is given below:

TABLE 18—*Rural Electrification : Target and Achievement*

Period	Electrification of Villages					Electrification of Harijan Bastis†		Energisation of Private Tubewells*	
	By CEA Definition†			By LT Mains		Addi- tional	Cumulative	Addi- tional	Cumulative
	Addi- tional	Cumu- lative	Percent- age of electtified villages	Addi- tional	Cumu- lative				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
By the end of 1979-80	..	38,577	34.3	..	17,188	..	14,014	..	3,44,135
<i>Sixth Plan</i>									
Target	28,050	66,627	59.2	..	..	15,450	29,450	2,77,870	6,22,005
Achievement	24,498	63,075	56.0	13,676	36,864	15,587	29,601	1,40,374	484,509
<i>Seventh Plan Target</i>	25,170	88,245	78.4	25,170	56,034	24,300	53,901	2,47,950	7,32,459

TABLE 18—(Concd.)

(Number)

Period	Electrification of villages					Electrification of Harijan Bastis†		Energisation of Private tubewells*	
	By CEA Definition†			By LT Mains		Addi- tional	Cumu- lative	Addi- tional	Cumu- lative
	Addi- tional	Cumu- lative	Percen- tage of electrified villages	Addi- tional	Cumu- lative				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1985-86	4,486	67,561	60.0	4,716	35,580	5,282	34,883	27,904	5,12,413
1986-87	4,003	71,564	63.6	3,824	39,404	4,343	39,226	30,082	5,42,495
1987-88	4,185	75,749	67.3	3,571	42,975	4,302	43,528	21,917	5,64,412
1988-89 (Likely achievement)	2,688	78,437	69.7	2,688	45,663	2,586	46,114	15,075	5,79,487
1989-90 (Proposed target)	2,747	81,184	72.1	2,747	48,410	2,657	48,771	15,567	5,95,054

5.1.62. The Seventh plan target of 25,170 village electrification and 2,47,950 private tubewells energisation includes 5,370 villages and 18,500 private tubewells respectively in dacoity prone areas. This work is being done under Special

Area Development programme, for which an outlay of Rs. 150.00 crore has been provided in Seventh plan. Financial programme proposed for 1989-90 based upon funding from all sources, plan or non-plan, is summarised in the table below :

TABLE 19 :- Financing of Rural Electrification Programme during 1989-90

(Rs. in crore)

Source	Seventh Plan Outlay	1985-86 Expendi- ture	1986-87 Expendi- ture	1987-88 Expendi- ture	1988-89 Likely expendi- ture	1989-90 Proposed outlay
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>A— PLAN FUNDS</b>	434.53	77.42	81.82	82.33	57.22	66.46
(1) Energy Sector	284.53	77.42	79.82	80.33	53.22	60.46
Normal	63.52	6.47	11.77	17.30	5.57	5.54
REC	103.90	53.75	46.03	34.97	22.65	24.92
MNP	117.11	17.20	22.02	28.06	25.00	30.00
(2) Special Area Programmes Sector	150.00	..	2.00	2.00	4.00	6.00
Accelerated Development of Dacoity Prone Areas	150.00	..	2.00	2.00	4.00	6.00
<b>B— FUNDS OUTSIDE PLAN</b>	200.00	5.18	7.42	14.00	9.16	8.75
Special Programme Agriculture (SPA)	200.00	5.18	7.42	14.00	9.16	8.75
<b>TOTAL FUNDS : (A+B)</b>	634.53	82.60	89.24	96.33	66.38	75.21

†ANNEXURE 4— Planwise and Programme-wise progress and programme

\*ANNEXURE 5— Planwise and programme-wise progress and programme

5.1.63. Slow progress under electrification of private tubewells is attributable to following reasons :

(i) Persistent power shortage since sixth plan, due to which supply to rural areas was possible during limited hours only.

(ii) Comparatively cheaper source of alternative irrigation available on account of large scale strengthening of canal irrigation in the state.

5.1.64. Inadequate availability of underground water potential in certain areas and inadequate outlays for secondary and distribution systems, in certain areas have also adversely effected this programme.

5.1.65. The following are some of the issues which need serious considerations in order to accelerate progress under

## 5.2. NON-CONVENTIONAL SOURCES OF ENERGY

For the development of non-conventional source of energy and promotion of energy conservation, a separate organisation known as Non-conventional sources of Energy Development Agency (NEDA) under the department of additional sources of energy of the state was set up in April, 1983.

5.2.2.. Programmes under non-conventional sources of energy undertaken by NEDA are described in the following paragraphs.

5.2.3. *Installation of System/ devices*—Various systems and devices are being installed in rural and semi-rural areas under five schemes viz. Bio-energy, Solar-energy, Wind-energy, Energy conservation and Rural Technology to demonstrate the utility and practical application. Under these programmes, users are also being induced to setup devices/system of their own. Since, at the present level of the development of technology, these devices and systems are costly and are not competitive and economical to encourage users to setup their own devices/system, subsidy is being provided as an incentive to popularise and propagate the use of

this programme :

(a) Infrastructure of secondary transmission network needs to be strengthened adequately in order to ensure trouble free supply for private tubewells and pumping sets. The inadequacy of outlay for transmission and distribution has led to serious deficiencies on secondary transmission system.

(b) Under REC programme, normally a step up of 10 to 12 per cent is allowed from year to year in allocating plan outlays. These increases are not sufficient to accelerate the programme because escalation in costs nearly neutralizes these increases. Higher allocation of outlay is, therefore, required in REC programme, specially for areas where level of electrification is comparatively low.

systems.

(A) *Bio Energy*—The state has a large cattle population. The waste of the cattle is being effectively used in community biogas plants in villages to provide cooking gas to the villagers. Sewage based biogas plant has also picked-up very well at many places. In usar land, energy plantation is also being taken up, to provide fuelwood. A sum of Rs.51.00 lakh has been allocated for 1988-89. An outlay of Rs.49.00 lakh has been proposed for this programme for 1989-90. Prestigious sewage based biogas plant in Gorakhpur has been set-up very recently.

(B) *Solar Energy*—To harness solar energy, thermal as well as photovoltaic systems are being installed for demonstration. To induce consumers to adopt these devices, subsidy is also being given to them.

(i) *Thermal devices/systems* — Various solar energy devices like water heaters, cookers, etc. will be installed in 1989-90 to popularise utilization of solar energy. An outlay of Rs.147.00 lakh has been proposed for this purpose in 1989-90.

(ii) *Photo-Voltaic*—A number of solar photo-voltaic lights, television sets and solar pumps have been installed in rural areas. A major programme of power generation from photo-voltaic modules has been taken up by the agency to provide benefits of electrical energy to those who are living below poverty line. Three solar photo-voltaic power plants have been installed at Majhwara (Sultanpur), Ghaziabad and Tuntwala (Dehradun). In 1989-90, power generation plants with capacity of 10 KW are proposed to be installed to generate electricity by photo-voltaic modules. The site of these plants will be selected amongst the following sites :

<i>Villages</i>	<i>Districts</i>
1. Karora	Jalaun
2. Chandwari	Hamirpur
3. Barojia	Lalitpur
4. Kariawali	Etawah
5. Behamei	Kanpur
6. Lotari	Saharanpur
7. Asoi	Dehradun
8. Bharnu	Pauri Garhwal
9. Banas	Uttar Kashi
10. Darna	Almora
11. Kyari	Nainital

Besides centralized power plants, individual poles for illumination have been installed at many places.

(c) *Wind Energy*—Aerogenerators, Battery Chargers and Wind Pumps are to be installed to harness potential of wind energy in the State.

Generation of electricity by aerogenerators has tremendous potential in those areas where the velocity of wind is sufficient. One aerogenerator of 25 KW capacity at Mana, district Chamoli has been installed. Another aerogenerator of 25 KW capacity at Auli in district Chamoli is under installation. Likewise, two aerogenerators each of 2 KW capacity in Bargaon and Haldukhal in district Pauri are also under installation. A sum of Rs. 38.00 lakh has been proposed for 1989-90.

(D) *Energy Conservation*—Smokeless chulha for domestic cooking has been very popular for being fuel efficient as well as smokeless. Promotion of smokeless chulha is being done effectively to save the fuelwood. It requires less of fuel wood and is 25 per cent more efficient than the other chulhas. By the agency 2,44,085 smokeless chulhas have been installed so far in the State. An outlay of Rs. 27.50 lakh has been proposed for 1989-90.

5.2.4. *Micro Hydrel Generation*—The work of construction of micro hydrel generation schemes was being carried out exclusively by the State Electricity Board (UPSEB) in the past. But in view of urgency of taking up and commissioning such schemes, a separate agency namely Micro/Mini Hydro Electric Corporation was set up in April, 1985 by the State Government. Execution of Micro hydrel schemes upto 100 KW capacity is the responsibility of Non-Conventional Energy Development Agency (NEDA) of the State, which will investigate and execute such schemes and will also be responsible for their operation.

5.2.5. The work on two micro hydel schemes, viz. Kamptyfall and Ramgad is in progress and these are likely to be completed within this year. Work on another

eight projects will be taken up soon and these will be completed in 1989-90. Financial progress and programmes proposed for 1989-90 is given below :

TABLE 20 :—Micro Hydel Schemes: Progress and Programme for 1989-90

(Rs. in lakh)

Scheme	District	Instal- led ca- pacity (KW)	Estima- ted cost	1987-88 Expen- diture	1988-89 Likely expen- diture	1989-90 Propo- sed outlay	Commis- sioning Sche- dule
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>A. Micro Hydel Scheme</b>		480	283.04	11.20	41.50	191.00	..
1. Kapterfall	Tehri Garhwal	10	6.00	..	6.00	..	3/89
2. Ramgad	Nainital	100	52.21	11.20	25.00	16.00	6/89
3. Ghagria	Chamoli	50	26.55	..	6.00	15.50	6/90
4. Naini	Chamoli	50	30.00	..	4.50	25.50	3/90
5. Bilkot (Bareth)	Pauri Garhwal	50	30.00	..	..	30.00	3/90
6. Khokhta	Dehradun	20	12.18	..	..	10.50	6/90
7. Golpha	Pithoragarh	50	33.50	..	..	25.00	6/90
8. Khet	Pithoragarh	50	36.60	..	..	27.00	6/90
9. Ohhajnar	Dehradun	50	30.00	..	..	22.50	6/90
10. Pantwari	Tehri Garhwal	50	26.00	..	..	19.00	6/90
<b>B. Survey and Investiga- tion of Micro Hydel schemes.</b>				5.00	6.50	4.50	
<b>C. Improved Water Mill (No.)</b>	Hill Districts	100	10.00	..	2.50	7.50	25mills in 1988- 89 and 75mills in 1989 -90
<b>Total</b>			293.04	16.20	50.50	203.00	

5.2.6. The work of identification investigation and preparation of detailed project reports of micro hydel schemes has been taken up in Joshimath block of district Almora, Bhatwari and Moorie of district-Uttarkashi. Discharge measurement is being carried out at Dhumak and Thiang in Joshimath block of district-Chamoli and Karmi, Khati, Bagar, Sangad, Liti and Badiyakot in Kapkot block of district Almora.

5.2.7. During 1987-88, 10 improved Watermills have already been installed in district-Nainital and Almora and 15 more are likely to be installed by end of March 1989. It is proposed to install 75 water-mills in 1989-90.

5.2.8. Some other sites have also been selected in districts Chamoli and Almora and survey is likely to be started very soon on these sites :

District	Installed capacity (KW)
<b>A. Chamoli</b>	
1. Malari	10
2. Bamba	10
3. Shyang	20
4. Dumak	20
<b>Sub-Total : (A)</b>	<b>60</b>
<b>B. Almora</b>	
1. Khyati	50
2. Pathiakhot	50
3. Bagar	50
4. Suram	20
5. Karmi	50
6. Bacham	100
7. Gogina	50

District	Installed capacity (KW)
8. Liti	50
9. Lithi	50
10. Sangad	50
<b>Sub-Total : (B)</b>	<b>520</b>
<b>Total</b>	<b>580</b>

5.2.9. *Energy Complexes/Villages*—To propagate utility of the devices based on renewable energy, energy complexes in plains and energy villages in hills are developed. These have been very useful as growth centres for the scheme. Usually 10 photovoltaic lights are provided for illumination, and one community size biogas plant for providing cooking gas to 40 families, wind pumps for irrigation, smokeless chulhas for cooking and photovoltaic pumps for making drinking water available in energy complexes/villages are being installed in each complexes/village. Complexes/villages have been developed in Allahabad, Sultanpur, Bareilly, Kashi-pur, Ghaziabad and Nainidanda.

5.2.10. *Alternate Energy Experimental Station*—It is being set-up in Chinhat, Lucknow. It will be responsible for research and development in the field of renewable energy, collection of field data and utilizing it for developing new devices. This complex will also be utilized for standardizing energy systems, imparting training to the field staff and the users and holding seminars and workshops in the field of renewable energy and energy conservation. Total project cost of this centre is Rs.112.08 lakh against which Rs.66.98 lakh are likely to be spent up to March, 1989. An outlay of Rs.20.00 lakh has been proposed for 1989-90.

5.2.11. Status of civil works and workshop alongwith programme for 1989-90 is given in the table below :

TABLE 22 - *Physical Progress and Programme for 1989-90*

Work	Number	Progress up to March, 1988	1988-89 Likely achievement	1989-90 Target proposed
(1)	(2)	(3)	(4)	(5)
<b>A--CIVIL WORK</b>				
1. <i>Building</i>				
(a) Main	1	Completed	..	..
(b) Residential	1	Completed	..	Extension
(c) Hostel	1	Completed	..	Dormatry
(d) Workshop	1	..	To complete	..
2. Overhead Tank	1	..	To complete	..
3. Stareyard	1	..	To complete	..
<b>B. WORKSHOP MACHINES</b>				
1. Lathes	3	3	..	..
2. Drills	2	2	..	..
3. Grinders	2	2	..	..
4. Hacksaw	1	1	..	..
5. Power Bench Shering	1	..	1	..
6. Others			To complete	
<b>C. PURCHASE OF LABORATORY EQUIPMENTS</b>			Partially procured	Balance to be procured



5.2.12. Progress of the devices/systems that have been installed in the complex area and these proposed to be installed in 1989-90 is given below :

TABLE 23—Progress of Installation of Device Systems

Devices/System	Progress upto March, 1988	1988-89 Likely achievement	1989-90 Proposed target
(1)	(2)	(3)	(4)
<b>A—BIO-ENERGY</b>			
1. Janta/poly-thene fibre-glass bio-gas plant	..	1	..
2. Bio-gas engine with pump	..	..	1
3. Gasifier	1	..	..
4. Energy Plantation	..	..	Proposed
<b>B—SOLAR ENERGY</b>			
<i>(i) Thermal</i>			
1. Cookers	..	1	..
2. Water Heater	..	1	..
3. Still	..	1	..
4. Dryer	..	..	1
5. Timber seasoning kiln	..	1	..
6. Hot air system	..	..	1
7. Solar House	..	1	..
8. Power Generator	..	..	1
9. Pump	..	1	..
10. Low pressure steam generator	..	..	1
<i>(ii) Photo-Voltaic</i>			
1. Refrigerator	..	1	..
2. Colour T.V.	..	..	..
3. Lannels	..	..	1
4. Pump	..	1	..

TABLE 23—(Concl'd.)

Devices/System	Progress up to March, 1988	1988-89 Likely achievement	1989-90 Proposed target
(1)	(2)	(3)	(4)
5. Power Generator	..	..	1
6. Street Lights	..	1	..
<b>C. WIND-ENERGY</b>			
1. Pumps	1	..	..
2. Aero-generator	..	..	1
3. Battery Charger	..	..	1
<b>D. MICRO-HYDEL ENERGY</b>			
1. Working model of			
(i) Hydel Plants	..	..	1
(ii) Water Mill	..	..	1
<b>E. ENERGY CONSERVATION</b>			
1. Smokeless Chulhas	..	1	..
2. Portable Chulhas	1	..	..
<b>F. RURAL TECHNOLOGY</b>			
1. Leaf Cup making machine	..	..	1
2. Sprinklers	..	1	..
3. Foot Valves	..	..	1

5.2.13 *Strengthening of Organisation of NEDA*—For office building of NEDA, 3,000 square meters of land has been purchased in Gomatinagar. A payment of Rs.15.00 lakh was made to Lucknow Development Authority in 1986-87 for this land. For preparation of design and estimate of building during 1987-88, an amount of Rs.1.00 lakh was spent. The estimated cost of the office complex is about Rs.1.40 crore. Construction of the main building will start in the current year and will be completed in 1990-91.

An amount of Rs.10.00 lakh is likely to be utilised in 1988-89. Allocation for the construction of building is Rs.30.00 lakh in a total provision of Rs.127.00 lakh proposed for 1989-90 for strengthening NEDA.

5.2.14. *Centrally Sponsored Programme*—There are two cent per cent centrally sponsored schemes of the installation of individual bio-gas projects and smokeless chulhas that are being run in the State by the Rural Development Department. In view of the importance that is being attached to these schemes in the overall energy scenario, both of these programmes have also been included under 20-point programme. Details of these schemes are given in the following paragraphs.

5.2.15. *National Project on Biogas Development (NPBD)*—This scheme is in operation in 57 districts of the state. Government of India provides financial assistance for meeting the expenditure on subsidy, service charges, incentives, turn-key fees and prizes etc., which is utilised accordingly in extension and implementation of the project.

5.2.16 By the end of 1984-85, 66,805 biogas plants had been established. An outlay of Rs.112.60 crore was made for the scheme for Seventh Plan and 1,05,000 plants were to be established under this programme. Physical and financial progress together with programme for 1989-90 is given below :

TABLE 24 —Progress and Programme for 1989-90

Period	Target	Physical (No.)		Financial (Crre Rs.)	
		Additional	Cummulative	Outlay	Expenditure
(1)	(2)	(3)	(4)	(5)	(6)
1984-85 (Base year level)			66,805		
Seventh Plan Target	1,05,000	1,11,782	1,78,587	112.60	37.89
1985-86	20,000	27,295	94,100	12.00	8.37
1986-87	20,000	30,186	1,24,286	12.00	12.11
1987-88	18,000	18,301	1,42,587	12.00	4.84
1988-89 (Likely)	18,000	18,000	1,60,587	12.00	6.83
1989-90 (Target proposed)	18,000	18,000	1,78,587	5.74	5.74

5.2.17. *National Programme on Improved Chulhas*—This scheme was taken up in the state during 1983-84 with a view to reducing deforestation and meeting of cooking energy requirements in rural area. The scheme is designed for mitigating women's drudgery and health hazards and also to save fuel. The scheme also provides employment opportunities for persons who will be involved in the construction and maintenance of stoves.

5.2.18. This programme is being conducted in all the districts of the state by 22 Extension Training Centres and 4 Farmers Training Centres. This programme is being run by Development of Women and Children in Rural Areas (DWCRA) programme machinery in the districts with the help of some voluntary organisations. The programme contains two main features of training and construction, estimated cost of training is

Rs. 10,000.00 per course. Maximum cost of chullha model approved by Department of Non-Conventional Sources of Energy, Government of India is as follows :

Type of Chullha	Cost in Rs.
1. Nade Type (With Damper)	54.00
2. Abhinav Type (With Damper)	36.00

Type of Chullha	Cost in Rs.
3. Portable chullha	83.00
4. Community Type (Sohyos)	65.00

5.2.19. Financial and physical progress and the programme for 1989-90 is as under.

TABLE 25—Progress and Programme for 1989-90

Year	Financial (Lakh Rs.)	Physical Programme (Number)		
		Training conducted	Construction of Chullhas	
(1)	(2)	(3)	(4)	(5)
1983-84	4.01	46	9,331	9,331
1984-85	21.28	182	66,677	76,008
Seventh Plan Target	328.88	676	4,04,566	4,80,574
1985-86	48.59	308	62,410	1,38,418
1986-87	43.65	177	60,626	1,99,044
1987-88	49.69	131	1,01,530	3,00,574
1988-89 (Likely)	71.50	60	1,80,000	4,80,574
1989-90 (Target)	220.32	60	4,00,000	8,80,574

## ANNEXURE -1

*District-wise Financial and Physical Programme Proposed for 1989-90 under System Rural Improvement*

Districts	Proposed Outlay (Crore Rs.)		Proposed Target (33 Kv. works)		
	33 kV work	11 kV works	Lines (Ckt. Km.)	New sub-station (33/11 kV) (No.)	Additions in sub-station capacity (MVA)
(1)	(2)	(3)	(4)	(5)	(6)
1. Aligarh	50	20	10	1	3
2. Bulandshahr	60	20	10	1	6
3. Ghazipur	40	15	5	..	6
4. Agra	60	20	10	1	6
5. Azamgarh	60	20	10	1	6
6. Muzaffarnagar	50	15	10	1	3
7. Ghaziabad	40	15	5	..	3
8. Meerut	50	15	10	1	6
9. Mainpuri	40	15	5	1	6
10. Allahabad	40	15	5	1	6
11. Naini Tal	60	20	15	1	6
12. Sultanpur	60	20	15	1	6
13. Rae Bareli	70	20	10	1	3
14. Jaunpur	70	20	10	1	4
Total	750	250	130	12	70

## ANNEXURE 2

*Towns identified for System Improvement*

Town	Population (1981 Census)	Estimated Cost (Crore Rs.)	Town	Population (1981 Census)	Estimated Cost (Crore Rs.)
(1)	(2)	(3)	(1)	(2)	(3)
1. Kanpur*	1688242	81.00	21. Haridwar	146186	2.60
2. Lucknow	1006538	40.00	22. Faizabad*	141714	2.61
3. Varanasi*	793542	40.00	23. Mirzapur	128179	3.80
4. Agra	770352	32.00	24. Amroha	112510	2.00
5. Allahabad	642420	20.00	25. Etawah	112424	1.75
6. Meerut*	538861	4.98	26. Sambhal	108379	1.50
7. Bareilly	437801	4.90	27. Jaunpur	100994	1.50
8. Moradabad*	347983	9.54	28. Bulandshahr	103666	2.90
9. Aligarh	319981	6.00	29. Hapur	103466	2.00
10. Gorakhpur	306399	5.00	30. Bahraich	102580	1.65
11. Saharanpur*	294391	4.95	31. Sitapur	98270	1.60
12. Dehra Dun*	293828	4.97	32. Hathras	98047	2.20
13. Ghaziabad	291955	10.00	33. Budaun	92552	2.00
14. Jhansi*	281332	2.58	34. Rae Bareili*	90442	1.75
15. Shahjahanpur	205325	2.54	35. Pilibhit	88541	1.60
16. Rampur	203491	2.00	36. Modinagar	86614	1.50
17. Firozabad	202837	2.80	37. Maunath Bhanjan	38298	3.00
18. Muzaffarnagar*	172439	4.95	38. Fatehpur	85067	1.60
19. Mathura*	160995	1.60	39. Hardoi	82617	1.80
20. Farrukhabad	160927	3.50	40. Roorkee	79145	1.50
				<b>Total</b>	<b>324.17</b>

\*Project report has been prepared and rest are under preparation.

## ANNEXURE—3

*Town-wise Financial and Physical Programme Proposed for 1989-90 under system improvement*

Town	Estimated cost (Cr. Rs.)	Proposed outlay (Cr. Rs.)			Proposed Target (33 kV works)		
		33 kV Works	11 kV and below works	Total	Lines (Ckt.)	Sub-Stations (No.)	Additions in Sub-Station capacity (MVA)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Meerut	498	22	64	86	..	..	3
2. Muzaffarnagar	495	21	64	85	..	..	..
3. Saharanpur	495	21	64	85	..	..	..
4. Jhansi	258	11	34	45	..	..	..
5. Faizabad	261	11	34	45	..	..	..
6. Shahjahanpur	254	11	34	45	..	..	..
7. Mathura	160	7	21	28	..	..	..
8. Dehradun	497	22	64	86	..	..	..
9. Kanpur	8100	50	150	200	10	1	2
10. Varanasi	4000	25	75	100	..	1	2
11. Rae Bareli	175	8	22	30	..	..	..
12. Moradabad	954	41	124	165	10	1	3
<b>Total</b>	<b>16147</b>	<b>250</b>	<b>750</b>	<b>1000</b>	<b>20</b>	<b>3</b>	<b>10</b>

**ANNEXURE—4**

*Rural Electrification—Electrification of villages and Harijan Bastis*

160

(Number)

Period	Plan Funds					Funds outside plan				Grand Total	
	Energy			Total	Special Area Programme	Total	NABARD/LDB	S.P.A.	Consumer's deposit		Total
	Normal	REC	MNP								
(1)	(2)	(3)	(4)	(5)	(5)	(7)	(8)	(9)	(10)	(11)	(12)
<b>A—VILLAGE ELECTRIFICATION</b>											
Pre-Plan	110 (110)				110 (110)	110 (110)					110 (110)
First Plan	310 (420)				310 (420)	310 (420)					310 (420)
Second Plan	662 (1 082)				662 (1,082)	662 (1,082)					662 (1,082)
Third Plan	4,773 (5,855)				4,773 (5,855)	4,773 (5,855)	*		*	*	4,773 (5,855)
Three Annual Plans (1966-69)	7,071 (12,926)				7,071 (12,926)	7,071 (12,926)	*		*	*	7,071 (12,926)
Fourth Plan	15,714 (28,640)	1,125 (1,125)			16,839 (29,765)	16,839 (29,765)	*		*	*	16,839 (29,765)
Fifth Plan	1,778 (30,418)	3,553 (4,678)	1,202 (1,202)		6,533 (36,298)	6,533 (36,298)	*		*	*	6,533 (36,298)
Annual Plan 1979-80	596 (31,014)	1,233 (5,911)	450 (1,625)		2,279 (38,577)	2,279 (38,577)	*		*	*	2,279 (38,577)
Sixth Plan	7,988 (39,002)	5,263 (11,174)	4,849 (6,501)		18,100 (56,677)	18,100 (56,677)	237 (237)	6,062 (6,062)	99 (99)	6,398 (6,398)	24,498 (63,075)

<b>Seventh Plan Target</b>		77,400	8,400	15,800	5,370	21,170		4,000		4,000	25,170
	(39,002)	(18,574)	(14,901)	(72,477)	(5,370)	(77,847)	(237)	(10,062)	(99)	(10,398)	(88,245)
1985-86	576	1,464	1,681	3,721		3,721		736	29	765	4,486
	(39,578)	(12,638)	(8,182)	(60,398)		(60,398)	(237)	(6,798)	(128)	(7,163)	(67,561)
1986-87	424	1,187	1,815	3,426	15	3,441		562		562	4,003
	(40,002)	(13,825)	(9,997)	(63,824)	(15)	(63,839)	(237)	(7,360)	(128)	(7,725)	(71,564)
1987-88	412	1,396	1,972	3,780	10	3,796		395		395	4,185
	(40,414)	(15,221)	(11,969)	(67,604)	(25)	(67,629)	(237)	(7,755)	(128)	(8,120)	(75,749)
1988-89 (Likely)		1,016	1,222	2,238	75	2,313		375		375	2,688
	(40,414)	(16,237)	(13,191)	(69,842)	(100)	(69,942)	(237)	(8,130)	(128)	(8,495)	(78,437)
1989-90 (Target)		1,005	*1,310	2,315	67	2,382		365		365	2,747
	(40,414)	(17,242)	(14,501)	(72,157)	(167)	(72,324)	(237)	(8,495)	(128)	(8,860)	(81,184)

**B - HARJAN BASTIS**

<b>Fourth Plan</b>				5,960		5,960					5,960
				(5,960)		(5,960)					(5,960)
<b>Fifth Plan</b>				6,493		6,493					6,493
				(12,453)		(12,453)					(12,453)
<b>Annual Plan 1979-80</b>				1,561		*1,561					1561
				(14,014)		(14,014)					(14,014)
<b>Sixth Plan</b>				15,587		*15,587					15,587
				(29,601)		(29,601)					(29,601)
<b>Seventh Plan Target</b>				24,300		24,300					24,300
				(53,901)		(53,901)					(53,901)
1985-86				5,282		5,282					5,282
				(34,883)		(34,883)					(34,883)
1986-87				4,343		4,343					4,343
				(39,226)		(39,226)					(39,226)
1987-88				4,302		4,302					4,302
				(43,528)		(43,528)					(43,528)
1988-89 (Likely)				2,586		2,586					2,588
				(46,114)		(46,114)					(46,114)
1989-90 (Target)	365	995	1,230	2,590	67	2,657					2,657
				(48,704)	(67)	(48,771)					(48,774)

\*Included in Normal Programme



## ANNEXURE 5

## Rural Electrification—Energisation of Private Tubewells/Pump Sets

162

(Number)

Period	Plan Funds					Funds outside Plan				Grand total		
	Energy			Total	Special Areas Programme	NABARD/LDB	S.P.A.	Consumer's deposit	Total			
	Normal	REC	MNP									
				Dacoity Prone areas								
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
Pre-Plan	635 (635)				635 (635)	635 (635)						635 (635)
First Plan	794 (1,429)				794 (1,429)	794 (1,429)						794 (1,429)
Second Plan	2,137 (3,566)				2,137 (3,566)	2,137 (3,566)						2,137 (3,566)
Third Plan	5,717 (9,283)				5,717 (9,283)	5,717 (9,283)	*		*	*		5,717 (9,283)
Three Annual Plans (1966-69)	56,230 (65,513)				56,230 (65,513)	56,230 (65,513)	*		*	*		56,230 (65,513)
Fourth Plan	1,45,935 (2,11,448)	4,998 (4,998)			1,50,933 (2,16,446)	1,50,933 (2,16,446)	*		*	*		1,50,933 (2,16,446)
Fifth Plan	43,237 (2,54,685)	13,496 (18,494)	1,095 (1,095)		57,828 (2,74,274)	57,828 (2,74,274)	24,376 (24,376)		9,340 (9,340)	33,716 (33,716)		91,544 (3,07,990)
Annual Plan 1979-80	15,289 (2,69,974)	6,127 (24,621)	840 (1,935)		22,256 (2,96,530)	22,256 (2,96,530)	11,615 (35,991)	325 (325)	1,949 (11,289)	13,889 (47,605)		36,145 (3,44,135)
Sixth Plan	15,358 (2,85,332)	25,952 (50,573)	3,668 (5,603)		44,978 (3,41,508)	44,978 (3,41,508)	19,642 (55,633)	67,127 (67,452)	8,627 (19,916)	95,396 (1,43,001)		1,40,374 (4,84,509)

Seventh Plan (Target)	31,000 (3,16,332)	31,000 (81,573)	10,000 (15,603)	72,000 (4,13,508)	18,500 (18,500)	90,500 (4,32,008)	.. (55,633)	1,57,450 (2,24,902)	.. (19,916)	1,57,450 (3,00,451)	2,47,950 (7,32,459)
1985-86	1,522 (2,86,854)	7,879 (58,452)	1,557 (7,160)	10,958 (3,52,466)	..	10,958 (3,52,466)	45 (55,678)	16,787 (84,239)	114 (20,030)	16,946 (1,59,947)	27,904 (5,12,413)
1986-87	4,226 (2,91,080)	9,293 (67,745)	3,739 (10,899)	17,258 (3,69,724)	..	17,258 (3,69,724)	.. (55,678)	12,824 (97,063)	.. (20,030)	12,824 (1,72,771)	30,082 (5,42,495)
1987-88	1,448 (2,92,528)	8,337 (76,082)	4,630 (15,529)	14,415 (3,84,139)	8 (8)	14,423 (3,84,147)	.. (55,678)	7,494 (1,04,557)	.. (20,030)	7,494 (1,80,265)	21,917 (5,64,412)
1988-89 (Likely)	1,200 (2,93,728)	5,000 (81,082)	3,000 (18,529)	9,200 (3,93,339)	75 (83)	9,275 (3,93,422)	.. (55,678)	5,800 (1,10,357)	.. (20,030)	5,800 (1,86,065)	15,075 (5,79,487)
1989-90 (Target)	1,500 (2,95,228)	6,000 (87,082)	3,000 (21,529)	10,500 (4,03,839)	67 (150)	10,567 (4,03,989)	.. (55,678)	5,000 (1,15,357)	.. (20,030)	5,000 (1,91,065)	15,567 (5,95,054)

\*Included in normal programme

## CHAPTER-VI

### INDUSTRY AND MINERALS

Uttar Pradesh has adopted an industrial policy which aims at a balanced development of the state—a healthy balance between employment oriented village and small industries and capital intensive large and medium industries and growth of a large number of ancillaries. Industrial development of the state is now receiving much greater attention than what it had done in the past. As a result of this new emphasis, the manufacturing sector has witnessed a rapid growth in the past few years. 1,10,710 small scale units with an investment of Rs. 676.00 crore and employing 9.20 lakh persons were functioning in the state at the end of sixth plan.

#### INDUSTRIAL POLICY

6.0.2. The objective of industrial policy of the State is to bring about, as far as possible, faster industrialisation of the State. The New Industrial policy envisages establishment of major industrial projects in the central sector, rapid development of infrastructure, development of roads, power, communication, higher priority to development of small scale and khadi and village industries, electronics, handlooms and handicrafts industries, and provision of quick and co-ordinated assistance to entrepreneurs. The policy offers unlimited scope for private sector, envisages priority for development of backward areas and special concessions/incentives for attracting investment in industrial ventures, particularly in backward areas.

6.0.3. Heavy industries are expected to act as nucleus for future growth. Small scale industries alongwith employment oriented industrial development programmes would carry industrialisation even to remote rural areas. Block has been adopted now as a unit for future area development programme. This would promote industries in rural areas on a much larger scale.

#### PACKAGE OF ASSISTANCE AND INCENTIVES

6.0.4. The State promises a package of incentives to entrepreneurs for setting-

up industries in the State. The incentives include investment subsidy on purchase of generating sets, margin money loans, seed capital assistance, a number of concessions related to power including exemption from power cuts for first five years and open-ended scheme of sales tax exemption to new units, scheme for deferment of payment of sales tax, special subsidy for pioneer and prestige units. The Central Government also provides capital investment subsidy in 42 backward districts of the State. In addition the State also offers special incentives like transport subsidy and development rebate in power charges for setting up industries in hills.

#### INFRASTRUCTURE

6.0.5. Apart from setting up big industrial estates and industrial areas, the State has taken up a massive programme of development of infrastructure including development of at least one growth centre in each of 11 "No Industry Districts", and setting up a mini industrial estate in each of 895 Blocks. The Directorate of Industries has so far developed 112 industrial estates and U.P. State Industrial Development Corporation had developed 98 big industrial areas in different parts of the state.

#### SINGLE WINDOW SERVICE

6.0.6 With a view to provide all services particularly of guidance and information to prospective entrepreneurs, single window service is available in District Industrial Centres at the district level. Udyog Bandhu at state level has been assisting entrepreneurs in overcoming impediments delaying implementation of their projects.

"Industry and Minerals" sector has been divided into three groups

1. Village and small industry (including Handlooms)
2. Large and medium industry (including sugar industry)
3. Mining

## 6.1. VILLAGE AND SMALL INDUSTRIES

TABLE 1—(concl'd.)

The development of small scale industries in Seventh Plan is now getting centred around blocks. It is proposed to establish each year one Mini Industrial Estate per district during the plan. The infrastructure of feeder line, drainage and water facilities are provided in these estates to strengthen technological assistance link; a number of industrial advisors have been inducted with specific task of assisting entrepreneurs right from the stage of identification of the project to actual commencement of production.

6.1.2. *Accelerated Growth of Small Scale Industries*—Emphasis is being laid on improving investment level in small scale and cottage sector. While 47,943 small industries had been established by the end of Fifth Plan, the number rose to 1,10,710 by the end of Sixth Plan. It is proposed to add 1 lakh more units during Seventh Plan. The following table gives a picture of growth which has taken place in small scale industries.

TABLE 1—Growth of Small Scale Units

Year	No. of SSI Units	Estimated production (Rs.)	Estimated employment (No.)
(1)	(2)	(3)	(4)
1979-80	47,943	983.03	5,38,260
1980-81	55,896	1076.80	6,13,813
1981-82	68,426	1318.42	6,91,145

Year	No. of SSI Unit	Estimated production Rs.	Estimated employment (No.)
(1)	(2)	(3)	(4)
1982-83	82,037	1580.00	7,75,194
1983-84	95,847	1847.00	8,50,149
1984-85	1,10,710	2143.00	9,20,756
1985-86	1,27,294	2464.00	10,07,830
1986-87	1,46,187	2830.00	11,02,295
1987-88	1,67,062	3235.00	12,00,489
1988-89 (Likely achievement)	1,89,062	3661.00	1,31,000
1989-90(target)	2,13,062	4136.00	14,30,000

6.1.3. *Artisan Programme*—Artisans and craftsmen of Uttar Pradesh produce articles which are highly valued and enjoy good reputation abroad. Brassware of Moradabad, Chikan embroidery of Lucknow, soap stoneware of Agra, zari gold work of Varanasi and carpets of Bhadohi have always had ready acceptance in foreign markets. In order to look after small artisans and cottage industries, the State is giving priority to the implementation of the scheme for self employment of educated unemployed youths. During 1986-87, 18,893 small scale industries were established. During 1987-88, 20,875 SSI units were established and the anticipated achievement for 1988-89 is 22,000 units. The target for 1989-90 is 24,000. The progress made during the seventh plan is given below:

TABLE 2—Physical Progress

(Number)

Item	Base Year 1984-85 Level	Achievement				
		1985-86	1986-87	1987-88	1988-89 Anticipated achievement	1989-90 Target
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Establishment of SSI Units	14,863	16,584	18,893	20,875	22,000	24,000
2. Artisan Units established	32,500	34,237	31,082	33,150	30,000	30,000
3. Employment generated	1,25,008	1,44,599	1,35,723	1,47,146	1,40,000	1,50,000
4. Integrated Rural Development (Industry Service and Business)	2,40,000	2,54,208	2,89,695	3,01,421	2,53,200	2,53,200

6.1.4. *Integrated Rural Development Programme (Industry Service and Business (ISB))*—As many as 2,89,645 persons were benefited during 1986-87 and 3,01,421 persons during 1987-88. The target for 1988-89 and 1989-90 is to assist 2,53,200 persons each year.

#### TRAINING

6.1.5. *Entrepreneurial Development Programme (E. D. P.)*—Under this programme, entrepreneurs are identified motivated and encouraged to set up their small scale units. The programme was started in 1978-79. A target to train 2,42,320 persons was fixed for Seventh Plan. As many as 42,320 persons have been trained during 1985-88 and the target for 1988-89 and 1989-90 is to train one lakh persons each year. The entrepreneurial

Development Institute has been established at Lucknow with the assistance of IDBI to give over all direction to this important programme. It will have two sub-centres in Eastern and Western Uttar Pradesh.

6.1.6. *Carpet Weaving Training Centre*—The U.P. Export Corporation has been running carpet weaving training centre since 1976-77. Under the scheme, 50 persons are trained in each centre. In order to improve the economic conditions of scheduled tribes, new carpet training centres were opened for the first time in 1986-87 in Lakhimpur Kheri and Gonda districts. The physical progress under carpet training centres along with the number of persons trained is given below :—

TABLE 3—Physical Progress under Carpet Weaving Training

(Number)

Year	Training centres				Persons trained				
	General	Special component Plan	Tribal sub-plan	Total	General	Special component plan	Tribal sub-plan	Total	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Up to 1986-87	..	619	52	6	677	30,800	2600	300	33,700
Addition in 1987-88	..	..	6	6	12	..	300	300	600
1988-89 (Anticipated achievement)	..	18	6	6	30	900	300	300	1500
1989-90 (target)	..	37	12	6	55	1850	600	300	2750

#### INDUSTRIAL ESTATES

6.1.7. *Big Industrial Estates*—This scheme was started in Second Five Year Plan and 112 estates have been developed so far, of these 25 have been transferred to other departments and corporations. The estates provide facilities of sheds, developed plots, roads, drainage, water supply and independent feeder line. The position of plots and sheds in industrial estates under the control of Industry Department only is given below :—

		Sheds	Plots
Total available (Nos.)	..	1083	3643
Total allotted (Nos.)	..	1007	3066
Total nos. working	..	645	1334
Total nos. non-working	..	252	1130

6.1.8. In addition to above, 13 new Industrial Estates are under construction and development in Varanasi Extension, Banbir Kach (Pratapgarh), Nagedha (Hardoi), Padrauna (Deoria), Navgarh (Basti), Siddiquipur (Jaunpur), Meerut Sadar, Ghazipur Sadar, Etawah Sadar, Bhadohi (Varanasi), Baraut (Meerut), Gonda Sadar and Haldwani (Nainital).

6.1.9. *Mini Industrial Estates*—It has been decided now in Seventh Plan to establish mini industrial estates at block level for development of rural industrialisation. The following target of mini

industrial estates have been fixed for the Seventh plan :

Year	Target	Sanctioned
1985-86	85	51
1986-87	200	124
1987-88	200	205
1988-89	164	Under consturction
1989-90	..	..

6.1.10. *Maintenance of Industrial Estates*—A sum of Rs.73.00 lakh is proposed in 1989-90 for maintenance of roads, drainage, repairs, water facilities and change of feeder line in various Estates.

#### SMALL SCALE INDUSTRIES

6.1.11. *U. P. Small Industries Corporation*—This corporation was set up in 1958 to provide following main facilities to SSI units of the state.

1. Procurement and distribution of raw material
2. Supply of machines on hire purchase
3. Import Assistance Scheme
4. Participation in Joint Venture Projects

6.1.12. *Share Capital for Uttar Pradesh State Industrial Corporation (UPSIC)*—The authorised share capital of UPSIC is Rs.10.00 crore. Paid up share capital is Rs.4.40 crore. An outlay of Rs.60.00 lakh have been approved for 1988-89 for share capital of this corporation. In the absence of adequate share capital, the corporation has to borrow funds from commercial banks at 18 per cent interest and from IDBI at 11 per cent interest for its activities. Cash credit limit of Rs.5.95 crore has also been obtained by the corporation from the bank for this purpose. For 1989-90, the turnover for purchase of indigeneous raw material is projected as Rs.50.00 crore which will mainly consist if Iron and steel, pig iron, palm fatty acid and coal. In addition, it is planned to import pig iron, plastic raw material and tin plate etc.

worth Rs.5.00 crore. It is not viable to finance these purchase from the cash credit limits of banks and working capital credit from IDBI. The current debt equity ratio for this activity is very high at 4:1. The increase this activity share capital assistance is required.

6.1.13. *Reorganisation of Chinhat Potteries*—This factory offers semi finished saggars to potters in and around chinhat and also manufactures crokerywares. The plant and machinery of this factory has become obsolete. Factory building also needs renovation and reconstruction for instalation of new machinery. In addition UPSIC runs 3 production-cum-demonstration units handed over to it by Direstor of Industries. UPSIC has spent Rs.53.23 lakh is excess of the income from these centres. Funds are now required to compensate this loss to the corporation and for renovation of Chinhat potteries.

6.1.14. *Share Capital UPIC Potteries*—UPSIC has invested Rs.58.00 lakh as equity a term loan of Rs.40.00 lakh from PICUP in this company. On an annual basis this company is likely to suffer a cash loss of Rs.25.00 lakh and a cumulative loss of Rs.128.00 lakh in 1988-89.

To prevent this company from going into liquidation, working capital is essential which is not forthcoming from financial institutions inview of the cash losses.

6.1.15. *Ancilliary Estates*—The corporation had established ancilliary estates at four places viz. BHEL Hardwar, BHEL Jhansi, HAL Lucknow and SIL Amausi Lucknow in the Seventies. Now in 1989-90, the corporation proposes to establish ancilliary estates at two more places for which funds are required.

6.1.16. *U. P. State Leather Development and Marketing Corporation (LAMCO)*—This Corporation was established to provide assistance to leather artisans for design, supply of raw materials, common facility service and training facilities. Paid up capital of the Corporation is Rs.334.81 lakh against authorised capital of Rs.500.00 lakh. The Corporation

helps artisans in marketing of footwear products. Micro service centres have been established by the Corporation at Kanpur, Agra and Faizabad. Design development centres have also been established at Agra and Unnao which provide designs to artisans of modern fashion. A High Frequency Vulcanizing Centre has been established at Agra. Under Kamdhenu Yojna machines are being provided by the Corporation on hire purchase and working capital loan is provided to artisans. The Corporation has also established show rooms at Agra, Kanpur, Lucknow, Allahabad and Rampur.

6.1.17. The Corporation is imparting training to artisans for tanning process as well as footwear manufacturing. The Corporation is providing training to those artisans who want to switch over from vegetable tanning to chromium tanning up to wet blue stage. So far 75 and 146 persons have been trained in 1986-87 and 1987-88 respectively. Dur-

ing 1988-89, 114 persons have been trained till September end.

6.1.18. It is proposed to train 500 persons in 1989-90.

6.1.19. *Glass and Pottery Industry*—The State has a concentration of glass and pottery industries and artisans. Common facility services in the form of supply of raw materials, designs, kilns, etc. are being provided through pottery development centres at Jhansi, Nizamabad (Azamgarh) and Chunar (Mirzapur).

6.1.20. *District Industries Centres (DIC)*—This is a Centrally sponsored scheme which was started in 1978-79. The estimated expenditure on this scheme for 1988-89 and 1989-90 will be at a rate of Rs.6.00 lakh per D.I.C., as State's share only due to enhancement of dearness allowance and interim relief etc. An outlay of Rs.419.50 lakh has been proposed for 1989-90 for this scheme. The work done by D. I. C. is given below :

TABLE 4—Achievement of district industries centres

Programme	Achievement			Anticipated achievement for 1988-89	(number)
	1985-86	1986-87	1987-88		1989-90 (Target)
(1)	(2)	(3)	(4)	(5)	(6)
1. Establishment of Small and Tiny Units ..	16,584	18,893	20,875	22,000	24,000
2. Establishment of Village Artisans Units	34,237	31,082	33,150	30,000	30,000
3. Beneficiaries under Programme/Industries Service and Business	2,54,208	2,89,695	3,01,421	2,53,200	2,53,200
4. Trainees benefited under TRYSEM Programme	32,965	32,264	35,763	22,175	22,175

6.1.21. *Testing and Development Facilities*—The State Government has introduced a scheme of setting up testing and development laboratories for quality control and testing facilities to small scale industries. Under this programme a leather testing laboratory in Kanpur, a glass and ceramics testing laboratory in Khurja and central glass testing laboratory in Kanpur are functioning.

6.1.22. *Forged Heat Treatment Plant, Meerut*—Meerut is famous for cutlery and Scissor Industries. A common facility Centre was established in 1951-52 to develop these Cottage Industries. Both technical and non-technical staff has been posted in this Centre. later on the Centre was reorganised as forged heat treatment plant during 1966-67 to cater to the needs of the following industry :

1. Modern and useful Agricultural Implements.

2. To provide the facility of heat Treatment to the SBI units on nominal charges.

3. To prepare rolls from the scrap.

6.1.23. A sum of Rs.3.50 lakh has been approved for the centre in 1988-89. An outlay of Rs.4.00 lakh is proposed for the Centre in 1989-90.

6.1.24. *Quality Control Marking Testing Laboratories*—In order to reorganise the existing quality marking scheme, full fledged testing Laboratories for SSI units are being established. It is proposed to establish one Central Controlling Lab. at Kanpur and 5 Regional Labs at Varanasi, Gorakhpur, Agra, Ghaziabad and Haldwani, (district Nainital).

6.1.25. *Fairs and Exhibitions*—The products of Small Scale and Cottage industries do not find ready market in the absence of proper publicity. With a view to create market for S.S.I. and cottage Sector, the Department has introduced a scheme of holding fairs and exhibitions in each year and displaying these products there. Products of these units are also displayed in the International Trade Fair organised at the National level. A permanent pavilion of U. P. State Industries Department has been set up in Pragati Maidan exhibition ground in New Delhi. At the instance of India International Trade Fair Authority, New Delhi exhibition is organised in Pragati Maidan every year for which a provision of Rs.47.37 lakh has been proposed for 1989-90.

6.1.26. *State Capital Subsidy*—State Capital Subsidy was introduced in 1978-79 in 25 Districts, but after the Central Investment Subsidy Scheme was introduced in 23 districts, out of these 25 districts, the State Capital subsidy was abolished/closed in these Districts. At present the scheme is running only in Gorakhpur (Bansgoan Tehsil) and Saharanpur (in five block).

6.1.27. *Subsidy on Generating Sets*—Keeping in view power shortage in the State, the State had introduced a scheme

of subsidizing installation of generating sets by the entrepreneurs to prevent or reduce loss in production and unemployment in times of shortage of power and power cuts. In the present scheme, small scale units are entitled to subsidy at the rate of Rs.1000 per KVA capacity of Diesel Generating (D.G.) Sets. The D.G. sets can be installed subject to a maximum of 120 per cent of the connected power load.

6.1.28. *Integrated Margin Money Loan* — This scheme was introduced in 1984 after merging a number of Margin Money Loan Schemes. The Margin Money Loan is given to entrepreneurs, who are unable to raise required capital to meet the requirement of the promoters' contribution laid down by financial Institutions. The maximum margin money which can be given to an entrepreneur cannot exceed 10 per cent of the cost of the project in general cases and 15 per cent in cases of schedule caste entrepreneurs or 50 per cent of the margin money required by the financial institutions. A maximum of Rs.3.00 lakh can be given as a margin money loan to a entrepreneur. An outlay of Rs.540.00 lakh has been proposed for this purpose in 1989-90.

6.1.29. *Industrial Potentiality and Market Survey Scheme* — This is a continuing scheme under which potentiality, feasibility studies and areas survey are taken up every year. These studies are approved by a standing committee constituted by Government under the Chairmanship of the Commissioner and Director of Industries. An outlay of Rs.15.00 lakh is provided for these studies/surveys in 1989-90.

6.1.30. *Assistance to sick units*—The growing incidence of sickness is an 'All India Phenomenon' which has affected small scale units in this State also. Sickness is mainly due to lack of management capability, acute shortage of working capital, delay in providing power etc. Some of the reasons which make a unit sick are beyond the control of the entrepreneurs. The State Government has, therefore, introduced a scheme of providing package assistance for rehabilitation of sick units. The assistance is in the form of margin



money loan for obtaining additional capital from the Bank/UPFC, term loan for additional equipments and re-scheduling of dues of the UPSEB and Sales Tax.

6.1.31. Under the scheme, the task force committee identifies such units in consultation with financial institutions and recommends the quantum of assistance to be provided. An outlay of Rs.25.00 lakh has been proposed for this purpose in 1989-90.

6.1.32. *Development Centre of Foundry and Forging Industry, Agra with the Assistance of UNDP*—A product and process Development Centre is being set up in Agra with the assistance of UNDP for providing integrated services to foundry and forging industries. This centre will not only provide testing facilities of ISI Standard, but will also provide guidance technical advice in prototype production to foundry and forging industries of Agra. The centre will also provide training to the entrepreneurs. This project is being implemented by Government of India. The total cost of the project is Rs.2.11 crore. The Government of U.P. is required to contribute only land, building and electrification power net work. The building of the centre has almost been completed and handed over to Government of India. Other expenses on tools and equipments and remaining expenditures will be borne by Government of India. Staff is being appointed for this centre by Government of India/UNDP.

6.1.33. *Uttar Pradesh Minorities and Development Corporation*—For economic upliftment of minorities, U.P. Minorities Finance and Development Corporation has been established. Main objectives of the Corporation are as under:—

(1) *Margin Money Loan* — The Corporation introduced 'Margin Money Loan Scheme' for minorities in November, 1985. Under this scheme, minorities entrepreneurs whose project does not cost more than

Rs.2.00 lakh can get from the corporation margin money loan up to 75 per cent of the margin money required by the banks/financial institutions. So far 845 persons have availed benefits under this scheme and the Corporation has given Rs.198.00 lakh in the shape of margin money. It is estimated that 1500 persons will be assisted during 1988-89 in the shape of margin money assistance of Rs.150.00 lakh.

(2) *Credit Camps* — The purpose of holding camps is to focus attention of financial institutions, development departments and entrepreneurs belonging to minority communities towards facilities offered by the Government under various schemes and to bring together bankers, promoters and beneficiaries on a common platform for free and frank exchange of views. Loans under various government schemes are actually disbursed during these camps to needy entrepreneurs. So far the corporation has organised 10 such camps and has benefitted 3229 units. During 1988-89, 20 such camps are proposed to be organised. This scheme will continue in 1989-90 for which funds are required.

(3) *Training Programme* — A number of training courses for minority communities like E.D.P. training in profitable trade like screen printing, photo-laminations, electronic items, beautician, computer etc. pre-recruitment-training courses for recruitment in Police, PAC, Army and other para military forces are being organized by the corporation at various centres of the State. During 1987-88, 419 persons were benefitted by these training courses. The target for 1988-89 is 500 persons. This programme will continue in 1989-90 too.

(4) *Interest Free Loan Scholarship* — This scheme has been introduced in the current year to assist needy and meritorious students who have secured admission through

competitive tests in degree and diploma courses. So far 205 persons have been benefitted under this scheme. This scheme will continue in 1989-90 also.

6.1.34. Other schemes being run by the corporation are rickshaw-puller scheme, manpower export scheme and awareness camps schemes. These all schemes will also continue during 1989-90 too.

#### INDUSTRIAL COLONIES

6.1.35. *Development of "Tala Nagar" for lock artisans at Aligarh* — There is a concentration of about 2,000 artisans manufacturing various types of locks and their components in Aligarh who had been demanding suitable environment for increasing productivity and level of production. For this purpose, a common facility centre for training artisans in improved techniques has been set up by the National Small Industries Corporation. It is proposed that the entire lock industry is modernised for production of new types of locks on electronic locking system, which has considerable export potentials. A feasibility report has been prepared through UPICO for developing an integrated complex, where workshop-cum-residential facilities, common facility centres and development centres for developed and C.F.C., R & D. Centres and It is proposed to acquire 10 acres of land which has been identified close to the Aligarh City, where artisans will be provided improved working places and residential facilities. In the first phase, 100 such workshop residences would be developed and C.F.C., R and D. Centres and marketing facility centres would be created. In the second phase, which will spill-over to Eighth Plan, it is proposed to develop remaining 400 workshop-cum-residential facility centres alongwith expansion of C.F.C. etc. Since this is a new scheme on the pattern of "Pital Basti" in Moradabad, an area of 10 acres of land is proposed to be acquired in 1988-89 and infra-structural facilities like development of land, provision of roads and construction of administrative blocks etc. will be taken up.

6.1.36. *Development of "Charm Nagar" for the Leather Artisans of Agra* — There is a concentration of about 5,000 artisans in Agra belonging to weaker sections of the Society. These workers reside in congested localities where they do not have facilities of taking up improved methods of production for increasing their efficiency. It is, therefore, proposed to develop an integrated industrial area for leather artisans for which feasibility report has been prepared by UPICO. In the first phase, about 50 acres of land will be acquired in which 200 plots and 200 workshop-cum-residential facilities centres are proposed to be set up. Administrative block, common facility centre, design development centre and other infra-structural facilities will be developed in the first phase, during 1988-89. The land which has been identified is proposed to be acquired and its development will be taken up. The cost of the project in first phase is Rs.225.00 lakh. An outlay of Rs.80.00 lakh is envisaged for this scheme in 1989-90.

6.1.37. *Subsidy for preparation of project reports*—The small entrepreneurs are given project profile for the Industry selected by them through the Office of G.M. (DIC's) Directorate of Industries and SISI. However, on the basis of this profile, the entrepreneurs have to prepare a bankable projects for submission to the financial institutions. The entrepreneurs find it difficult to meet the cost of preparation of project reports which have to be submitted alongwith their applications to the Financial Institutions. It is, therefore, proposed that for small scale units, 75 per cent of the cost of preparation of feasibility report may be subsidised in backward districts and 50 per cent in non-backward districts.

6.1.38. *Industrial Complexes* — For the development of a particular type of Industry in certain districts, a scheme of Industrial Complexes was started in Uttar Pradesh. Under this scheme, Industrial

Estates were developed and Industrial-sheds constructed. After selection of entrepreneurs all facilities including those for preparing project reports, sanction of loan etc. were provided. Under this scheme 2 per cent of cost of the complexes was being given as grant by State Government to consultancy organisations for development of industries to be set up by selected entrepreneurs. This scheme has now been dropped. But consultancy claims to the tune of Rs.10.00 lakh are pending.

6.1.39. *Awards to Small Scale Entrepreneurs*—A new scheme for giving State Award to outstanding entrepreneurs of small scale sector was introduced during 1987-88. The scheme will continue till the end of Seventh Plan. The objective of the scheme is to encourage successful and outstanding Small Scale Entrepreneur in achieving higher production and productivity. The first prize consists of Rs. 15,000 with a gold medal and citation. The second prize is of Rs.10,000 with silver medal and citation and the third prize is of Rs.8,000 with a bronze medal and citation. Twelve special awards, one for each Division, of Rs.5,000 with citation has also been kept. In order to create awareness about the use of systems/equipments by the SSI/Medium Scale Sectors, and to encourage them to use these, it has been proposed to provide financial support to such units who adopt pollution/control measures in their units. A cash subsidy scheme has now been introduced by the State Government to provide following assistance :—

(a) an amount equal to 50 per cent of the cost of consultancy charges paid for preparation of feasibility/project reports on treatment, disposal and control of pollution or Rs.5,000, which ever is less will be paid as subsidy.

(b) An amount equal to 25 per cent of the cost of the civil work, plant, machinery and equipment and the laboratory facilities for control and monitoring or Rs.25,000 which ever is less will be paid as subsidy.

(c) The subsidy will also be paid for employing technical persons at the rate of Rs.250 per head per month (not exceeding 2 persons) per unit. The facilities would be provided in the first phase in Agra-Mathura and in the district of Dehradun, Kanpur, Lucknow, Varanasi, Allahabad, Meerut, Ghaziabad, Bareilly and will be extended to other industrial districts as per recommendations of the State-level Committee.

6.1.40. *Tannery and Sports Goods, Meerut*—The Government of India has set up a product and process development centre at Meerut with the assistance of U.N.D.P. to provide testing and development assistance for modernization of sports goods industry. Meerut and Aligarh districts have made good progress in this field and are renowned for large production of sports goods and toys. The main objective of the centre is to provide technical guidance and training to entrepreneurs and also to upgrade sports goods industry to boost up exports. The total cost of the project is approximately Rs.2.39 crore. The Government will contribute land and building only.

#### HANDLOOM

6.1.41. *Handloom Industry* is a decentralised Cottage industry of the State and occupies a prominent position in the economy of the State. It is only next to agriculture in terms of employment generation and income. The industry is spread over in rural and semi-urban areas of the state and is directly responsible for up-liftment of minorities, weaker sections and scheduled caste and scheduled tribes. The seventh plan laid emphasis on strengthening of co-operative sector in this area and on providing encouragement to weavers outside cooperative fold also. While a number of facilities are being provided to co-operative sector, the individual sector is also being encouraged through Intensive Handloom Development Projects undertaken by the State Handloom Corporation.

6.1.42. In order to over-come the problem of production and distribution of yarn, 23 spinning mills, both in state and co-operative sectors are playing important role in meeting the yarn requirement. For ensuring proper distribution of yarn to weavers, U.P. State Handloom Corporation and UPICA are, at, present running 200 yarn Sale Depots at weavers concentration reas. Besides, 21 depots established by the spinning mills, and National Handloom Development Corporation, are also providing yarn to weavers. The requirement of woollen yarn is met by private manufacturers and M/s Bhadohi Woolen Mill. The supply of silk yarn is being done by the Central Silk Board, Karnataka Silk Marketing Board, private persons, societies and now by U.P. Handloom Corporation. The supply of Polyester yarn is being made by the Petro-fils (India) Ltd. and others.

6.1.43. Handloom industry in general and in co-operative fold, in particular has been passing through a period of crises due to competition from Powerloom Mills of U. P. as well as of other states. The number of registered weavers co-operative societies which stood at 4459 in 1984-85 has now reached 4625 till September 1988. Emphasis is now being laid on activising dormant societies through various inputs and on providing all help to Viable societies. U. P. has been making significant contribution in production of Handloom cloth. A target of reaching a production level of 700 million metres of Handloom cloth per annum has been envisaged for seventh plan. The percentage share of U. P. in total production of Handloom cloth in the country was 21.4 per cent (617.78 Million metres) in 1985-86 which increased to 22.8 per cent (625.43 Million metres) by the end of 1986-87. For 1988-89, the target of production of Handloom cloth is 660.00 million metres. The production of handloom sector including janta cloth has been increasing under Intensive Handloom Development Projects being run by State Handloom Corporation at different concentration pockets. The total production in 1987-88 reached a level of Rs.53.64 crore against Rs.47.66 crore in 1986-87 and Rs.43.98 crore in

1985-86. A target producing Janta cloth worth Rs.53.90 crore is set for 1988-89.

6.1.44. U.P. is also making good progress in production of blended and polyester fabrics. At present about 10,000 looms are engaged in production of Blended, Terricot and Polyester cloth. The main centres are Mauraipur, Ranipur (Jhansi), Mau (Azamgarh), Etawah, Mau-aima (Allahbad) and Tanda (Faizabad). For promoting individual weavers of Varanasi and Mobarampur area, a silk projects was established in 1982-83 at Varanasi. The project has so far adopted 1250 weavers and established 7 production centres at different places. In 1987-88, silk worth Rs.70.00 lakh was purchased/procured.

6.1.45. The Development of Handloom Industry in U.P. has been taking place mainly in two folds e.g. Co-operative fold and Individual fold. Financial assistance on increased scale is provided for handloom activities in the form of Share-capital assistance, working Capital assistance, Modernisation of Handlooms etc.

6.1.46. Attractive and modern designs are the back-bone of handloom industry. In order to provide latest and attractive designs, 6 Design Centres are located at Kanpur, Bareilly, Etawah, Mau (Azamgarh), Barabanki and Gorakhpur. Each Design Centre is expected to cater to design needs of neighbouring areas and distribute the same to weavers free of cost.

6.1.47. For maintaining quality of production, 25 Quality Marking Centres have been established in weavers concentration areas. The position of handloom goods quality marked by these centres is given below :—

<i>Years</i>	<i>Value of goods quality marked (Rs. in crore)</i>
1985-86	8.71
1986-87	10.88
1987-88	8.12
1988-89	5.50
1989-90	8.00

## MARKETING

6.1.48. U. P. State Handloom Corporation provides marketing assistance to weavers in the individual fold, UPICA undertakes this task for weavers in the

co-operative fold. Both these institutions have set up a large number of retail outlets within and outside the State.

The table given below depicts the progress of the marketing activities :—

TABLE 5—Progress under UPICA and U. P. Handloom Corporation

Year	UPICA		U. P. Handloom Corporation	
	Sale depots (No.)	Total turn over (Rs. in lakh)	Sale depots (No.)	Total turn-over (Rs. in lakh)
(1)	(2)	(3)	(4)	(5)
1980-81	33	701.95	67	4072.68
1981-82	36	780.95	79	5289.22
1982-83	36	785.21	88	4207.56
1983-84	39	1008.59	94	5039.12
1984-85	53	1135.97	103	5393.53
1985-90 Target (Additional)	50	4000.00	50	10000.00
1985-86	64	1439.26	112	7236.33
1986-87	72	1872.89	156	8482.00
1987-88	77	2088.00	157	7672.00
1988-89 Likely achievement	127	3000.00	167	9500.00
1989-90 Target	137	3500.00	177	10000.00

6.1.49. While encouraging institutional marketing of handloom cloth, efforts are also made to provide marketing support to Primary weavers Co-operative Societies through Financial Assistance of Rs. 50,000 for opening their own sale outlets. 104 such sale depots have been opened up till now.

## WELFARE PROGRAMMES

6.1.50. Thrift Fund Scheme has been launched in the State in 1986-87. 1410 and 1386 weavers were brought under the purview of this scheme during the first two years of its operation. Workshed-cum-Housing scheme was launched in U. P. in 1986-87 as Centrally Sponsored Scheme for providing housing and workshed facilities to the weavers. The scheme pertaining to construction of attached

houses with worksheds is becoming popular and about 800 sheds have so far been constructed at various places. The target for 1988-89 is to construct 1500 sheds in various concentration pockets.

## U. P. STATE HANDLOOM CORPORATION

6.1.51. In order to give relief to weavers and to provide encouragement to the handloom industry in the State, U. P. State Handloom Corporation was established in January 1973. Initially the authorised capital of the Corporation was Rs. 10.00 crore which has now been raised to Rs. 20.00 crore. The paid up capital of the Corporation is Rs. 11.93 crore. The Corporation is presently under taking following activities :

1. Production programme—Handloom Intensive Development Project and Silk Project, Varanasi.

2. Supply of Yarn—Cotton, Silk, Blended/Polyester/Wool etc.

3. Providing Processing facilities through Process House at Khalilabad (Basti).

4. Promoting new designs.

5. Woollen Handloom Development Project for Kumaon and Garhwal Divisions of Hill areas.

6. Marketing of handloom goods.

6.1.52. The Corporation has achieved satisfactory progress in all spheres of activities. The following table briefly describes the progress :

TABLE 6—Progress under U. P. Handloom Corporation

Item	Unit	Achievement				Likely	1989-90
		1930-81	1985-86	1986-87	1987-88	achievement	Target
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Production Centres	No.	117	186	186	186	..	..
2. Adoption of looms under HDP's	No.	37933	57453	61771	62286	62786	63286
3. Production of Handloom cloth	Rs. in Crore	25.33	43.98	49.67	53.64	62.00	68.00
4. Opening of showrooms	Nos.	67	103	156	157	167	177
5. Total turnover	Rs. in Crore	43.72	53.94	83.29	76.72	95.00	100.00

6.1.53. U.P. State Handloom Corporation the biggest handloom Corporation in India with annual turn over of more than Rs. 100.00 crore.

6.1.54. The Corporation has also undertaken the task of promotion and development of Printing Industry which is localised in Farrukhabad, Mathura, Unnao and Kashipur (Nainital district). For this purpose a subsidiary Company U.P. State Textile Printing Corporation) has already been established.

#### U. P. INDUSTRIAL CO-OPERATIVE ASSOCIATION (UPICA)

6.1.55. UPICA, is commonly known, as an apex organisation of co-operative societies in U.P. About 1600 Primary Co-operative societies are enrolled its members and UPICA is expected to provide them yarn for production and marketing of finished products. The authorised capital of UPICA is Rs. 20 crore, out of which Rs. 6.46 crore has already been contributed by the State Government. The total turn-over of UPICA was Rs. 23.58 crore in 1987-88 having 12 production centres and 77 showrooms all over

the country. UPICA has a target of turn-over of Rs. 35.00 crore in 1988-89. The activities of UPICA are expending.

6.1.56. *Proposals for 1989-90 Share Capital Assistance to Regional Societies*—For a big state like U.P., only one apex body i.e. UPICA is not able to tackle the problems of weavers and provide them necessary help and marketing support. It has been felt necessary to create Regional level Societies in appropriate concentration areas. These Regional societies will work independently of UPICA and will be charged with responsibility of providing yarn, marketing support and necessary technical guidance in the larger interest of handloom weavers and industry. It is proposed to provide Share Capital Assistance to these societies so that they can be established and start their function properly.

6.1.57. *Interest subsidy to Commercial Banks on loans to Weavers through Bunkar Shivirs*—U.P. has a very large population of weavers (about 15 lakh) but only about 3 lakhs weavers are so far covered under co-operative fold and

Intensive Handloom Development Projects. Most of the weavers are still not getting any facility and their looms do not function for the whole year. In order to activate looms of weavers and to encourage production programme, it is envisaged to provide financial assistance to such weavers through Commercial Banks whose role has almost been nominal so far. It is, therefore, proposed to organise 'Bunkar Shivirs' (weavers camp) at important places of weavers' concentration and give them loans through Banks ranging upto Rs. 25,000 under composite loan scheme. This scheme is being introduced in the current financial year. The weavers will be charged interest at the rate of 7½ per cent and 3 per cent subsidy will be given to Commercial Banks by the Government under this scheme. An outlay of 25.00 lakh has been proposed in 1989-90 for this scheme.

6.1.58. *Revolving Fund for the purchase of Janta Cloth—U.P.* is leading in production of Janta Cloth in the country. Out of total entitlement of 550 sq. million metres of Janta Cloth fixed for 1988-89, U. P. has been allocated a target of 120 million metres. A large number of weavers engaged in the production of janta cloth are providing it to UPICA and Handloom Corporation and get subsidy to earn their livelihood. Due to paucity of funds these organisations can not make prompt payments to weavers and weavers have to wait for 3 to 4 months to get back their payments. This causes great hardship to weavers and affects adversely their production activities. It is proposed to overcome their difficulty by creating a revolving fund of about Rs. 300—Rs. 400 lakh.

#### HANDICRAFTS

6.1.59. Uttar Pradesh occupies a prominent place in handicrafts products in the country as well as in overseas markets. Handicrafts of the State such as Silk and brocade of Varanasi, Carpets of Bhadoi and Mirzapur, Chicken of Lucknow, Artistic marble products of Agra, utensils of brass and copper of Moradabad and Varanasi and wood work of Saharanpur are in great demand in International markets. Besides these, art metal-wares,

wood carving, hand printing of textiles, horn, zari, zardozi, cane tarkashi, Jamdani wooden toys, imitation jewellery and musical instruments are important handicrafts of the State. There are 20 lakh artisans in India, out of which 6 lakhs are in Uttar Pradesh. The production of handicrafts in Uttar Pradesh is of the order of Rs. 156 crore annually. A number of programmes described below have been taken up to encourage handicrafts.

6.1.60. *U. P. Export Corporation—*The Corporation as an Export House is involved in export of hand-knotted carpets, Art, Metal Ware, Wood Wares, Handlooms and Textiles, Leather and Sports Goods. The Corporation was set up in 1966. The authorised Capital of the Corporation is Rs. 500.00 lakh and the paidup capital Rs. 368.47 lakhs. The performance of the Corporation in the field of exports as well as internal marketing has improved to a great extent. The progress for 1986-87 and 1987-88 is given below :—

	(Rupees in lakh)	
	1986-87	1987-88
Traditional items (Carpet, Handicrafts, leather goods, RNG/Textiles etc.)	240.31	291.30

6.1.61. For the population and marketing of handicrafts in the internal markets, the U.P. Export Corporation is also operating Handicraft Emporia under the title "Gangotri" in important cities of the country. These emporia provide an excellent marketing outlet for a large number of master craftsmen and artisans engaged in the Handicrafts Industry of the State. For 1989-90, the corporation has fixed a target of Rs. 900.00 lakh for sale of handicrafts goods through these emporia.

6.1.62. *Development of Wood Carving Industry—*To provide seasoned wood to artisans engaged in the Wooden Industry, the State had established a Wood Seasoning Plant in Saharanpur in 1971. This plant is managed by U.P. Export Corporation since 1976. In the first 3-years, the Government had provided 100 per

cent subsidy and thereafter in 1979-80 and 1980-81 the subsidy was allowed @ 66 per cent and 33 per cent respectively. After 1980-81, no subsidy was allowed by the Government. However, on the persistent demands of the Corporation, Government is again providing subsidy from 1986-87. Since more and more artisans are using seasoned wood for the production of wooden items, subsidy for meeting running expenses of wood Seasoning Plant is proposed to be given. An outlay of Rs. 14.00 lakh is proposed for 1989-90 for this purpose.

6.1.63. *Air Cargo Complex* — In order to provide custom clearance and other facilities to exporters of Bhadohi-Mirzapur belt, an Air Cargo Complex was set up by the Government, through the Corporation in 1979-80. The complex since inception has been incurring operational losses. The losses are to be reimbursed. An outlay of Rs. 5.00 lakh is proposed for this purpose in 1989-90.

6.1.64. *Bhadohi Industrial Development Authority (BIDA)*—The Government has constituted Bhadohi Industrial Development Authority for creating infra-structural facilities for artisans and foreign buyers in Bhadohi, the main nerve centre of carpet export trade Authority is already constructing industrial sheds, shopping complexes and transit hostels etc. The Authority is going to establish an export house for which the land required has already been acquired. The following programmes will be undertaken during 1989-90 :

1. Construction of Niryat Bhawan
2. Jamnipur Brihattar Housing Scheme
3. Rajpura Commercial/Residential Scheme
4. Rajpura Housing Scheme
5. Construction of approach road.
6. Jalalpur Housing/Commercial Scheme

6.1.65. *U. P. State Brassware Corporation* — The Corporation is prompting metal artware and utensils industry in

various parts of the State. The concentration of this industry is especially high in Moradabad, Aligarh, Etah, Almora, Varanasi and Mirzapur areas. Various facilities are being extended to brassware artisans. The required raw materials are purchased by the Corporation and distributed to artisans. Besides, financial assistance, supply of machines on hire purchase, distribution of designs to the artisans and marketing support are provided by the Corporation. The authorised capital of the Corporation is Rs. 600.00 lakh and the paid up capital is Rs. 515.30 lakh. During the last three years, the activities of the Corporation were as under :—

Particulars	(Rupees in lakh)		
	1985-86	1986-87	1987-88
1. Raw Material	860.41	1772.07	2234.50
2. Inland Trade Export	10.95	9.60	10.41
Total	871.36	1781.67	2244.91

The targets for 1988-89 and 1989-90 are given below :

Particulars	(Rupees in lakh)	
	1988-89	1989-90
1. Raw Material	3100.00	3365.00
2. Inland Trade and Export	21.50	30.00
Total	3121.50	3395.00

6.1.67. *Non-Ferrous Rolling Mill*—With a view to improve the condition of the mill, a technical feasibility report was prepared and on the recommendations made therein, an amount of Rs. 60.00 lakh was provided as Equity for the purchase of those machinery which were very vital for improvement of quality as well as production. Some machines have already been installed and installation of remaining machines is under-way.

#### KHADI AND VILLAGE INDUSTRIES

6.1.68. *Khadi and Gramodyog Board*—Khadi and Village Industries are playing an important role in reducing the problem of rural unemployment and



under employment. Growth of Khadi and Village Industries occupies an important place in our planning strategy. Khadi and Village Industries Commission has continued to play a significant role in development of Khadi and Village Industries through directly aided institutions. Besides, U.P. Khadi and Gramodyog Board is also engaged in the task of extending the coverage of Khadi and Village Industries all over the State through societies and individually assisted units. Khadi Board gets financial assistance under the State Plan and also from the Khadi

Commission. There is a growing effort to get greater bank assistance also. Khadi and Village Industries Programme has also been dovetailed with other development schemes under IRD, TRYSEM, special component and self employment to carry out greater integrated development and over all industrialisation in the State.

6.1.69. In the Seventh Plan, the target is to set up 50 KVI units per block. Physical progress during Seventh Five Year Plan is as follows :

TABLE 7—Physical progress in Seventh Plan

Year	Financial Assistance (Rs. in lakh)		Established units (Number)	Production (Rs. in lakh)	Employment (000's)
	Khadi	Gramodyog			
(1)	(2)	(3)	(4)	(5)	(6)
1985-86 .. ..	55.69	947.17	13544	12498.00	241.06
1986-87 .. ..	107.19	1186.40	18541	15097.00	319.08
1987-88 .. ..	77.24	1009.05	14252	17209.00	356.10
1988-89 (Anticipated) .. ..	204.15	1111.18	14060	21107.00	381.03
1989-90 Target .. ..	123.04	1341.78	16277	24595.00	406.85

6.1.70. Some of the salient features of important activities are briefly given as under--

#### ACTIVITIES IN PLAINS

6.1.71. For a vast majority of units in this sector, problem of marketing continues to pose a serious threat even to their very existence. To overcome this problem, 28 sale depots up to 1985-86 were assigned the job of marketing. During 1986-87 and 1987-88, 32 and 29 sale depots have started working. During the current year, a special integrated plan has been chalked to boost up marketing. Under training programme 5 Divisional Training Centres at Lucknow, Allahabad, Kalpi, Gorakhpur and Nainital were sanctioned during 1986-87. These centres imparted training to 3,298 entrepreneurs during 1987-88. Six more training centres were sanctioned in 1987-88 for Azamgarh, Ballia, Behraich, Mathura, Naziba-

bad and Shahjahanpur. These training centres are being established with financial help of Rs. 20.78 lakh for each centre from Rural Development Department for construction of buildings, machines, implements and office furniture. The target fixed for training in these training centres for 1988-89 and 1989-90 is 17,295 and 20,000 respectively.

#### ACTIVITIES IN THE HILLS

6.1.72. The main programme of the Board in hills is to develop Village and Cottage Industries which, are based on the local raw materials, hill wool scheme is one of the important schemes being implemented by the Board so as to cope up with the relevant needs of the local people, and create substantial local employment. The facilities under the scheme are wool bank, spinning centres, new model charkhas, wool carding plant finishing plant and sale depots etc.

6.1.73. Bee-keeping assistance to co-operative societies, common facility centres, divisional training centres, are also some other important programmes which are being run by the Board, in hills.

6.1.74. *Directorate of Cottage and Village Industries*—The Directorate is engaged in effective implementation of the schemes, monitoring, strengthening data base, formulation of project/schemes, co-ordination with the different departments of the State Government. Task of supply of file covers, file boards and stationery has been entrusted by the State Government to the Directorate which was earlier being looked after by the Directorate of Printing and Stationery. It is also engaged in making policies and reviewing programmes of Khadi and Village Industries.

#### SERICULTURE

6.1.75. Sericulture is an agro industrial activity. It provides an additional

scope for gainful employment to rural population during lean parts of the year. At the end of sixth plan, the scheme was implemented in 33 districts of the state. The mulberry based sericulture industry has covered 31 districts whereas the tropical tassar was taken up in Varanasi Mirzapur districts. For accelerating sericulture activity, both in plains and hills, various promotional developmental programmes have been launched to encourage and assist rearers and to provide training and other technical guidance to them. The Government has also recognised the importance for the sericulture industry in U.P. and has given a separate entity to it by creating a separate Directorate of Sericulture in the State during 1987-88.

6.1.76. Physical progress under sericulture during the seventh plan is given as under :

TABLE 8 — Physical progress under Sericulture

Item	Unit	1984-85 (level)	1985-86 Achievement	1986-87 Achievement	1987-88 Achievement	1988-89 Anticipated achievement	1989-90 proposed Target
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Cocoon Production (Plain)	lakh tonnes	1.20	1.39	1.79	1.32	1.65	1.70
2. Cocoon Production (Hill)	lakh tonnes	0.79	0.99	0.99	0.71	0.95	1.00
Total		2.08	2.38	2.78	2.03	2.60	2.70
3. Raw Silk Production	lakh tonnes	0.20	0.23	0.28	0.28	0.30	0.32
4. Tropical Tassar	No. in lakh	17.51	22.47	28.43	7.81	32.00	35.00
5. Oak Tassar Cocoon	lakh tonnes	0.37	0.61	0.68	0.30	1.20	1.50

6.1.77. *Model chawki Rearing-cum-Demonstration Farms*— This scheme is mainly proposed for the study and development of sericulture scheme. It is necessary that the chawki rearing-cum-demonstration extension centres may be established in the village areas to educate and demonstrate the activities of sericulture such as in mulberry plantation and

silkworm rearing. Each chawki rearing centre will have mulberry plantation of about 10 acres in plain areas and 5 acres in hill areas. These centres will have operational building and will serve the rearers by supplying them improved races of seed worms and appliances.

6.1.78. *Intensive Sericulture Project for Tarai Region*—The Tarai region of

the state comprising 8 districts has favourable climate conditions as well as employment potential. A scheme of intensive development project has been started during sixth plan under which 68 mulberry farms has been established on 775.55 acres of land.

6.1.79. *Tassar Development Project for Mirzapur*—The Southern part of this state especially the south Mirzapur district has more scope for the development of the tropical tassar. It is an extensive scheme to cover the economically backward people, specially scheduled tribes.

6.1.80. *Oak Tassar Scheme for Staff and Oak Tassar Development Project for Hill Areas*—The oak tassar scheme for staff is mainly a staff scheme and oak tassar development project is mainly an extension programme.

6.1.81. According to the forest department survey, an area of 5.5 lakh hectares is covered by oak in Kumaon and Garhwal Mandal. The experiments so far done regarding tassar rearing evidently proved the tassar culture can be a success in the hill districts as food material is abundantly available. However, difficulty is experienced in the stabilisation in seed rearing resulting in low survival of seedworm for which consultation of Central Silk Board has been taken.

6.1.82. *Scheme for Revolving Fund for Purchase of cocoon*—It has become a common complaint from cocoon producers that they are not getting timely payment from the department. The main reason for this late payment is the present set up wherein the payment for the cocoon production has to be first provided in budget and then get it released and complete accounting formalities before making payments. The sale proceeds of departmental yarn sales etc. have to be deposited in the treasury. Thus the department frequently faces lack of funds to make immediate payment to rearers. Hence, it is proposed to create a revolving fund of Rs.25.00 lakh for making immediate payment to rearers.

6.1.83. *Silkworm Insurance Scheme*—For the first time this scheme is proposed to be introduced in the State. Quite often,

the rearers face crop losses due to variations in the climate, disease in the worm etc. To cover this risk factor, it is proposed to introduce a scheme of insurance for the benefit of the rearers. An outlay of Rs.5.00 lakh is proposed for 1989-90.

6.1.84. *Establishment of Statistical Cell*—It is experienced that to have a proper management information system, management accounting and budgetary control, it is essential to set up a statistical cell at head office. An outlay of Rs.5.00 lakh is proposed for 1989-90.

6.1.85. *Replacement of Vehicle*—Most of the vehicles in the Sericulture department were purchased at the time of inception of the scheme and these vehicles have already run more than 2.00 lakh kms. The repairing cost has become excessive because of the poor condition of the vehicles. Hence, it is planned to replace these vehicles gradually.

6.1.86. *Establishment of Mulberry Nurseries for Plantation*—It is known fact that development of sericulture industry depends upon the availability of mulberry plantation which is the only food plant for the rearing of silk worms. It is very essential to have departmental mulberry nurseries for the production of mulberry seedling, saplings of improved varieties which will produce more quantity of leaves of higher nutrient value.

6.1.87. Upto this time no adequate action have been taken in this important aspect of the industry.

6.1.88. This year a major programme has been finalized for mulberry plantation in the forest lands, private institutions, Panchayati lands, departmental farms and individual farmers. Due to shortage of mulberry saplings and non availability of nurseries operation under the department, a shortfall was experienced.

6.1.89. Nurseries are being raised by forest department and also by other voluntary organisation but it will not be sufficient to meet the increasing demand of mulberry sapling in the state.

6.1.90. This programme being the most important aspect of the sericulture

Directorate, it is necessary to organise departmental nurseries at important places in the state where department will raise good varieties of mulberry plants and distribute to forest department, other agencies, departmental demand and private individual planters. The demand will definitely increase and the demand will be met to increase the silk cocoon production.

6.1.91. In order to successfully organise the establishment of 100 acre nurseries in the state, a sum of Rs.3.50 lakh has been received.

#### POWERLOOM

6.1.92. The Government of India has decentralised licencing of powerloom and allowed registration of new powerlooms under Textile Policy, 1987. As a result of this, about 53,000 powerlooms have been registered in different location of the State. It is proposed to set up two powerloom weavers' service centres in areas of concentration of powerloom to provide training and design development facilities to the weavers, besides given them guidance in the installation of improved types of looms. The weavers' service centres are also proposed to be provided raw material and marketing assistance wherever necessary. The estimated cost of the weavers' centre is at the rate of Rs.5.00 lakh per centre, which is proposed to be established in 1988-89 with an outlay of Rs. 10.00 lakh.

6.1.93. Because of various problems being faced by the powerloom weavers, in the initial stages of developing this industry, it is proposed to provide them interest subsidy on the financial assistance to be obtained from the financial institutions. This interest subsidy will be at the rate of 4 per cent on the term loan obtained from the financial institutions.

6.1.94. An outlay of Rs.5.00 lakh has been proposed for 1989-90.

#### CO-OPERATIVES

6.1.95. *Industrial Co-operatives (Non-Textiles)*—The programme for organisation of industrial co-operatives was introduced in Fourth Plan in small scale sector with a view to extend financial assistance to weaker societies and to strengthen them for effective working. The existing schemes of providing share capital loan, assistance for construction of workshop/godowns, managerial assistance will be continued during 1989-90. Scheme for providing managerial staff to each of the co-operatives specially those of the weaker sections will also continue.

6.1.96. *Marketing Centres for Apex-Body-State Handicrafts and Industrial Co-operative Association Ltd., Kanpur (SHICO)*—The main objectives of this apex body of non-textile industrial co-operative societies of the State are as under :—

1. To educate members and officials of the societies in the co-operative principles and methods.
2. To recruit and control staff of affiliated societies.
3. To exercise general supervision and provide guidance to its members in resolving their problems.
4. To purchase shares of primary and central societies on behalf of the Government.
5. To arrange raw materials wherever necessary.
6. To assist societies in the sale of their products and to open sale depots in important towns of State and out side.

6.1.97. This organisation has started marketing of products of the co-operative societies of khadi and village industries and handicrafts etc. A show room has been established at Kanpur. SHICO had also participated in the India International Trade Fair, New Delhi.

## 6.2. INDUSTRIES

## LARGE AND MEDIUM INDUSTRIES

There has been a rapid growth in industries in U. P. from third five year plan and onwards. The number of industrial undertakings in the State at the end of the First Plan was 52, which increased to 690 with an investment of Rs.3375.00 cr. at the end of Sixth Plan. The Seventh Plan envisaged an investment of Rs.7000.00 cr. by attracting more central sector projects, setting up industries in public and joint sector, inviting and attracting entrepreneurs from outside the state and providing them a suitable environment for establishing industries in U. P. The strategy has been successful to the extent that by the end of 1987-88, the number of industrial undertakings in U. P. reached 841 with an investment of Rs.6407.00 cr.

6.2.2. During the Seventh Plan, so far major projects for manufacture of sophisticated items like light commercial vehicles digital switching system, air craft accessories, ceramic insulators, watch complex, sophisticated electronic components including colour picture tubes, two wheelers etc. have been commissioned. Projects for manufacture of fertilizer from natural gas from Bombay-High, portable generators, M.E.G., poly-propylene, gas cracker project, glass, photographic film projects, ethylene glycol and colour picture tubes are under active implementation.

## TEXTILE INDUSTRY

6.2.3. *Modernisation and Diversification of State sector Mills*—The announcement of the New Textile Policy of the Government of India on the June 6, 1985 has given a new orientation to the Textile Industry, including the spinning sector.

6.2.4. The UPSTC Group of Companies in response to these policy changes have made necessary adjustments in their production and marketing strategy. Projects for modernisation and diversification of 7 of UPSTC/UPSSM-I mills have been drawn up, which envisage technological upgradation and conversion of part of the

spindleage from cotton to synthetic and blended yarn. The major products that will be manufactured in the synthetic category would be based on polyester-cotton, polyester-viscose, viscose staple fibre and acrylic. The projects have been approved by Public Investment Board (PIB) and Financial Institutions.

6.2.5. The proposed requirement of funds and sources thereof as emerged after detailed appraisal by Central Financial Institutions are as under :—

	Total cost	(Rupees in lakh) Equity	Term loan
<i>UPSTC</i>			
Modernisation and Diversification of 4 mills	1936.00	976.28 (including 75.28 for D. G. set)	900.00
<i>UPSSM-I</i>			
Modernisation and Diversification of 3 mills	1700.00	861.00 (including 30 for D.G. set)	828.00
	3636.00	1837.28	1728.00

6.2.6. *Modernisation of Old Co-operative Spinning Mills*—Four Co-operative Spinning Mills, i.e. Bulandshahar, Etawah, Maghar and Nagina established long time back needed modernisation and diversification to improve their performance and to ensure that adequate quantity of yarn of fresh count is available to weavers of U.P.. Work of modernisation of Bulandshahar and Etawah is in the final stage, while in Maghar and Nagina mills it is in progress. An outlay of Rs.937.00 lakh is envisaged for 1989-90 for modernization of state and co-operative sector mills.

6.2.7. *Strengthening of Equity Base (State Sector Mills)*—During the last few years unprecedented and abnormal hike in raw material costs, wage costs and electricity bills/security rates etc. have given rise to persistent losses and thus affecting adversely on the equity base of the Company. Mills are experiencing immense difficulty even in day to day working in the absence of adequate margin money. There is an adverse problem of viability of these mills also. Projects of modernisation/diversification have been drawn-up which will definitely improve the viability of the mills. In order to derive full

benefit of implementation of the modernisation/diversification projects, the equity base of the company has to be strengthened.

6.2.8. The total requirement pertaining to state sector mills and Bhadohi Woollen Ltd., in this scheme is Rs. 1173.40 lakh. A sum of Rs. 150.00 lakh each has been provided by the State Government in the years 1987-88 and 1988-89 as equity in this scheme. Keeping in mind limited funds availability of the State Government, a sum of Rs. 125.00 lakh has been proposed in the year 1989-90 thus necessitating its spill over in the Eighth Plan.

6.2.9. In case of Co-operative sector mills, an outlay of Rs. 75.00 lakh is proposed for strengthening of equity base for 1989-90.

6.2.10. *Modernisation of Bhadohi Woollens Ltd.*—It is functioning as a subsidiary company of the U P S T C. With a view to increase the productivity of the mill and its profitability and further to substantially improve the quality of end product it is essential to undertake modernisation of the old machines and changes in machinery with obsolete technology.

6.2.11. An amount of Rs. 25.00 lakh is being proposed for modernisation of Bhadohi Woollens Ltd. for 1989-90.

6.2.12. *Barwapur Dyeing Plant*—State Government has directed UPSTC to take over a Dyeing Plant at Barwapur (District Varanasi) which is under the management of Varanasi Mandal Vikas Nigam and is running into continuous losses due to bad management. In this connection, detailed study has also been got conducted and as per findings of the study, an amount of Rs. 131.75 lakh will be needed by UPSTC to clear previous dues and take over the plant. An outlay of Rs. 38.00 lakh is envisaged for 1989-90.

6.2.13. *Completion of Jaspur Unit*—UPSTC was granted a letter of intent in December, 1981 for establishing a spinning mill of 50,000 spindles capacity at Jaspur (Nainital). Due to paucity of

funds a capacity of 25,000 spindles only was established which started commercial production from February, 1984.

6.2.14. The project envisages the establishment of 25,000 spindles as a new spinning unit in the premises of existing Jaspur mill of UPSTC. The land for proposed project is readily available and infrastructure facilities already exist at the site.

6.2.15. The estimated project cost would be around Rs. 1500.00 lakh. On the basis of 1:1 debt equity ratio, an equity of Rs. 750.00 lakh shall be required from the Government. An outlay of Rs. 89.00 lakh is envisaged for 1989-90.

#### CEMENT INDUSTRY

6.2.16. *U. P. State Cement Corporation*—The Corporation took over control and managements of the erstwhile Government Cement Factory, Churk and Dalla and started functioning with effect from April 1, 1972. The main objective of the Corporation is to produce Ordinary Portland Cement (OPC), Portland blast Furnace Flage Cement (PBFC) and other types of Cement. Following programmes are under consideration for implementation.

6.2.17. *Addition of Pre-Calculator to Dry Process Kilns at Dalla*—There are two clinkerisation units in the same premises of the Dalla unit. The first commissioned in 1972, has two Wet process kilns having a capacity of 4 lakh tonnes per annum. The second unit has two dry process kilns of a capacity of 8 lakh tonnes per annum. To consider all alternatives of modernisation and to suggest most suitable alternative M/s National Industrial Development Corporation in consultation with cement Research Institute retained. NIDC have given their report indicating the most suitable alternative of modernisation. They have recommended that addition of Pre-Calculator to dry process kilns at Dalla increasing their capacity to 1800 TPD each and closing down the wet kilns, is the most suitable alternative.

Their report is under scrutiny. After their report is cleared, NIDC will be giving feasibility study for this project.

6.2.18. *Rehabilitation and Modernisation of Churk Cement Factory*—First two vickers kilns were installed at Churk in 1954. Thereafter in 1962 two Skoda kilns were installed. All these four kilns, besides operating on wet process, consume more coal, are having old technology and the machine and equipment have become very old resulting in poor efficiency.

6.2.19 Therefore the consultants M/s Development consultants Pvt. Ltd., were asked to work out comparative study of various alternatives suggesting the best alternative for modernisation. This report has also been received.

6.2.20. According to this report most suitable alternative of modernisation i.e. replacement of four wet process kilns by one dry process Pre-calculator kiln would cost Rs. 45.50 cr. Although PIB's Clearance was obtained for this project earlier in 1981-82 based on earlier estimated cost, fresh approval will have to be obtained from PIB due to considerable increase in the project cost. After the study done by DCPL is approved, the consultants will be asked to prepare a detailed project report and hence the main activity of the project is expected to start in 1989-90. An outlay of Rs. 120.00 lakh is envisaged for 1989-90 for rehabilitation and modernisation of existing mills.

**THE PRADESHIYA INDUSTRIAL AND INVESTMENT CORPORATION OF U. P. LTD.**

6.2.21. The main activities of the Corporation are industrial development banking in medium and large scale industries, direct promotion of industrial projects, technical services and institutional supports for growth of industry. The authorised share capital of the corporation was Rs. 100.00 cr. and the paid up capital as on March 31, 1988 was Rs. 68.70 cr.

6.2.22. *Development Banking*—In the field of development banking the corporation is primarily concerned with extending financial assistance to industrial units by way of term loans, equipment financing schemes, underwriting of shares equity participation and leasing. The Corporation is also working as an agent of the Government, IDBI and other institutions for running few of their schemes like sales tax loans scheme etc. The performance in each of these areas is enumerated below :

6.2.23. *Term Loan*—As per the present policy frame-work for SIDC, PICUP can provide term loan assistance with a maximum of Rs. 90.00 lakh to units with cost of project up to Rs. 3.00 cr. in order to be eligible to avail of refinance assistance from IDBI.

6.2.24. The sanction on account of term loan/ERS loan/Foreign currency loan including loan in lieu of CIS has increased from Rs. 94.64 cr. during the year 1986-87 to Rs. 115.78 cr. during 1987-88. The cumulative sanction as on March 31, 1988 was Rs. 436.00 cr. out of which Rs. 284.26 cr. were sanctioned in the backward areas of the State. Disbursement has increased from Rs. 51.72 cr. during the year 1985-86 to Rs. 63.10 cr. during the year 1987-88. As on March 31, 1988 PICUP has made cumulative disbursements of Rs. 237.24 cr. out of which Rs. 132.01 cr. pertain to backward areas of the State.

6.2.25. *Equipment Finance Scheme*—In this scheme financial assistance upto Rs. 1.00 crore is given to existing Industrial concerns with good track record for purchase of capital goods/equipments including equipments for energy saving systems, modernisation, expansion, balancing/replacement. PICUP has sanctioned loans under this scheme to the tune of Rs. 1186.20 lakh and has disbursed a sum of Rs. 773.04 lakh during the year 1987-88.

6.2.26. *Foreign currency Loan*—PICUP provides foreign currency loans to projects under purview of State Financial Institutions for improving capital

equipment and services. This facility is extended out of the Euro currency loans raised by IDBI. PICUP has sanctioned foreign currency loan of Rs.130.31 lakh and has disbursed amount of Rs.81.10 lakh as foreign currency loan to two units during the year 1987-88.

6.2.27. *Direct equity participation/underwriting assistance*—This scheme is operated by PICUP at present on a very selective basis because of poor returns to the Corporation under this scheme in the past and current resource crunch due to expansion in other development banking activities. During the year 1987-88 disbursement under this scheme amounted to Rs.89.77 lakh.

6.2.28. *Joint Sector Projects*—Promotion of joint sector projects in the state has now become a very important activity of PICUP. As on date PICUP has 36 joint sector projects out of which 5 projects are in production and 19 are under active implementation. 6 of these projects are likely to be commissioned within the next 6 months. The joint sector projects envisage a total investment amounting to Rs.3,075.63 cr. out of which PICUP's stake is about Rs.164.85 cr. During the year 1989-90 an investment of Rs.15.00 cr. is proposed to be made in various joint sector projects.

6.2.29. *Leasing Activities*—The Corporation under the leasing activities has sanctioned assistance amounting to Rs.182.55 lakh and disbursed Rs.263.19 lakh during the year 1987-88.

6.2.30. *Interest free sales Tax Loan (Agency Scheme)*—The Corporation operates the interest free sales tax loan scheme of the State Government as an agency function. In the year 1987-88, the Corporation sanctioned Rs.123.60 lakh and disbursed Rs.175.22 lakh under this scheme.

6.2.31. *Techno-Economic Feasibility Study Subsidy (Agency Scheme)*—PICUP also undertakes preparation techno-economic feasibility studies. In the year

1987-88 a sum of Rs.6.55 lakh were utilised for preparation of techno economic feasibility reports.

6.2.32. *Seed Capital assistance scheme of IDBI (Agency scheme)*—Under this scheme seed capital assistance is available to a maximum extent of Rs.15.00 lakh for project with projects cost not exceeding Rs.3.00 crore to those persons who intend to set up a project in medium scale for the first time or those who intend to graduate from SSI to medium scale. Since the funds for this scheme are provided by IDBI themselves, the Corporation has not requested for any funds from the Government for this purpose.

6.2.33. An outlay of Rs.2100.00 lakh is proposed for all the schemes of PICUP for 1989-90.

#### U. P. STATE INDUSTRIAL DEVELOPMENT CORPORATION (UPSIC)

6.2.34. The following activities are being performed by this Corporation.

1. Development of Industrial Areas possessing necessary infrastructural facilities and to provide industrial plots to industries.

2. Identification and promotion of large and medium scale projects in Joint/Assisted sector.

3. Extension of financial assistance to limited companies by way of underwriting their public issues and through direct participation in equity.

4. Preparation of Techno-Economic feasibility reports for entrepreneurs locating their projects in UPSIC's Industrial Areas.

5. Execution of construction work for public and semipublic organisation and provision of consultancy services in Architecture and Town planning etc.

6.2.35. *Development of Infrastructure (Industrial Areas)*—Estimated investment of over Rs.2500.00 cr. in about



2500 establishments in industrial areas gives an indication of the success and popularity of this programme. Manufacturing establishments set up in industrial areas constitute a wide spectrum of industries including chemicals, paper, cotton yarn. Automobiles, Heavy and light Engineering, Sugar, Textiles, Leather Electronics etc. Apart from medium and small scale units, many large projects have been/are being set up which inter-

alia, include, TELCO (Chinhat, Lucknow), DCM Toyota and Escorts (Surajpur, Ghaziabad), Indo-Gulf Fertiliser (Sultanpur), Carbon Black and India Rayon (Mirzapur), Glaxo's project (Orai), Tata Fertilizer (Badaun), Continental Float Glass (Banda), Hindustan Cables and Raymond Woollens (Naini-Allahabad), National Newsprint (Hempur, Nainital) etc. the details of industrial areas developed is as below :

TABLE 9—Details of industrial areas

Category	District (No.)	Industrial area (No.)	Land acquired (in acres)	Land available for allotment		Land allotted	
				Developed land		No. of plots	Area (in acres)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>A—Plains</b>							
1. No industry Districts	7	8	3868.07	965	1894.20	22	1394.40
2. Backward Districts	17	48	13815.17	3839	9458.12	2997	7506.04
3. Other Districts	12	32	9354.57	5893	6590.40	4979	9827.90
<b>B—Hills</b>							
1. No Industry District	2	2	116.79	..	..	..	..
2. Backward District	4	11	1498.36	753	1362.20	176	1105.70
Total ..	42	101	28752.40	11450	19324.90	8274	15833.40

6.2.36. The corporation proposes to bring all the districts of the state under industrial area programme. Accordingly in 1989-90, acquisition is planned in Barabanki, Pilibhit, Ballia, Gonda, Behraich, Ghazipur and Shahjahanpur districts where industrial areas have not been established so far. It is planned to acquire 4180 acres of land at an estimated cost of Rs.2120.00 lakh. About 78 per cent of the land to be acquired will be in backward districts.

6.2.37. *Development of Growth Centres in No Industry Districts (NID) —*

The corporation has been made the Nodal agency in 1984-85 for the implementation of the scheme of development of growth centres in NIDs. Under the scheme, being jointly financed by the Central and State Governments and IDBI, it is planned to develop 4161 acres land in 7 NIDs at an estimated cost of Rs.5283.00 lakh.

6.2.38. As almost all the land proposed for acquisition in NIDs will be acquired by the end of 1988-89, the entire thrust in the plan has been kept on development of land.

6.2.39. Programme under this head also includes appropriate provisions for installation of telecom facility and industrial housing in the NID growth centres. Overall it is intended to complete most of developmental works in NIDs by the end of the Seventh Plan.

6.2.40. As regards hill NIDs developmental works would be completed in two NIDs namely, Pauri Garhwal and Chamoli and works would be started in the remaining NIDs.

6.2.41. *Joint/Assisted Sector Projects*—During 1987-88, a great deal of attention was paid on expediting implementation of two projects namely, Polyester film project in Nainital and Leather Board Project in FaFtehpur. As a result, these are likely to commence production during 1988-89. Also, lot of ground work was done in case of Gas cracker complex, petro-chemical complex, Acrylic Fibre and some other projects which has strengthened corporation's case for grant of letters of intent (LIs). Rehabilitation of UPTTL and UPIL was actively pursued in this year. Simultaneously, certain medium scale projects were indentified and 17 applications for grant of letters of intent were submitted to Government of India. In the same period, LIs were received for extruded aluminium products and conveyor belts in addition to SIA/DGTD Registration for 6 other projects.

6.2.42. It is planned to extend assistance amounting to Rs.592.00 lakh to various Joint/Assisted sector projects in the next year, of this Rs.175.00 lakh will be in the nature of grants for rehabilitation/modernisation of U. P. Digitals (Rs.30.00 lakh), U. P. Instruments Ltd. (Rs.120.00 lakh) and Rs.25.00 lakh will be need as grant for feasibility studies in regard to Gas Cracker Project. Among the projects under production, Rs.50.00 lakh is proposed for modernisation/expansion programme of M/S. Almora Magnesite Ltd., Rs.254.00 lakh are needed for new projects for which LI/Registration have been received and substantial pre-promotional work has been done

thereafter. In case of many such projects, private promoter has already been fixed and MOU signed too in certain cases.

6.2.43. *Equity Participation and Underwriting*—In the last year, Rs.103.00 lakh were disbursed to 13 units whereas 12 companies were sanctioned Rs.126.50 lakh. Thus, cumulatively a sum of Rs.716.27 lakh had been made available to 97 units by 1987-88. Cumulative sanctions by this period amounted to Rs.1132.83 lakh. Certain steps were taken in the year for more effective monitoring of assisted companies as well as more rigorous scrutiny of applicants so as to increase yield from this activity. Also, efforts were undertaken to disinvest more with a view to recycle greater funds among new companies.

6.2.44. Total assistance provided so far to 52 companies through underwriting scheme amounts to Rs.574.55 lakh. However, the present stock held by the corporation in underwritten companies is worth Rs.430.00 lakh approximately, as disinvestment have been regularly made. In 1987-88, 5 companies were sanctioned assistance to the extent of Rs.70.00 lakh. Against this, Rs.9.51 lakh were disbursed to a company against the developed liability.

6.2.45. An outlay of Rs.150.00 lakh is envisaged for 1989-90 for equity participation and underwriting.

#### U. P. STATE ELECTRONICS CORPORATION

6.2.46. Electronic industry is being developed in the State by this Corporation which has an authorised capital of Rs.16.00 cr. This Corporation has established from State Sector Projects namely Uptron India, Uptron Digital System, Uptron Capacitors and Uptorn Communication and Instruments Ltd., and seven joint assisted sector projects. An Electronics Test and Development Laboratory has been established at Panki (Kanpur). In the hill region, another testing laboratory is being established. The Corporation has established electronics industrial estates which are also being established

in hills. A subsidiary of U. P. Electronics Corporation for the hill districts has been established for speedier development of electronics in hills.

6.2.47. The Corporation is establishing many projects viz. Mining Electronics, Process Control Instrumentation and Allied component project etc.

6.2.48. The Electronics Corporation has established Uptron Colour Picture Tubes Ltd. at Sahibabad at a total project cost of Rs.117.5 cr. A modern, automated Plant was imported to manufacture 7.50 lakh coloured picture tubes (CPTS) annually. In full capacity the plant would produce CPTS worth Rs.150.00 cr.

6.2.49. The notable projects under execution or in formulation stages are Electronic T. V. tuner project Video tapes projects, floppy disk drive project, Rural automatic exchange project, Mini and Super Mini Computer Project, Multi access rural telephone systems project, Flat square and 14 inches Colour Picture Tube project, Medical electronic Project, Technological upgradation projects for video products, digital system and electronic components etc. The corporation

also has plans to take up black and white T. V. Picture Tubes and defence electronics project in Joint/assisted sector as also rehabilitation schemes for sick units. An outlay of Rs.900.00 lakh including Rs.250.00 lakh for hills is envisaged for 1989-90 for the development of electronics.

#### U. P. FINANCIAL CORPORATION

6.2.50. The U. P. Financial Corporation was established in the year 1954 under the SFC's act, 1951 to encourage the growth of Industries in the State of U. P. by way of providing Term loan facilities. The authorised share capital continued to be Rs.50.00 cr. as was in the last year. The IDBI had drawn a phased programme for conversion of quasi-equity loan into Share Capital. The Corporation received a sum of Rs.4.67 cr. as Share Capital from the State Government during the year 1987-88. A sum of Rs.1.80 cr. has been converted from Quasi-equity to Share Capital. The paid up capital of the corporation has reached Rs.14.47 cr.

6.2.51. The target and achievements of the Corporation in key areas of operation during the year 1986-87, 1987-88 and 1988-89 are as follows :

TABLE 10—Targets and achievements

(Rupees in crore)

Particulars	Achievement		1988-89	
	1986-87	1987-88	Target	Achievement upto June 88
(1)	(2)	(3)	(4)	(5)
1. Number of Units Assisted .. ..	2440	1815	1700	350
2. Sanction of loan .. ..	192.87	177.44	158.44	32.05
3. Disbursement of loan .. ..	98.47	120.78	135.00	28.42
4. Recovery of dues .. ..	51.10	70.02	89.00	11.94
5. Refinance from IDBI .. ..	71.29	72.00	78.00	40.54

6.2.52. To meet the requirement of funds for disbursement of loans and other obligations including redemption of Bonds and repayment of Refinance during the year 1989-90, the Corporation is required to increase its capital base. As per norms laid down by the IDBI the outstanding refinance should not be more than three times of the paid up capital and Free reserves. The Corporation proposes to avail of refinance from IDBI to the tune of Rs. 85.10 cr. in 1989-90. Considering the outstanding refinance necessary payment of current liability and disbursement of term loan to the borrowers, it is essential to obtain the fresh share capital. Therefore, an outlay of Rs. 11.00 cr. is proposed for 1989-90.

#### AUTO TRACTORS LIMITED

6.2.53. Auto Tractors Limited is a public sector company registered under the Companies Act 1956 established in Pratapgarh.

6.2.54. The Company was started with the objective to produce 6,000 tractors and 2,000 engines per annum. The production of tractors was started in October, 1981. The Company also produces vehicular engines suited to Jeeps and Ambassador Cars. Up to 1987-88, a total number of 2391 tractors and 2027 engines have been manufactured by the Company.

The working capital of the company is blocked by imbalanced inventory of land outstandings against dealers. The cash loss is reimbursed by the Government. At present Government is releasing funds only for salary and wages and other inescapable expenses.

6.2.55. An outlay of Rs. 200.00 lakh has been proposed for 1989-90.

#### THE NEW OKHLA INDUSTRIAL DEVELOPMENT AUTHORITY (NOIDA)

6.2.56. The New Okhla Industrial Development Authority was established in April, 1976 under the U. P.

established in April, 1976 under the U. P. Industrial Area Development Act, 1976 for planning and development of an integrated township in backward area of Tehsil Dadri of Bulandshahar district (later transferred to Ghaziabad district). An area of 3800 hectares is proposed to be developed under this scheme. Following achievements have so far been made :

1. Land acquisition of 2715 hectares has been completed.

2. Under Industrial Area Phase-I, 324 hectares (approx) of land has been developed out of which 4543 plots and 1080 industrial sheds have been allotted.

3. Up to the end of year 1987-88, employment has been generated for nearly 47000 industrial workers.

4. Approximately 9736 residential houses on plots varying from 25 sq.mts. to 180 sq.mts. have been constructed.

5. Approximately 18460 residential plots of sizes varying from 112.5 sq.mts. to 450 sq.mts. have been developed.

6. Approximately 496 commercial units which include shops, restaurants, kiosks etc. have been constructed.

7. In the Industrial Area Phase-III, in Sector 57, most of the plots have been allotted.

8. In the Industrial Area Phase-II over 200 industrial units have been set-up.

9. For medium and large-scale industrial units and Government of India's Export Processing zone, nearly 107 hectares land has been developed.

6.2.57. From the year 1976 to the end of 1987-88, the Authority has spent about Rs. 225.00 cr. The Authority has received the following assistance from the

State Government up to the end of 1987-88 :

	(Rs. in lakh)
Revolving Fund	1748.00
Loans	1290.20
Subsidy for the development of villages	23.33
For the allotment of land to WASME	10.80

6.2.58. In the year 1989-90, the following major works will be carried out:

1. In the Industrial Area Phase-III, development of Sectors 58 and 59 will be completed and development of Sector 60 will be started.

2. In the Industrial Area Phase-II, the development of Hosiery, complex will be completed.

3. In the residential area, the development work of Sector 34 and 35 will be completed.

4. In Low Cost Housing Scheme, 252, two-roomed houses and 401 one room houses will be completed. Besides construction of 855 two-roomed houses and 1400 one room houses will be taken up whereas for High Income Group 470 houses will be taken up for construction.

5. Further development of villages.

6. Strengthening of Power Distribution System.

7. Payment of enhanced land compensation. An outlay of Rs. 179.00 lakh is proposed for 1989-90.

#### TOOL ROOM PROJECT

6.2.59. The Institute of Tool Room Training has been established with financial and technical assistance from Government of Federal Republic of Germany. The activities of the Institute can be summarised in 3 categories viz. training courses, consultancy and service centres.

The Institute has proposed to augment the above the above activities in 1989-90. The assistance of the Government of the Federal Republic of Germany will also be available in this expansion phase (Phase-II) of the project. Training will be imparted in tool making, die casting, plastic moulds, jig fixtures, press tools etc.

6.2.60. For successful running of this Institute, additional equipment and machines were recommended. For the purchase of these machines payment of the custom duty on imported equipments, excise duty, sales tax will involve additional expenditure. Besides, additional amount will be required due to enhancement of Salary and recurring expenditure. New course of training will be started. An outlay of Rs. 190.00 lakh is proposed for 1989-90.

#### LAND ACQUISITION SCHEME

6.2.61. A number of Central and State Sector Projects are to be set up in the Seventh Five Year Plan such as Gas based Fertilizer, Petro Chemical Complex and other projects. The State Government has to acquire land for Central and State Sector Projects for which necessary provisions are being made. An outlay of Rs. 10.00 lakh is proposed for 1989-90.

#### PIONEER AND PRESTIGE UNITS SUBSIDY SCHEME

6.2.62. The State Government has introduced a Scheme of Subsidy for "Pioneer" (Capital Investment of Rs. 1.00 cr. or above) and Prestige (Capital Investment of Rs. 25.00 cr. or more) units to encourage major investment in the State. The subsidy to these units is Rs. 15.00 lakh but these 'Prestige' units which develop Ancillary Units are entitled for an additional subsidy of Rs. 15.00 lakh.

6.2.63. In Seventh Five Year Plan a sum of Rs. 200 cr. has been approved as an outlay, out of which an amount of Rs. 120.00 lakh has already been invested under this scheme upto 1987-88. For 1988-89 Rs. 30.00 lakh has been provided.

An outlay of Rs. 80.00 lakh is proposed for 1989-90.

#### CONTINUING STAFF OF HEAVY INDUSTRIES

6.2.64. The State Government have provided some staff for the administration of licenced projects, providing facilities to issue licences, to monitor the implementation of letters of intent and other facilities to State Sector Projects. The Staff of Heavy Industries has also helped for providing the financial and other assistance to Central/State Sector project and Corporation. An outlay of Rs. 6.00 lakh is proposed for 1989-90.

#### SUBSIDY ON DIESEL GENERATING (D.G.) SETS

6.2.65. Keeping in view of the power shortage prevailing in the State, the Government has introduced this scheme. This was aimed at preventing loss of production and unemployment due to power shortage. In the present scheme, large scale units are being given subsidy at the rate of Rs. 500 per KVA capacity of the diesel generating sets. The D.G. sets can be installed subject to a maximum 120 per cent of the connected power load. If the power is not provided for normal running by U.P. Electricity Board D.G. Sets cannot be allowed to be installed since these are meant as stand by units.

6.2.66 This is a continuing scheme being implemented through U.P.F.C. The Scheme has been evaluated and has been found to be useful for the entrepreneurs. The subsidy is disbursed after sanction in two phase i.e. 50 per cent of the subsidy is released on installation and the balance after two years of successful utilisation. An outlay of Rs. 50.00 lakh is proposed for 1989-90 to meet the old commitments under this scheme.

#### SUGAR INDUSTRY

6.2.67. Sugar Industry occupies a very important position in the economy of the State. There are 104 Sugar Factories in Uttar Pradesh. About 25

million cultivators are engaged in the production of sugar cane. The Industry gives direct employment to about one lakh people besides those engaged in distilleries, confectioneries, biscuit manufacturing etc.

6.2.68. In 1987-88 the production of sugar in the state was 26.65 lakh metric tonnes against 85.00 lakh metric tonnes in the whole country.

6.2.69. *The U. P. State Sugar Corporation Ltd.*—The U. P. State Corporation was created on 26th March, 1971 with the objective of taking over sick sugar mills. Initially 12 sick factories were put under the umbrella of the Corporation. In 1974 Pipraich Sugar Factory (Gorakhpur) was purchased by the Corporation. 12 more Sugar Factories were acquired by the Corporation. There are in all 31 Sugar Factories being run by the Sugar Corporation with a total crushing capacity of 40440 tonnes crushed per day TCD. An outlay of Rs. 1250.00 lakh has been proposed for the year 1989-90.

6.2.70. *Saharanpur*—It is proposed to modernise and expand this unit from its present capacity of 1322 TCD to 2500 TCD at an estimated cost of Rs. 2400.00 lakh, out of which equity share of the State Government would be to the tune of Rs. 360.00 lakh. The proposal has been sent for approval of PIB. Letter of Intent for grant of Industrial Licence has been received. Loan application has also been sent to financial institutions. The proposed provision to the tune of Rs. 360.00 lakh for this scheme in the year 1989-90 is proposed to meet the requirement of purchase/acquisition of land, purchase of iron, cement and steel and to cater the payment of advances to be made to machinery and civil contractors. It is expected to take up the project from April, 1989 and it shall be completed by March, 1991.

6.2.71. *Rohana Kalan*—It is proposed to modernise and expand this unit from its present capacity of 1300 TCD to 2500 TCD at an estimated cost of Rs. 2400.00 lakh out of which

equity share of State Government would be to the tune of Rs. 360.00 lakh. The project report has already been sent for approval of PIB while Industrial Licence application was sent long back to Government of India. The proposed provision of Rs. 360.00 lakh during the year 1989-90 is essential to meet the requirement of purchase of land, iron, steel and cement and advance to be paid to the machinery suppliers, civil contractors etc. The specifications are being prepared for floating tender enquiries for supply of plant and machinery and civil works. It is expected that the plant would be commissioned by March, 1991.

6.2.72. *Hardoi*—This is an old plant having capacity of 1800 TCD. As per order of Government of India the purification process of sugar factories has to be changed from Carbonation to sulphitation. It is, therefore, proposed to undertake the conversion of process of this unit immediately with a total investment of Rs. 290.00 lakh. It is therefore, proposed that a sum of Rs. 10.00 lakh be provided by the State Government in the year 1989-90 to take up the work of conversion of process from Carbonation to Sulphitation and subsequently to replace a few obsolete equipments to improve the performance of the plant at the existing capacity.

6.2.73. *Chhata*—This factory was established in the year 1978 with a capacity of 1250 TCD. Taking into account its uneconomic condition on the 1250 TCD capacity it is proposed to expand this unit from its present capacity to 2500 TCD at an estimated cost of Rs. 1000.00 lakh with share capital of State Government of Rs. 150.00 lakh. The project report, loan application and Industrial Licence application are being sent shortly to the concerned agencies. A sum of Rs. 150.00 lakh is proposed in 1989-90 for disbursement by the State Government. The plant is expected to be commissioned in the end of the year 1990.

6.2.74. *Maholi*—It is proposed to modernise and expand this unit from its present capacity of 1524 TCD to 2500

TCD at an estimated cost of Rs. 2400.00 lakh, out of which the equity share capital of the State Government would be to the tune of Rs. 360.00 lakh. An amount to the tune of Rs. 210.00 lakh has been proposed to be provided in the outlay of 1989-90 to cater the requirement of purchase of land, cement, iron and steel and to make advance payment to civil and machinery contractors. The scheme has been sent for approval of PIB long back. The work at this project shall commence during 1989 and shall be completed by March, 1991.

6.2.75. *Burhwal*—It is proposed to modernise and expand this unit from its present capacity of 800 TCD to 2500 TCD at an estimated cost of Rs. 2400.00 lakh, out of which the equity share of the State Government would be to the tune of Rs. 360.00 lakh. The proposal for approval by PIB has already been sent. A sum of Rs. 60.00 lakh has been proposed in the year 1989-90 to cater the initial requirements of purchase/acquisition of land. It is proposed to complete the work by November, 1991.

#### U. P. CO-OPERATIVE SUGAR FACTORIES FEDERATION

6.2.76. Thirty Sugar Factories are working in Co-operative Sector under the umbrella of U.P. Co-operative Sugar Factories Federation with a total capacity of 43,050 TCD. In addition, existing distilleries are also being administrated by the Federation. Construction of two new distilleries is also in progress.

6.2.77. *Establishment of new sugar factories* — Construction work of a new sugar factory at Sneh Road Bijnore is under progress. The cost of the factory is estimated at Rs. 2,200.00 lakh. The State Government have already made available Rs. 204.00 lakh during 1987-88 and 1988-89. The additional amount of Rs. 400.00 lakh has been provided in the current year to expedite the work. During 1989-90 an outlay of Rs. 150.00 lakh has been proposed to complete the work of the factory.

6.2.78. *Expansion of existing sugar factories*—During Seventh Plan period the expansion in the existing capacity of 1,250 TCD to 2,500 TCD has been planned for each of the sugar factories at Nanauta, Ramala, Berlayan, Sampurnnagar and Bisalpur in addition to the expansion of Sarsawa Sugar Factory from 1,500 TCD to 2,500 TCD. Work at Nanauta, Ramala Belrayan and Sarsawa is expected to be completed in the current year 1988-89 while work on Bisalpur and Sampurn Nagar is expected to be completed by the end of Seventh Plan.

6.2.79. *Establishment of new distellery units*—Two new distelleries at Nanpara (30,000 Liters/day) and Kayamganj (6,000 liters/dav) were proposed in the Seventh Plan. The construction of these distelleries is under progress and likely to be completed in the current year 1988-89.

6.2.80. *Establishment of affluent treatment plant*—In order to control pollution and to generate electricity from the discharge of distelleries, establishment of affluent treatment plants were planned in Seventh Plan at Nanauta, Majhauila, Anupshahar, Bazpur, Kayamgni and Nanpara. The plant at Majhauila has already been established. Work on Nanauta is likely to be completed during the year 1988-89 while work at other plants is likely to be completed by the end of Seventh Plan.

6.2.81. *Financial Assistance to weak mills*—Sugar Factories located in backward

areas where sugarcane supply is inadequate, have suffered heavy losses. During 1989-90 an outlay of Rs.400.00 lakh has been proposed for rehabilitation of sugar factory at Ghosi (Azamgarh).

6.2.82. During the Seventh Plan an outlay of Rs.4800.00 lakh was provided of which Rs.3,347.75 lakh are likely to be utilised by the end of the year 1989. An outlay of Rs.1,250.00 lakh has been proposed for 1989-90 to be utilised as detailed below :—

1. <i>For New Sugar Factory</i>	
(1) Sneh Road (Bijnore) ..	150.00
(2) Bansgaon (Gorakhpur) ..	269.00
2. <i>Expansion of Sugar Factories</i>	
(1) Sampurna Nagar (Kheri) ..	240.00
(2) Bisalpur (Pilibhit) ..	40.00
3. <i>By Product Units</i>	
(1) Establishment of new distellery at Nanpara (Behraich) ..	51.00
4. <i>Affluent treatment Plants</i>	
(i) Anoopsahar distellery ..	25.00
(ii) Kaimganj ..	50.00
(iii) Nanpara ..	25.00
5. <i>Financial Assistance to weak Sugar mills</i>	
(1) Ghosi (Azamgarh) ..	400.00
Total ..	1250.00

### 6.3. MINING

The State of Uttar Pradesh is richly endowed with mineral resources such as lime stone, dolomite, magnesite, silica sand, rock phosphate, gypsum etc. which are commonly used in power projects, steel, chemical, refractory ceramic and glass industries etc. In addition, minor minerals such as building stones, ballast, sand, brick-earth etc. constitute a big resource in the construction material. Minerals worth over Rs.200.00 crore were produced in the state during 1987-88.

6.3.2. The activities in mining sector are carried out by (a) Directorate of Geology and mining U.P. and (b) the U.P. State Mineral Development Corporation Ltd. The search and exploration of the minerals is carried out by the Directorate of Geology and mining U.P., while the minerals (searched by the directorate) are developed by the U.P. State Mineral Development Corporation Ltd. The two agencies have complementary functions in the ultimate development and exploitation of the mineral resources in the State.



**DIRECTORATE OF GEOLOGY AND MINING  
U. P.**

6.3.3. The directorate of Geology and Mining U. P. was created in August, 1955 with the objective of carrying out mineral investigation programmes to establish mineral properties in U. P. The directorate has also been given mineral concessions and mining administration work since 1963 for scientific extraction and exploitation of minerals and augmenting government resources. Under the integrated plan for ecological regeneration in hill region, the directorate is also carrying out engineering geology investigations since 1985. Thus the main activities carried out by the directorate are

exploration, mining administration and engineering geology.

6.3.4. In formulation of Seventh Plan the main emphasis was given to the exploration of the mettalic ores beside intensifying mining administration work to increase Government revenues.

6.3.5. Out of 57 mineral investigation programmes outlined till now, 35 were taken up during the Seventh Plan of which 21 will be completed by the end of Seventh Plan, 14 will spill-over to Eighth Plan and the remaining 22 will be taken up during the Eighth Plan. The physical targets and achievements during the Seventh Plan are given as below :

TABLE 11—Physical targets and achievement

Item	Unit	1985-90 Target	Achievement during		Target for 1989-90	Likely achievement during 1985-90
			1985-87	1988-89 Anticipated		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Drilling	(Meters)	36000 (12000)	22285 (5349)	7900 (1900)	8500 (2500)	38685 (9749)
2. Pitting	(Cubic meters)	14000 (6000)	9524 (4877)	2500 (900)	3000 (1000)	15024 (6777)
3. Detailed mapping	(Sq. km.)	100 (40)	64.7 (29.9)	17.5 (6.0)	20 (10)	102.2 (45.9)
4. Travelling	(Sq. km.)	5000 (3000)	1685 (860)	270 (210)	1000 (500)	2955 (1570)

Not : —Figures in Paranthesis indicate those for hills

6.3.6. The activity-wise achievements in the Seventh Plan period till now are as under :—

(a) *Mineral Exploration*

Thirty-five mineral explorations were taken up. These include :

(i) *Preliminary surveys* — Six such investigation were taken up of which one has been completed and the remaining 5 are continuing.

(ii) *Detailed surveys* — Twenty-one detailed surveys for blocking out grade-wise reserve of specific minerals commodities were taken up, of which 3 are completed while remaining 16 are continuing and the two investigation are yet to be taken up.

(iii) *Regional surveys*—Eight investigations were taken up of which 4 are completed and the rest 5 are continuing.

*(b) Mining Administration*

(i) *Mining regulation* — During 1985–88, a total of 287 applications were processed, 225 inspections and 402 demarcations were carried out.

(ii) *Royalty Assessment and Realisation*—Surveys and inspections of mining areas and district offices for assessment of income from minerals and collection of royalty and rent through the district offices (under the control of District Magistrates) have been done and a royalty amounting to Rs. 30.27 cr. has been realised during 1985–88.

(iii) *Minor mineral surveys*—Thirty-seven surveys have been carried out for recommending the suitable type of concession and regulatory system for maximum income to the Government.

During 1985–88 period 2,340 cases were pursued in various courts at law out of which 685 cases were decided. 1,655 cases generally related to the payment of royalties are still pending in the courts.

*(c) Engineering Geology*

Short term investigation are carried out at the instance of the user department for examining the geological and environmental suitability of construction sites. During 1985–88, 425 investigations were completed, including 94 cases of roads, 24 canals, 27 water supply schemes, 6 bridge sites, 1 power supply scheme, 155 building construction sites, 102 land slide problem and 10 other cases. 700 problems are still pending investigation. Mineral reserves outlined during 1985–88 are as follows :

(In million tonnes)

1. Lime stone (Mirzapur, Nainital, Dehradun, Almora and Tehri)	25.76
2. Dolomite (Mirzapur, Dehradun, Almora and Tehri)	11.00
3. Granite (Jhansi and Hamirpur)	0.20,

(In million tonnes)

4. Magnesite (Almora)	1.00
5. Soapstone (Almora)	1.00
6. Marble (Mirzapur)	4.00
7. Marl and Kankar (Rae bareli Barabanki and Unnao)	1.00
8. Rock Phosphate (Lalitpur)	1.50
9. Pyrophyllite ((Lalitpur)	0.15
10. Copper-lead-zinc-ores Pithoragarh)	0.07
	45.68

*Programmes for 1988-89*

6.3.7. In all 25 mineral investigation 13 in plains and 12 in hill areas have been taken up of which 20 spilled over from 1987-88 and 5 were new investigations which are of preliminary nature related to the search of mettalic minerals in Latitpur, Mirzapur and Chamoli and the search of Gypsum and Barytes in Dehradun and Pauri Garhwal. Two investigations in plain areas related to pyrophyllite and Marl and two investigations in hill area related to geochemical survey and high grade lime stone in Dehradun have been completed. In addition to 25 investigations, one programme related to engineering geology has also started in the hill areas. Short term investigations related to minor minerals survyes all conducted on regular basis. Royalty worth Rs. 14.00 cr. is expected to be realised during 1988-89.

*Proposals for 1989-90*

6.3.8. The proposals for 1989-90 have been made to achieve the target of the Seventh Plan in a manner that programme likely to be completed in Seventh Plan may get a high priority.

There are no proposals for any new schemes. Two schemes continuing in the plain and 3 schemes in hills would, however need to be strengthened for which additional staff and equipment would be needed. It is extremely necessary to cope with the work and complete the projects.

Environmental geology and geotechnical investigations mainly in the hills are proposed in the Eighth Plan and beginning of these investigations is proposed in 1989-90. A geotechnical laboratory is proposed to be set up to strengthen the engineering geology investigations. For strengthening the engineering geology and starting environment geology and geotechnical investigations, additional staff and equipment will need to be provided in 1989-90.

6.3.9. Work in the mining administration is specially increasing and hence the wing needs to be strengthened. It is proposed to provide ready technical assistance to the District Magistrates of all important districts by posting mines officers at district level. This will provide a better co-ordination for checking illegal mining and increasing the revenue from minerals. Work related to mining administration will continue with emphasis on increasing revenue from minerals. A target of Rs.18.00 cr. royalty has been kept for 1989-90 for both major and minor minerals.

6.3.10. The mineral investigation programmes also need to be strengthened through specialisation by developing specialist services for better technological inputs for the field parties and improving the laboratory back up. Considerable amount of drilling equipment through continuous use has worn out and need to be replaced. The chemical lab., mineralogical, ore dressing and geophysical lab. also require some equipments which are proposed to be purchased.

6.3.11. For 1989-90, 25 mineral investigations, 14 in plain areas and 11 in hill areas are being taken up. Of these, 11 in plain areas and all the 11 in hills are continuing investigations. The remaining 3 in plain areas are the proposed new investigations. In addition to these, 3 short term investigations related to engineering geology are proposed to be taken up in 1989-90 of which one will be a continued investigation from 1988-89 and the rest 2 will be the new once.

6.3.12. An outlay of Rs.720.00 lakh including Rs.400.00 lakh for hills had been approved for the Seventh Plan against which Rs.359.16 lakh including Rs.196.32 lakh has been spent during the first three year, while the outlay of Rs.165.00 lakh including Rs.85.00 lakh for hills for 1988-89 is likely to be utilised fully during this year. An outlay of Rs.175.00 lakh including Rs.90.00 lakh for hills has been proposed for 1989-90.

#### THE U.P. STATE MINERAL DEVELOPMENT CORPORATION LTD.

6.3.13. The U.P. State Mineral Development Corporation Ltd. (U.P. S.M.D.C.) was created in March, 1974 with the main objective of accelerating the pace of mineral development in Uttar-Pradesh.

6.3.14. The UPSMDC evaluates the exploration data generated by the State Directorate of Geology and Mining with a view to mineral development and setting-up of mineral based industry. At present the Corporation is operating mining projects located in parts of Mirzapur, Allahabad, Jhansi and Dehradun districts for mining of lime stone and dolomite, silica sand, rock phosphate and high grade lime-stone, respectively, and two mineral processing plants-Calcium Carbide and Synthetic Emery in Dehradun and Banda district. The Corporation has also undertaken activities under its Research and Development Schemes for the recovery of placer gold from stream sediments in parts of Dehradun, Saharanpur and Garhwal districts and for recovery of tungston from deposits identified in parts of Almora and Garhwal districts. The Corporation is also associating with the development of copper-lead-zinc mineralisation in Pithoragarh districts.

An outlay of Rs.2,440.00 lakh including Rs.50.00 lakh for hills had been approved for Seventh Plan, against which Rs.1,643.00 lakh including Rs.212.13 lakh for hills have been utilized during the first three years 1985-88 of Seventh Plan. An outlay of Rs.441.00 lakh has been approved for the year 1988-89 which

is likely to be utilized. An outlay of Rs. 516.00 lakh including Rs. 1.00 lakh for hills has been proposed for 1989-90 to be utilized in the projects detail as under :

6.3.15. *Lambidhar Mining Project near Mussoorie District Dehradun*—The project which was approved at Rs. 10.90 cr. at a debt equity ratio of 1 : 1 for a production capacity of 4.5 lakh tonnes per annum has now been commissioned. It is proposed to further increase the capacity of this mine to 5.4 lakh tonnes per annum for which detailed feasibility report has been prepared by M/s. DCPL Consultants and the same is being studied by experts for implementation.

6.3.16. Lambidhar Mine has already in 1986 launched an ambitious project, at a cost of over Rs. 20.00 lakh named "Mines to Metallurgy and Habitat" in collaboration with Five National Research Laboratories of the Council of Scientific and Industrial Research, Government of India.

6.3.17. Hon'ble Supreme Court vide its judgment dated August 30, 1988 has permitted the UPSMDC to carry out the mining operations in its Lambidhar Mine till the expiry of its lease period i.e. 10-03-96 provided it meets all the objections raised by the working group. If it fails to comply with this direction to the satisfaction of the Monitoring Committee set-up by the Hon'able Supreme Court of India under this judgment, the monitoring committee is empowered to direct closing down of the mine. Therefore, in order to meet the objections raised about the mining operation at Lambidhar by the working group an amount of 25.00 lakh is needed.

6.3.18. *Silica Sand Mine, Lalapur, Allahabad District* — The UPSMDC is developing its Silica Sand Mines at Lalapur in Allahabad District for a total production of around 4.00 lakh tonnes of run of Mine Silica Sand. The run of Mine Silica Sand, thereafter, would be beneficiated to produce consistent grade of silica sand required for supplies to Glass

Industry and Foundries. The output from the beneficiation plant planned at 2,40,000 tonnes per annum. The project report approved by Public Investment Board for developing the mines (for an annual production of 4 lakh tonnes) indicates an investment of Rs. 4.70 crore at a debt equity ratio of 1 : 1, the debt shall be met from the financial institutions, which includes cost for drilling, blasting, mining equipments alongwith essential infra-structures for roads, arrangements for power and water supply and a housing colony.

6.3.19. The Corporation had undertaken the Pilot Mining Operations on the Silica Sand deposits in Lalapur in Allahabad district on the basis of permission granted by the State Government. The operations were directly supervised by the State Directorate of Geology and Mining. Currently the mine is being developed for the production capacity of 4 lakh tonnes of silica sand per annum. The project shall be completed by 1990 and the total requirement of silica sand for the production of Float Glass by the Corporation's Joint Sector Company, Continental Float Glass Ltd., shall be met by this mine.

6.3.20. *Continental Float Glass, Bargarh, Banda District* — The UPSMDC through its joint sector Company M/s. Continental Float Glass at Bargarh in Banda district based on the silica sand reserves in Allahabad—Banda area, the project for manufacture of float glass by the float process is being set-up. The capacity of the plant is to be 25 million sq. meter of glass per annum on 2 mm. basis. The project had been appraised at a cost of Rs. 180.00 cr. by the Central Financial Institutions in May, 1986. The project cost has since been up-dated to Rs. 249.14 crore and it has been found that the project is still viable in the debt equity ratio of 2.28 : 1. IFCI have been informed about the recent change in the equity and management structure of CFG and have expressed satisfaction on the induction of M/s. Continental Construction Ltd. as an equity partner. One of the principal

conditions of IFCI was that all the promoters bring in 50 per cent of their equity contribution prior to release of bringing finance/loans by the institutions. This condition has been met by the Co-promoters, GDMS-ANN, Pilkington and CCL and its nominees. The UPSMDC's 26 per cent equity amount comes to Rs.1,968.00 lakh. The UPSDMC's 50 per cent share of the equity comes to Rs.984.10 lakh, out of which only Rs.798.00 lakh has so far been contributed by the UPSMDC. A letter for the additional allotment of Rs.186.10 lakh has been sent to the Government in order to meet the UPSMDC's corporate obligation to CFG.

6.3.21. Besides the above, an amount of Rs.396.00 lakh is required by the UPSMDC during the next financial year in order to bring the equity investment of UPSMDC in CFG up to 70 per cent by investing further 20 per cent share of its equity.

6.3.22. *Silica Sand Beneficiation Project, Allahabad District* — As discussed under Silica Sand Mine, the UPSMDC has been proposing to set-up a beneficiation plant for processing approximately 4 lakh tonnes of run of mine of silica sand for producing a consistent high quality sand for the UPSMDC's Float Glass Project and Foundry Industry. Turn-key-offers for design, supply, erection and commissioning of such a plant were invited on the basis of specifications drawn by the Indian

Bureau of Mines Nagpur and National Metalurgical Laboratory, Jamshedpur who had done extensive beneficiation test work. However, later on, the consultancy was awarded to British Industrial Sand Ltd. of U.K. to draw a process route (Flow-sheet) for the beneficiation of Silica Sand from Lalapur Mine. The project is likely to cost around Rs.4.00 cr.

It has been decided that the British Industrial Sand Ltd. would compile a layout drawing alongwith a preliminary appraisal report by early September, 1988 after getting some of the test results of the remaining 16 bore hole core samples now being tested by the IBM, Nagpur. While in accordance with the present agreement—BIS will provide the technology, there is no provision for BIS to physically demonstrate that the technology adopted and the plant constructed and commissioned would perform to the predicted standards. It is being felt that in the light of UPSMDC's needs, it would be appropriate for them to become fully associated with the mining and beneficiation project at Lalapur in Allahabad district.

It is being thought over that in case UPSMDC could set-up a new subsidiary company, BIS could offer to take a small equity stake. During the next financial year 1989-90, a sum of Rs.94.00 lakh is proposed for increasing and expediting the activities.

## CHAPTER VII

### TRANSPORT

#### 7.1. CIVIL AVIATION

The Directorate of State Civil Aviation established in August, 1980, takes care of VIP flights and conducts training in Civil Aviation. During Sixth Plan, an expenditure of Rs.6.77 lakh was incurred out of which Rs.2.00 lakh were spent on purchase of two old trainer air-crafts, Rupees 0.47 lakh on construction of petrol storage shed at Amausi (Lucknow) and the rest Rs.4.30 lakh on the establishment of Civil Aviation Training Centre at Faizabad. The Seventh Plan out-

lay for this Directorate is Rs.190.00 lakh, against which Rs.231.27 lakh have already been spent during the first three years of the plan. For 1988-89, there is a provision of Rs.189.85 lakh, including Rs.150.00 lakh for hills. An outlay of Rs.200.00 lakh has been proposed for 1989-90 including Rs.150.00 lakh for hills.

The scheme-wise break-up of expenditure and of the proposed outlay are as under :—

TABLE 1—Outlays and expenditure

Name of scheme	1985-86 Actual expenditure	1986-87 Actual expenditure	1987-88 Actual expenditure	1988-89 Anticipated expenditure	1989-90 Proposed outlay
(1)	(2)	(3)	(4)	(5)	(6)
1. Civil Aviation Centre at Faizabad	1.69	2.87	2.71	2.98	3.50
2. Scholarship for Trainees ..	0.92	0.93	0.93	1.50	2.00
3. A.M.E. Training Centre ..	..	5.21	0.49	0.98	2.00
4. Purchase of NDB/VHF for Faizabad and Varanasi Centres	..	..	5.62	..	..
5. Purchase of simulator ..	..	..	..	1.15	25.00
6. Strengthening of Engine Workshop	2.10	3.00	..	..	..
7. Modernisation and computerisation of stores	3.30	15.13	1.04	2.00	3.00
8. Construction of Petrol shed at Amausi	0.25	..	..	..	..
9. Land acquisition for Indira Gandhi Rashtriya Urban Academy at Fursatganj	29.70	..	..	..	..
10. Construction of functional and residential buildings	76.72	1.20	7.16	36.91	..
11. Construction of Civil Engineering Cell	..	..	1.06	1.00	3.50
12. Posts for Faizabad and Muirpur airstrip ..	..	..	2.98	0.60	1.00
13. Construction of Jhansi Air field	..	..	13.50	14.38	..
14. Construction of Air field at Pithoragarh and Chamoli	..	28.76	24.00	150.00	150.00
15. Establishment of electrical shop	..	..	..	..	10.00
Total ..	114.68	57.10	59.49	212.00	200.00

**7.1.2. Establishment of Civil Aviation Flying Training Centre at Faizabad—**

A flying training centre has been established at Faizabad during Seventh Plan. This centre imparts flying training to candidates for obtaining pilot licences. A number of candidates have been trained in this centre. An expenditure of Rs.3.50 lakh is estimated on the centre during 1989-90.

**7.1.3. A. M. E. Training Centre—**—There is an acute shortage of Aircraft Engineers in the country. One AME Training Centre has, therefore, been established during 1987-88. This centre will impart training to suitable candidates for obtaining AME licences. An expenditure of Rs.2.00 lakh is estimated during 1989-90.

**7.1.4. Scholarship for Flying and AME Trainees —** To encourage bright candidates, who are keen to take up flying as a career, scholarships are sanctioned to four flying trainees every year. Out of this, two scholarships are given for obtaining private pilot's licence and two for obtaining commercial pilot's licence. Similarly, scholarships are also given to candidates on yearly basis for obtaining AME licences. A total expenditure of Rs.2.00 lakh is estimated on scholarship (Flying and AME Trainee) during 1989-90.

**7.1.5. Computerisation and renovation of stores —** During Seventh Plan, a computer has been installed in the Directorate for maintenance and effective control of stores. For maintenance of this computer, an expenditure of Rs.3.00 lakh is estimated during 1989-90.

**7.1.6. Twin Engine Simulator—**A flying simulator is being installed in the Directorate to impart special training to pilots. An expenditure of Rs.25.00 lakh is estimated to be incurred on the simulator in 1989-90.

**7.1.7. Establishment of Civil Engineering Maintenance Cell—**The Directorate of Civil Aviation has also been entrusted with the work of construction of new airstrips in the State as well as maintenance and repair of old airstrips. Some

new airfields are being constructed in hill areas of the State at Pithoragarh, Gauchar and Uttarkashi. The work of repair and maintenance of existing state owned airstrips is also under progress. For carrying out this maintenance, a Civil Engineering Maintenance Cell has been created in the Directorate during 1987-88. An expenditure of Rs.3.50 lakh is estimated on this item during 1989-90.

**7.1.8. Muirpur and Faizabad Airstrips—**The repair work of airstrips of Faizabad and Muirpur has been completed and airstrips are now fully serviceable. The aforesaid towns of the State are important because of their historical, religious, tourist and industrial background, and their airstrips are used quite often. These places are proposed to be linked with regular services also. An expenditure of Rs.1.00 lakh is estimated on this item during the year 1989-90.

**7.1.9. Establishment of Electrical Shop—**Air-crafts are fitted with a number of electrical equipments e.g. magnates, relays, regulators, batteries, starters, generators, motors and inverters etc. These equipments require periodical servicing and overhauling. Besides, the batteries need frequent charging and capacity testing. The electrical shop of the Directorate is not fully equipped at present. Proper facilities for charging and capacity testing of the batteries are also not available. It requires constant current generators and battery analysers for quick and efficient servicing/testing of batteries. Similarly no facility exists in the Directorate for testing other electrical equipments such as magnates, relays, regulators, generators etc. Due to lack of proper facilities it becomes rather difficult to identify the faulty electrical equipments in the aircraft. Even minor repairs of the said equipments can not be carried out in the Directorate because they can not be tested after repair, which is a mandatory requirement. It is, therefore, proposed to establish a fully equipped electrical shop with all the required facilities for the above. A sum of Rs.10.00 lakh is estimated on the construction of the proposed shop and procurement of necessary tools, test equipment and machineries during 1989-90.

7.1.10. *Construction of Airfields in Hill Areas*—To provide quick transport facilities to VIP's in the hills, the State Government has decided to construct airfields in the hill areas. For the time being, three districts of hills namely Pithoragarh, Chamoli and Uttarkashi have been selected for construction of airfields. The acquisition of land in Pithoragarh and Chamoli is in progress and it is expected

that the construction work will start during 1988-89.

7.1.11. Acquisition of land in Uttarkashi will be taken up in 1989-90. The construction of airstrips in district Pithoragarh and Chamoli will be completed by 1989-90. An outlay of Rs. 150.00 lakh has been provided in 1989-90 for the construction of these airstrips in hills.

## 7.2 ROADS AND BRIDGES

Roads and Bridges are an essential infrastructure for socio-economic development and are often cited as an indicator of the level of development. The integration of different economic functions of production, marketing and consumption is possible only through roads and bridges. The construction and maintenance of roads and bridges also generate sizeable employment opportunities, a factor that has assumed considerable importance with demographic expansion and the growth of labour force. A net work of all-weather roads and transport is necessary to transfer benefits of various development schemes to masses.

7.2.2. The entire landscape of the state is criss-crossed by a large number of rivers and nalas. Consequently, to provide effective and all-weather linkages, the state needs comparatively more large and small bridges and culverts than other states of the country.

7.2.3. Systematic efforts for road development at the national level were initiated in 1929 when the Jayakar Committee considered the improvement of road systems in a comprehensive manner. Later in 1943, Chief Engineers incharge of roads in the country convened a conference at Nagpur and submitted a plan for a period of 20 years beginning from December, 1943. On the basis of the formula evolved in Nagpur plan, the road requirement worked out to 2,571 Km. in Uttar Pradesh in the next 20 years to achieve a road density of 16 Kms. per 100 Sq. Kms. The desirable density was again discussed in 1957 by the Chief Engineers incharge of roads and bridges in states and another

plan, popularly known as Bombay plan, was formulated. The Bombay plan envisaged that no village should be more than 6.4 Km. away from a metalled road or more than 2.4 Km. away from any type of road in developed agricultural areas. To achieve this target, the road density should reach the level of 32 Kms. per 100 Sq. Kms. of area by the end of 1981. A conference of Indian Road Congress held at Lucknow in 1985 formulated the road length requirement plans of various states for 1981-2001. The main recommendations of the Indian Road Congress are as under :—

(1) All villages or groups of villages with a population of 500 and above should be connected by all-weather roads by 2000. For villages of less than 500 population, the road network should be so planned that an all-weather road is available at a distance of less than 3 Km. in plains and 5 Km. in hills.

(2) Road links should be provided on the basis of cluster or group of villages. Because of less population of villages in hill areas, villages located within a radius of 1.6 km. and having an altitude difference of not more than 200 m. can be considered as one cluster. Isolated villages having population of more than 500 should be provided with an all-weather link road.

(3) The density of road for hill areas should be 40 km. per 100 Sq. km. area upto an altitude of 2100 m. above M.S.L. and 15 Km. per 100 Sq. Km. in areas above an altitude of 2100 m. above M.S.L.



(4) In plains it should increase from 32 km. to 80 km. per 100 Sq. km.

(5) Planning of National Highways will be done in such a way that no part of the country should be more than 50 km. away from a National Highway.

7.2.4. As per above recommendations of road density criteria, the length of roads in U.P. should be 2,35,500 km. by 2001 and on the basis of minimum distance criteria of village connectivity it should be 3,55,160 km.

7.2.5. The geographical area of this state being 2.94 lakh sq. kms. the total road length, which should have been available by 1981 as per Bombay plan is about 94,200 km. The length of roads of P.W.D. in the state increased from 15,113 km. in 1947 to 76,162 km. (including National Highways) at the end of the Sixth Plan. As such the balance of about 18,040 kms. of roads is still required to achieve even the Bombay Plan target fixed for the year 1981. The general area concept of Nagpur and Bombay Plans has been modified by the concept of Minimum Needs Programme which at the National level envisages that all villages with population (on the basis of 1971 census) of 1,500 and above and 50 per cent of the total number of villages in the population range of 1,000 to 1499 will be linked by all-weather roads by 1990. The guideline had formed the basis of planning for rural roads during Sixth Plan. The emphasis on Minimum Needs Programme continue in the Seventh Plan also. During Sixth Plan attempts were made for providing maximum benefits with limited financial resources. Emphasis was laid on construction of new roads alongwith reconstruction, modernisation and widening of existing roads. However, during this period the increase in road-length was 17,357 km. Thus by the end of Sixth Plan, the total road length under PWD increased to 76,162 km. As a result of emphasis laid on minimum needs programme 7,731 villages with population of 1,500 and above and 4,893 villages with

population between 1,000 to 1,499 were connected will all-weather pucca roads by the end of Sixth Plan.

#### STRATEGY FOR SEVENTH-PLAN AND ANNUAL-PLAN 1989-90

7.2.6. The broad strategy for the development of road net-work in Seventh Plan is as follows:—

(1) Progressive removal of the present deficiencies in the State highways and major district road systems and thus achieve consolidation and upgradation rather than continued expansion of the road network.

(2) Achieve the targets of linking of all villages with population of 1,500 and above and 50 per cent of the villages with population between 1,000—1,499 by the end of the Seventh Plan.

(3) Improvement in the road system to bring about better productivity in the road transport.

(4) To plan for a new generation of roads on high density corridors with provision of divided carriage way facilities.

(5) Take effective steps for energy conservation.

(6) To use road construction programme as means of generating employment.

#### CRITERIA FOR SELECTION OF NEW ROADS

7.2.7. The following points have been taken into consideration in the selection of new roads:—

(a) Removal of regional imbalances

(b) Determination of inter-district priorities on the basis of kilometerage per lakh of population in hills and per 100 Sq. km. area in the plains

(c) Linkage of communication facility with identified and sanctioned schemes for the development of agriculture, dairying and growth centres for industrial development

(d) Priority to areas of industrial and mineral development and areas where irrigation, power, fertiliser, sugar cane etc. are being installed.

(e) Determining alignment of roads by adopting alternatives which maximise benefits in terms of villages connected and population served for one unit of cost.

7.2.8. The following steps are being taken in formulation and implementation of road projects :—

(i) Master Plans for road net work of each district have been prepared for plains on the basis of accepted criteria of accessibility, keeping in view the resource endowment, topography and characteristics of the district. In these Master Plans, alignment of roads has been planned in order to maximise social benefits.

(ii) Scientific techniques for formulation and appraisal of road and bridge projects are adopted especially with the objective of reducing costs and time over-runs.

(iii) Effective monitoring of road projects to cut down delays and to keep costs under control.

(iv) Standard working norms for men, material and equipment and standardisation of design and project estimates.

(v) Rural road construction works are being monitored every month at the district as well as State level for uniformity in specifications and co-ordination of rural road net-work of all departments.

#### OUTLAYS

7.2.9. To fulfill the various objectives stated above, an outlay of Rs. 965.00 crore including Rs. 175.00 crore for hills was approved for road development in the Seventh Plan. An expenditure of Rs. 579.32 crore including Rs. 99.66 crore in hills has been incurred during 1985-88. An expenditure of Rs. 192.22 crore including Rs. 33.75 crore for hills is anticipated during 1988-89.

For the annual plan 1989-90, the proposed outlay is Rs. 279.00 crore including Rs. 3.00 crore for Industrial Roads, Rs. 57.00 crore for World Bank project roads and Rs. 40 crore for hills.

#### INDUSTRIAL ROADS

7.2.10. Emphasis has been laid in Seventh Plan for linkage of communication facilities with identified schemes for industrial development. Industries play a very important role in integration of production, marketing and consumption functions through road net-work. Schemes have been taken up under industrial roads for the benefit of those areas which have been developed into industrial centres. Priority has also been given to areas of industrial and mineral development and areas where irrigation, power, fertilizer and sugar plants etc. are being installed. Expenditure of Rs. 1.18 crore and Rs. 1.99 crore has been incurred during 1986-87 and 1987-88 respectively and expenditure of Rs. 2.00 crore is anticipated to be incurred during 1988-89. An outlay of Rs. 3.00 crore is proposed for the annual plan 1989-90.

#### WORKS PROPOSED FOR 1989-90

7.2.11. Works proposed for 1989-90 are given in the annexure.

7.2.12. *National Highways* — The total length of National Highways in 1947 was 2431 km. in the State which could increase to 2744 km. only by the end of Sixth Plan against a total road length of 31710 km. of National Highways in the country. The road-length of National Highways in the State is 8.65 per cent of the total road length of National Highways in the country. The State has, thus, not received the requisite priority in respect of allocation of new National Highways. For the Seventh Plan, proposal for new National Highways as shown in the Annexure are being pressed with Government of India, Ministry of Surface Transport for acceptance.

7.2.13. *State Highways and Major District Roads*—The State Highways and Major district roads form the secondary

road system. The deficiency in the system would be gradually removed by laying greater emphasis on programmes for **pavement-rehabilitation and augmentation of capacity** to provide good linkages to district headquarters and sub-divisional-headquars. According to the Bombay Plan, the road length of State Highways in the state should have been 15587 km. by 1981 but only 7692 km. road length of State Highways could be achieved by the end of Sixth Plan. This is targetted to increase to 8806 km. by the end of 1989-90 due to more addition of length of S. H., by-passes and conversion of M. D. R. to S.H.

7.2.14. *Rural Roads*—The rural road construction programme is an important part of the National Minimum Needs Programme which envisages linking of all villages with a population of 1500 and above and 50 per cent of the villages with a population between 1000 to 1499 (on the basis of 1971 Census) by all-weather pucca roads by the end of the Seventh Plan. By the end of Sixth Plan, 7731 villages out of 10,899 villages with population 1500 and above and 4893 villages out of 11,396 villages with a population between 1000 to 1499 had been connected by all-weather pueca roads. By the end of 1987-88, 9,741 villages with population of 1500 and above are 6,012 villages with population between 1000 to 1499 have been connected. The anticipated achievement for 1988-89 is 555 villages with population of 1500 and above and 480 villages with population between 1000 to 1499. The proposed targets for 1989-90 are 603 and 556 villages respectively.

7.2.15. For rural roads an outlay of Rs.650.00 crore including Rs.120.00 crore for hills has been provided under

Minimum Needs Programme in Seventh Plan. An expenditure of Rs.324.55 crore including Rs.59.95 crore for hills has been incurred during first three years of the Seventh Plan and expenditure of Rs.123.30 crore including Rs.25.84 crore for hills is anticipated to be incurred during 1988-89. The proposed outlay for 1989-90 is Rs.131.01 crore including Rs.30.00 crore for hills. Thus, Rs.578.86 crore including Rs.115.79 crore in hills would have been spent by the end of Seventh Plan.

7.2.16. *Urban Roads*—A scheme has recently been approved for improvement of riding quality of Urban roads at various district Head quarters of the State (Roads of 42 small district head quarters and Lucknow and Kanpur) at a cost of Rs.40.10 crore for a total length of about 800 km. (for equivalent width of 3.50 m.). This work is anticipated to be completed during 1988-89.

7.2.17. *World Bank Project*—World Bank has approved a scheme for construction of 4 roads namely Gorakhpur-Sunauli, Gorakhpur-Ballia, Faizabad-Sultanpur-Pratapgarh-Allahabad and Allahabad-Jaunpur-Azamgarh-Dohrighat. The total cost of this project is estimated to be Rs.231.26 crore. The project has been earmaked to be completed by the end of 1992-93. The project has been negotiated by the World Bank authorities and agreement is likely to be executed soon. An expenditure of Rs.5.00 crore is anticipated during 1988-89 and Rs.57.00 crore during 1989-90.

7.2.18. *Spill over Works*—The anticipated spill over works on April 1, 1989 will be of the order of about Rs.525.00 crore for plains and about Rs.155.00 crore for Hills.

### 7.3. ROAD TRANSPORT

In the surface transport system, both for movement of passengers and goods, road transport is of great importance. There is a wide variety of mechanised and non-mechanised vehicles in the country for road traffic which provides some choice to people to travel and transport goods

according to their requirements. Motor transport efficiency depends on a good road system in addition to quality vehicles, adequate repair and supply of fuel. In view of the characteristics of easy availability and flexibility of operation, adaptability to individual needs, door-to-door

service and reliability, road transport is ideally suitable, for short and medium distances. It is also the main an important means of transport in hilly and rural areas not served by railways. Further, road transport provides one of the basic infrastructure for economic development of backward areas and serves as a feeder service to rail traffic.

#### NON-ROADWAYS

7.3.2. Road transport activities have witnessed phenomenal increase in the

recent years. The non-roadways activities of the State Transport Department mainly relate to regulation and enforcement of various provisions of Motor Vehicles Act, U.P. Motor Vehicle Taxation Act, Passenger Tax Act, Goods Tax Act and rules framed thereunder. Efforts have been made to strengthen the administrative and enforcement machinery which has resulted in substantial increase in state's revenue. If 1968-69 is taken to be the base year, the number of vehicles as well as the state revenue has increased tremendously as would be evident from the following table:

TABLE 2—Number of vehicles and revenue earned

Year	Total number of on-road vehicles (lakh)	Percentage increase in number of vehicles as compared to 1968-69	Total Revenue (Rs. in cr.)	Percentage increase in revenue as compared to 1968-69	Staff strength
(1)	(2)	(3)	(4)	(5)	(6)
Base year (1968-69)	1.00	..	12.89	..	1211
At the end of the third plan (1969-70)	2.05	105	24.09	86.85	1501
At the end of the Fifth Plan (1979-80)	3.69	269	51.05	296.04	1750
At the end of the Sixth Plan (1984-85)	8.10	710	117.05	808.06	2423
Till the Third year of the Seventh Plan (1987-88)	12.23	1123	167.34	1198.21	2871

7.3.3. An outlay of Rs. 18959.00 lakh has been sanctioned for the Seventh Plan and Rs. 3659.00 lakh for 1988-89. Outlay of Rs. 4100.00 lakh is proposed for 1989-90. An expenditure of Rs. 27599.49 lakh is anticipated to be incurred by the end of Seventh Plan i.e. 1989-90.

7.3.4. During 1985-86, posts of 6 sub-Regional Transport Officers and post of Nazir and Cashier for Transport Commissioner's Headquarter were created, 4 Enforcement Squads and 4 Check posts on Delhi-Ghaziabad border were established and for computerisation of records relating to vehicles and revenue collection seven direct Data Machines along with necessary equipment were purchased.

7.3.5. During the period of 1986-88 additional staff for sub-Regional Transport Offices, 36 posts of R.I./A.R. Is., one post of Additional Transport Commissioner (Admin.) at Head quarter, 20 posts of Assistant Regional Transport Officers (Admin.) some posts for Accounts at Headquarter were also created. Besides, 2 additional check posts at Hamidpur (Aligarh) and Mauranipur (Jhansi), 4 Regional Transport Authorities and two fitness workshops at Lucknow and Kanpur for proper checking of the vehicles and providing fitness certificates were established. A legal cell was also created and land for construction of office buildings of Regional Transport Officers at Meerut, Lucknow and Allahabad was also purchased.

7.3.6. In order to further improve efficiency of the department, equipments relating to computer, 6 driving licence machines and 15 gas analysers, land for Regional Transport Offices at Gorakhpur and Varanasi and testing grounds at Lucknow and Kanpur would be purchased. A State Transport Planning and Research Institute will also be established. Tinsed, ramp and office rooms for fitness workshop will be constructed. A bus terminal authority would be established and vehicles for the offices engaged in enforcement activities would be purchased during 1988-89.

7.3.7. The details of schemes proposed for 1989-90, are given below :

	<i>(Rs. in lakh)</i>
(1) Strengthening of headquarter and strengthening and creation of Zonal and Regional Offices	97.17
(2) Strengthening of Enforcement machinery	24.04
(3) Creation of Additional check posts	10.00
(4) Computerisation for preservation and maintenance of records	14.51
(5) Purchase of Land/Building for Headquarter and Regional Offices and extension, alteration and improvement of head-quarter building	80.00
(6) Creation of state Transport training, Research and Planning Institute	30.00
(7) Purchase of machinery and equipment	12.65
(8) Continuation of 4 Regional Authorities	29.31
(9) Establishment of Fitness Workshops at Lucknow and Kanpur	2.32
Total ..	300.00

7.3.8. A brief description of some of the schemes is given in the following paragraphs :

7.3.9. *Strengthening of Headquarter and strengthening and creation of Zonal and Regional Offices*—The work of registration, Tax Collection, issue of fitness certificates and driving licences etc. is done at Regional and sub-Regional Transport Offices. At present six Zonal Offices and 14 Regional Offices are functioning. Due to increase in the number of vehicles, the work load of these offices has also tremendously increased. In order to increase efficiency of the department, creation of two posts of Deputy Transport Commissioners for Zonal Offices viz., Allahabad and Agra, establishment of four Regional Offices at Ghaziabad, Aligarh, Etawah and Fatehpur and creation of 5 posts of Assistant Regional Transport Officers (Administration) for Muzaffarnagar, Bulandshahr, Mathura, Mirzapur and Saharanpur are proposed during 1989-90. The proposed expenditure of Rs.0.90 lakh for 1989-90. is for the continuation of Audit and Accounts machinery. One Enforcement squad consisting of A.R.T.O., Supervisor, Constable and some ministerial staff has already been posted in Bareilly, Gorakhpur, Allahabad and Ghaziabad districts but in view of the large number of vehicles on road, the present enforcement squad is unable to ensure proper follow-up of the various provisions of Motor Vehicle Act. Therefore, creation of 4 additional enforcement squads one each for Gorakhpur, Allahabad, Bareilly and Ghaziabad districts is proposed in the year 1989-90 under strengthening of enforcement machinery.

7.3.10. *Creation of Additional Check-posts*—The proposed expenditure during 1989-90 will be on the check-posts created during 1986-87 and 1987-88.

7.3.11. *Computerisation for preservation and maintenance of Records*—A composite scheme amounting to Rs. 14.51 lakh for computerisation work at the Regional Transport Offices and at Headquarters is under consideration in collaboration with U. P. Development Systems Corporation Ltd. The proposed expenditure will be incurred against this scheme during 1989-90.

7.3.12. *Purchase of land/alteration and improvement of headquarter building*—At present 6 D. T. C. and 10 Regional Offices are housed in rented buildings. Most of these rented buildings are indelapidated condition and are not suitable for work. Efforts will be made to provide departmental accommodation to these offices. Office building of Regional Transport Offices of Gorakhpur is proposed to be constructed during 1989-90.

7.3.13. The first floor of the present office at Headquarter was constructed in 1972. With the increase of work the second floor was constructed during 1982. To accommodate the further increased staff it is proposed to construct third wing along with other amenities. For construction of R. T. O. office building at Gorakhpur and expansion and alteration of the office building at Headquarter, an outlay of Rs. 80.00 lakh is proposed during 1989-90.

7.3.14. *Creation of State Transport Research and Planning Institute*—There is a great demand for scientific studies in urban and rural transport, in the State. Several other States have already established such Institutes. The basic objective of this State level Institute with headquarter at Lucknow would be to conduct studies

to affect economy, safety and operational efficiency of surface transport system, minimizing accidents in vehicular traffic on roads and to impart training in transportation etc. for which an outlay of Rs. 30.00 lakh is proposed during 1989-90.

7.3.15. *Purchase of machinery and equipment*—It is proposed to purchase 11 driving licence machines to provide effective and at the spot service to the applicants of driving licence during 1989-90 for which an outlay of Rs. 12.65 lakh is proposed.

7.3.16. *Continuation of Regional Transport Authorities*—Four whole time Regional Transport Authorities were sanctioned during 1987-88 to dispose off the applications for required buses to grant permits expeditiously. These authorities will continue in 1989-90 for which an outlay of Rs. 29.31 lakh has been proposed.

7.3.17. *Establishment of Fitness Workshops*—It has been experienced that the major reason for the immense increase of accidents in passenger and goods vehicles is due to the fact that mechanically unfit vehicles ply on the roads. To overcome this problem a scheme of issuing fitness certificates after scientifically testing the vehicles was introduced in 1987-88. The fitness workshops are proposed to be established at Lucknow and Kanpur for which workshops, ramps are to be constructed. An outlay of Rs. 2.32 lakh is proposed during 1989-90.

#### UTTAR PRADESH STATE ROAD TRANSPORT CORPORATION

7.3.18. The nationalised passenger bus service was started in Uttar Pradesh

in May, 1947 to promote rail-road co-ordination and also for balanced development of various modes of transportation to ensure all-round development of the State. The Corporation is providing passenger bus services on all important routes including interior and remote villages in the hills. It operates bus services on 1/3rd nationalised routes out of the total length of roads in the State.

#### REVIEW OF SIXTH FIVE YEAR PLAN

7.3.19. Sixth Five Year Plan (1980-85) of the State Road Transport Corporation was a capital plan of Rs.118.70 crore financed by the internal resources of the Corporation comprising Depreciation Reserve Fund (DRF) and Profit/Loss of the Corporation and Capital contribution by the State Government as equity as well as loans from the Life Insurance Corporation of India. During the Sixth Plan, 2929 buses were replaced and 307 km. of new routes were nationalised against a target of 3,591 buses and 1,800 km. roads respectively.

#### SEVENTH PLAN (1985-90)

7.3.20. During the Seventh Plan, the Corporation shall purchase 5,553 buses for replacement of overaged buses to achieve the objective of "no over-aged buses in the fleet." The UPSRTC would be adding 1,224 buses for augmentation and expansion. The expansion would be of a limited nature to cover contiguous sections opened up due to construction of bridges, construction of missing sections, routes lying in backward areas of Bundelkhand, hill districts and the eastern districts. The additional traffic generation on existing routes would however, be catered by increasing fleet-utilisation, bus utilisation and occupation

ratio. Reliable technical support to operations would be ensured by adding depot workshops, upgradation, and reinforcing existing Regional Workshops and replacing plants and machinery which have outlived their utility. The Central Workshop Complex at Kanpur would be streamlined and strengthened to undertake more body-building work for the corporation. Efforts will be made for adding to the durability and efficiency of buses by going in for aluminium body structures. Such a structure would reduce the body weight and the incidence of wear and tear and would also lead to economy in fuel consumption. The existing bus stations would be strengthened and developed in order to extend more facilities to the travelling public.

7.3.21. The Urban Transportation system of UPSRTC in 6 cities viz. Agra, Allahabad, Kanpur, Lucknow, Varanasi and Dehradun would also be improved by inducting more buses for operation on urban nodal scheduled routes and on suburban routes.

7.3.22. Variable cost is proposed to be brought down through strict observance of pre-determined vehicle norms in various fields of operation namely the performance of engines, consumption of fuel and oil, life of tyres and tubes, batteries and other assemblies. The fixed cost would also be reduced by increasing earning kilometres. The emphasis is on correct route planning and re-scheduling to ensure optimum utilisation of men and material as this would also lead to better passenger satisfaction.

7.3.23. The yearwise break-up of physical and financial targets and achievements in the Seventh Plan are given in Annexure-4.

7.3.24. The Seventh Plan of UPSRTC is proposed to be financed by internal resources of UPSRTC (Depreciation reserve fund and net profit/loss), loans from L.I.C., I.D.B.I. and capital contribution from State Government.

7.3.25. The yearwise original plan outlay, outlays approved by the state government and expenditure are given in the following table.

TABLE 4—Year-wise outlay and expenditure

Item	(Rupees in crore)				
	1985-86	1986-87	1987-88	1988-89	1989-90
(1)	(2)	(3)	(4)	(5)	(6)
1. Original Plan	32.49	34.84	36.45	40.77	41.04
2. Plan Outlay	31.29	34.42	34.48	34.48	38.00
3. Actuals	31.57	51.61	60.57	86.33	102.40
				(Anticipated)	(Proposed)

7.3.26. The year-wise resource position from 1985-86 to 1989-90 is given in the following table :—

TABLE 5—Resource position from 1985-86 to 1989-90

Item	(Rupees in crore)				
	1985-86 Actual	1986-87 Actual	1987-88 Pre-actual	1988-89 Estimates	1989-90 Estimates
(1)	(2)	(3)	(4)	(5)	(6)
1. Capital Contribution from State Government	10.00	15.00	15.00	29.00	20.00
2. Capital Contribution from Central Government	8.33	6.96	0.54	22.00*	10.00
3. LIFE INSURANCE CORPORATION					
(a) Loan from LIC	2.20	2.42	2.66	3.00	3.30
(b) Repayment of Loan to LIC				(-)-2.84	(-)-3.15
(c) Net Loan				0.16	0.15
4. INDUSTRIAL DEVELOPMENT BANK					
(a) Loan from IDBI	17.27	28.52	27.08	36.40	44.46
(b) Repayment of IDBI, Loan				(-)-20.30	(-)-27.70
(c) Net Loan				16.10	16.76
5. Loan from State Government	0.50	..	..	..	..
6. Loan from other financial Institutions/Banks	..	..	..	6.25	30.12
7. Internal Resources	0.88	11.19	32.72	12.82	25.37
Total	39.18	64.09	78.00	86.33	102.40

(\*) Includes Rs. 7.50 cr. balance capital contribution of previous year i.e. 1987-88 from Central Government.



7.3.27. During the first year of the Seventh Plan (1985-86) the corporation could purchase 895 buses only against a target of 1237 buses due to price escalation of chassis and increased cost of body building. During 1986-87 and 1987-88, only 1335 and 1189 buses could be purchased to replace the old and worn out buses.

7.3.28. The annual plan of 1988-89 envisages purchase of 1400 buses out of which 1195 buses are proposed to be purchased for replacement of old and worn out buses and 205 for augmentation and expansion of services of the corporation. This will enable the organisation to fulfill needs of growing demand of the travelling public. The renovation programme of old buses is proposed to be taken up on priority basis.

7.3.29. To give adequate Technical support to keep the fleet fit for operation, it is proposed to equip the existing workshops with modern equipment and replacing out-dated tools and plants. In order to strengthen the infrastructures, investment will also be made on the construction of new bus stops and modernising the existing ones.

7.3.30. The total requirement for purchase of new buses, renovation of old buses, construction of bus stops and modernisation of existing Bus Stations will be as under :—

Name of work	Qty.	Average rate (in lakhs)	Amount (Rs. in crore)
1. Chassis purchase for buses	1400	2.60	36.40
2. Bus body construction	1400	1.66	23.24
3. Cost of renovation of bus bodies	850	1.45	12.32
4. Purchase of Tools and plants Furniture and Fixtures	4.01 0.71		4.72
5. Land and Building	..	..	9.65
<b>Total</b>			<b>86.33</b>

7.3.31. The revised estimated expenditure for 1988-89, comes to Rs.86.33 crore as against the approved outlay of Rs.34.48 crore. Estimated resources for 1988-89 are as under :—

		(Rs. in crore)	
<b>I—CAPITAL CONTRIBUTION FROM</b>			
(a)	State Government		15.00
(b)	Central Government		7.50
<b>II—ADDITIONAL CAPITAL CONTRIBUTION</b>			
(a)	State Government		14.00
(b)	Central Government		14.50*
<b>III—LOANS FROM</b>			
(a)	L.I.C.	3.00	} 0.16
	Less repayment to LIC	(—) 2.84	
(b)	IDBI	36.40	} 16.10
	Less refund of loans to IDBI	(—) 20.30	
(c)	Other Financial Institutions/Banks		6.25
<b>IV—INTERNAL RESOURCES</b>			
(a)	DRF	36.00	12.82
(b)	Losses	(—) 23.18	
			12.82
	<b>Total ..</b>		<b>86.33</b>

(\* Includes Rs. 7.50 crores balance capital contribution of previous year i.e. 1987-88 from Central Government)

#### ANNUAL PLAN '1988-89'

7.3.32. The 'Annual Plan 1988-89' under state plan envisages expenditure of Rs.34.48 crore which is proposed to be financed by State Government Capital Contribution (Rs.29.00 crore), Loan from LIC Rs.3.00 crore, refund of loan to LIC (—) Rs.2.84 crore, Rs.16.00 crore Internal Resources (—) Rs.7.48 crore (DRF Rs.36.00 crore) Losses (—) Rs.23.18 crore and repayment of IDBI loans 20.30 crore and loan from IDBI, Rs.12.80 crore

Out of this plan outlay the UPSRTC will be able to purchase 809 buses.

(Rs. in crores)

1. Cost of 809 chassis@2.60 lakh per chassis	21.03
2. Cost of 809 body building @1.66 lakh per body	13.43
3. Expenditure on Tools and Plants	0.02
<b>Total</b>	<b>34.48</b>

#### Annual Plan 1989-90

7.3.33. The original plan envisaged purchase of 1559 buses during 1989-90. The revised plan now envisages purchase of 1560 buses out of which 1253 buses are proposed to be purchased for replacement of old and worn out buses and 307 buses for augmentation and expansion of services of the corporation. The renovation of 850 buses will also be taken up during 1989-90.

7.3.34. The financial requirement for purchase of new buses, renovation of old Buses, construction of Bus stops and modernisation of existing bus stations will be as under :-

(Rs. in crore)

1. Purchase of 1560 chassis@Rs. 2.85 lakh per chassis	44.46
2. Construction of bus body on 1560 chassis @Rs. 1.85 lakhs per chassis	28.86
3. Cost of renovation of 850 Buses @ 1.60 lakh	13.60
4. Land and building	13.17
5. Tools and Plants etc.	2.31
<b>Total</b>	<b>102.40</b>

7.3.35. The revised estimated expenditure in 1989-90 is Rs.102.40 crore against which the revised estimated resources are as under :-

(Rupees in Crore)

1. Capital contribution from State Government	20.00
2. Capital contribution from Central Government	10.00
3. Loan from Life Insurance Corporation	3.30
Refund of Loan to L.I.C.	- 3.15
	0.15
	0.15

(Rupees in crore)

4. Loan from I.D.B.I.	44.46	16.76
Refund of Loan to I.D.B.I.	-27.70	
	16.76	
5. Loan from Banks		30.12
6. Internal Resources		25.37
<b>Total</b>		<b>102.40</b>

Internal resources ;

1. D.R.F.	43.00
2. Losses	(- )17.63

Total Internal Resources 25.37

7.3.36. The Annual Plan envisages expenditure of Rs.38.00 crore which is proposed to be financed by capital contribution from State Government, loan from L.I.C., Internal Resources of the corporation and loan from I.D.B.I. Details of estimated resources are as under:-

(Rupees in Crore)

1. Capital contribution from State Govt.	20.00
2. Loan from L.I.C	3.30
Refund of Loan to L.I.C	(- )3.15
	0.15
3. Loan from I.D.B.I.	20.18
4. Internal Resources	(- )2.33
<b>Total</b>	<b>38.00</b>

Internal resources ;

(a) D.R.F.	43.00
(b) Profit/Loss	(- )17.63
	25.37

(c) Less Refund of I.D.B.I. Loans (-) 27.70

Internal Resource (-)2.33

7.3.37. The details of expenditure are as under :-

(Rupees in Crore)

1. Purchase of 808 chassis at an average cost of Rs.2.85 lakh per chassis	23.03
2. Construction of bus bodies at an average cost of Rs.1.85 lakh per body	14.95
3. Expenditure on (Tools and Plants)	0.02
<b>Total expenditure</b>	<b>38.00</b>

#### 7.4. INLAND WATER TRANSPORT

With growing pressure on the conventional modes of transportation, a saturation point is being reached. Other modes such as Inland Water Transport need to be seriously investigated and utilised for solving the fast increasing demands placed upon the transport system. River Ganga from Haldia to Allahabad has been declared a national waterway. The Government of India have proposed to establish six Inland Water Transport terminals at Allahabad, Mirzapur, Chunar, Varanasi, Ghazipur and Ballia.

7.4.2. The following four schemes for hydrographic and techno-economic feasibility studies had been submitted to Government of India in February, 1987 for clearance and acceptance as Centrally Sponsored Scheme :

	<i>Length Km.</i>
1. River Ganga from Allahabad to Kanpur	250
2. River Yamuna from Allahabad to Mathura	500
3. River Ghagra from Manjhighat to Faizabad	300
4. River Gomti from Audiyar to Lucknow	300

7.4.3. Government of India have forwarded the schemes to Inland Waterway Transport Authority in May, 1987 for technical appraisal. The Authority has cleared the scheme of river Ghagra in October, 1987 and forwarded it to the Government of India for issue of formal sanction. For the remaining schemes the authority has recommended taking up pre-feasibility surveys before they are proposed for hydrographic surveys. It is expected that these surveys will be completed during 1989-90.

7.4.4. An outlay of Rs. 100.00 lakh has been approved for Seventh Plan against which an expenditure of Rs. 3.08 lakh has been incurred during first three years and expenditure of Rs. 30.00 lakh is anticipated to be incurred during 1988-89. An outlay Rs. 21.00 lakh is proposed for 1989-90.

**Annexure I**

*Brief description of Draft Plan 1989-90 (Physical and Financial Rs. in Lakh)*

Name of work	Rate	District Sector				State Sector (Plains)				State Sector (Hill)				Grand Total (Plains+Hills)			
	Lacs per km/no,	Target km/no	Out-lay with-out Estt. (Lacs)	Out-lay with MNP Estt. (Lacs)	Out-lay of which Estt. (Lacs)	Target Km/10	Out-lay with-out Estt. (Lacs)	Out-lay with MNP Estt. (Lacs)	Out-lay of which Estt. (Lacs)	Target km./no	Out-lay with-out Estt. (Lacs)	Out-lay with MNP Estt. (Lacs)	Out-lay of which Estt. (Lacs)	Target Km/ no	Out-lay with-out Estt. (Lacs)	Out-lay with MNP Estt. (Lacs)	Out-lay of which Estt. (Lacs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
1. Bridges	13 D S 75 S S	64	832	832	965	20	1500	800	1740	52	416	416	483	136	2748	2048	3188
2. New construction																	
(a) Inter Coat/above	2.80	1300	3640	3640	4222	50	140	140	162	..	..	..	..	1350	3780	3780	4384
(b) Kharanja	1.50	1500	2250	2250	2610	42	63	63	73	..	..	..	..	1542	2313	2313	2683
(c) Earth work	0.90	676	608	608	705	35	32	32	37	..	..	..	..	711	640	640	742
(d) Hill roads	5.50	..	..	..	..	..	..	..	..	340	1170	1170	1357	340	1170	1170	1357
3. Conversion of MDR to State Highways	4.10	..	..	..	..	645	2644	..	3067	..	..	..	..	645	2644	..	3067
4. Improvement of S.H. including city roads	4.80	..	..	..	..	496	2380	..	2762	50	400	..	465	546	2780	..	3227
5. Reconstruction of roads	(a) 2.7 (b) 4.75	127	243	343	398	48	226	..	263	290	1265	1000	1631	465	1934	1343	2292
6. Reconstruction of weak and narrow structure	1.20	..	..	..	..	32	38	..	44	..	..	..	..	32	38	..	44
7. Centrally sponsored Schemes	..	..	..	..	..	..	259	..	300	..	..	..	..	..	259	..	300
8. World Bank Project	25.07	..	..	..	..	196	4914	..	5700	..	..	..	..	196	4914	..	5700
9. Tool and Plants	..	..	..	..	..	..	430	..	500	..	60	..	39	..	490	..	539
10. Research and Development	..	..	..	..	..	..	10	..	12	..	22	..	25	..	32	..	37
11. Site Accommodation	..	..	..	..	..	..	35	..	40	..	..	..	..	..	35	..	40
12. Industrial Road	7.5	..	..	..	..	35	259	..	300	..	..	..	..	35	259	..	300
<b>Total</b>		..	7673	7673	8900	..	12930	1035	1500	..	3433	2886	4000	..	24036	11294	27900
Establishment	..	..	1227	1227	..	..	2070	166	..	..	567	414	..	..	3864	1807	..
<b>Grand Total</b>	..	..	8900	8900	8900	..	15000	1201	15000	..	4000	3000	4000	..	27900	13101	27900

## ANNEXURE 2

*List of Roads which are proposed to be declared as National Highways*

<i>Name of Road</i>	<i>(km.)</i>
<b>A—Roads proposed by State Government</b>	
1. Nepalganj-Nanpara-Bahraich-Dariabad-Bachharawan-Fatehpur-Khajuraho-Sagar-Bhopal Road	410
2. Lucknow-Sultanpur-Jaunpur-Ghazipur-Buxar-Patna-Road	380
3. Delhi-Baghat-Saharanpur-Chakrata-Tyuni-Asakot-Shimla Road	400
4. Delhi-Meerut-Roorkee-Hardwar-Rishikesh-Badrinath-Mana Road	535
5. Bareilly-Amingaon-Lateral Road Bareilly-Pilibhit-Lakhimpur-Kheri-Bahraich (Basti Road)	475
6. Gorakhpur-Nautanwa-Sunauli-Pokhra Road	96
7. Ghaziabad-Aligarh-Kanpur Road (G.T. Road)	400
8. Jhansi-Gwalior Road	27
9. Rampur-Tanakpur Road	..
10. Ghaziabad-Meerut-Mizaffarnagar-Roorkee-Hardwar Road	190
11. Jhansi-Khajuraho-Rewari Road	..
12. Pilibhit-Hardwar-Pant Sahib Road	..
13. Lucknow-Sultanpur-Jaunpur-Ghazipur-Ballia-Chhapra-Hajipur-Patna Road	440
14. Rampur-Kathgodam-Nainital-Ranikhet-Almora-Kaushani Road	..
15. Lucknow-Rae Bareilly -Unchahar-Allahabad Road	200
16. Lucknow-Bachharawan-Lalganj-Fatehpur-Banda-Sagar-Bhopal Road	580
17. Kasia-Padrauna-Kinnarpathi-Raksol (Bihar) Road	..
<b>B—Roads Recommended as National Highways by National Transport Policy Committee :</b>	
1. Pilibhit-Hardwar-Paunta-Nahan-Ambala	..
2. Ghaziabad-Meerut-Hardwar	..
3. Gwalior-Jhansi-Khajuraho-Rewari	..
4. Gorakhpur-Nautanwa	..
5. Raipur-Varanasi	..
6. Bareilly-Amingaon-Lateral Road including Darbhanga-Ferobganj Link	..
7. Ghazipur-Ballia-Chhapra-Hajipur	..

## ANNEXURE—3

## Comparative operational results of U.P.S.R.T.C.

Particulars	1984-85 Actual	1985-86 Actual	1986-87 Actual	1987-88 Pre- Actual	1988-89 (April- August)
(1)	(2)	(3)	(4)	(5)	(6)
1. No. of Buses held (Average) ..	6040	6167	6452	6968	7301
2. Fleet Utilisation (%) .. ..	72	76	84	88	88
3. No. of hired buses (Average) .. ..	1255	831	575	561*	..
4. Total Earning Kms. (in crore) .. ..	42.77	44.35	43.60	54.96	24.65
5. Bus Utilisation (Kms. per bus held per day)	158	169	190	209	220
6. Load Factor (%) .. ..	66	73	74	63	67
7. Passenger Carried (in crores) ... ..	36.25	38.85	42.75	42.95	19.08
8. Total Income (Rs. in crore) ... ..	140.93	160.80	181.69	222.69	103.90
9. Profit/Loss (Rs. in crore) .. ..	-22.39	-17.52	-8.23	0.94	0.97
10. Income per Km. (Rs. in paise) .. ..	330	363	382	405	421
11. Fuel Average (Kms./Liter) .. ..	4.15	4.30	4.35	4.45	4.49
12. Lubricant Average Topping-up ... ..	368	464	534	712	830
13. No. of chassis purchased .. ..	9970	895	1335	1189	310

\* Up to August 10, 1987 during 1987-88. 561 hired Buses were operated

## ANNEXURE—4

## Financial and physical requirements and achievement

Items	1985-90	1985-86		1986-87		1987-88		1988-89		1989-90		
		Target	Actuals	Target	Actuals	Target	Pre-actuals	Annual Plan	Estimates	Least Estimates	Annual Plan	Estimates
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
<b>I— FINANCIAL</b>												
(Rs. in crore)												
1. Cost of buses for replacement	166.59	41.40	28.21	28.86	45.13	28.08	48.89	32.10	45.55	50.91	36.15	58.89
2. Cost of buses for augmentation and expansion	36.72	3.60	..	3.60	..	9.00	..	9.90	12.08	8.73	10.62	14.43
3. Cost of renovation	21.00	4.20	2.64	4.20	4.48	4.20	7.23	4.20	8.25	12.32	4.20	13.60
4. Land and building plant machinery Civil works and furniture and fixtures	25.69	3.06	0.72	6.39	2.00	5.74	4.45	5.50	15.73	14.37	5.00	15.48
Total ..	250.00	52.26	31.57	43.05	51.61	47.02	60.57	51.70	81.61	86.33	55.97	102.40
<b>II— PHYSICAL TARGET</b>												
1. No. of buses required for replacement of over-aged buses	5553	1380	895	962	1335	936	1189	1070	1135	1195	1205	1253
2. No. of buses required for augmentation and expansion	1224	120	..	120	..	300	..	330	265	205	354	307
Total ..	6777	1500	895	1082	1335	1236	1189	1400	1400	1400	1559	1560

## CHAPTER—VIII

### COMMUNICATION

It has been decided to replace the existing Mechanical PABX Exchange at Council House by 1000 lines Electronic PABX Exchange during 1989-90 and 1990-91. This 1000 line PABX Exchange will have scope for further expansion to 2000 lines to be able to cope up with further requirements. Besides the Electronic PABX, airconditioning of switch room, operator's room, meter room etc.,

would also be needed. It is estimated that approximately an amount of Rs.150 lakh will be needed for electronic PABX system. Thus, an amount of Rs.150 lakh will be required for the proposed Electronic Exchange at Council House, Lucknow out of which ~~Rs.80.00 lakh~~ will be required in 1989-90 and Rs.70.00 lakh in 1990-91.



**CHAPTER IX**  
**SCIENCE, TECHNOLOGY AND**  
**ENVIRONMENT**

Scientific research, technology up-gradation, preservation of ecology and improvement in environment programmes are widely accepted as major objectives of the planning process. Prior to 1977, the activities in this area were mainly restricted to providing financial support to research work in universities and other institutions and management of the state Observatory, Nainital. The scope of work has now greatly enlarged to include development of viable and appropriate technologies suitable for adoption, mainly in rural areas, for small scale and cottage industries and also to preserve ecological balance in the State. Though the total stock of technical manpower in the state is substantial yet it does not compare favourably with other advanced States of the country. The objective of seventh plan is, therefore, to develop a sound base in scientific competence and skills on a long-term perspective so that an approp-

riate mix of small, medium and large scale technologies are developed in a manner consistent with States' long-term interests.

9.0.2. Keeping in view the above objectives the following five agencies are functioning in this area :—

1. Council of Science and Technology
2. Remote sensing Application Centre
3. State Observatory, Nainital
4. Directorate of Environment
5. U.P. Pollution Control Board

9.0.3. In the Seventh Plan (1985—90) an outlay of Rs. 1500.00 lakh (Rs. 100.00 lakh for hills) has been approved for this sector. The agency wise break-up of outlay and expenditure is given in the following table :—

TABLE 1—*Outlay and Expenditure*

(Rupees in lakh)					
Agency/Department	Seventh Plan outlay	1985—88 Expenditure	1988-89 Anticipated expenditure	1989-90 Proposed outlay	1985—90 Anticipated Expenditure
(1)	(2)	(3)	(4)	(5)	(6)
<b>A—SCIENTIFIC RESEARCH</b>					
1. Council of Science and Technology	570	326	92	130	548
2. Remote sensing Application Centre ..	280	584	62	45	691
3. State Observatory ..	260	77	32	85	194
Total (A)	1110	987	186	260	1433
<b>B—ENVIRONMENT and ECOLOGY</b>					
1. Environment Directorate ..	32 (100)	147 (24)	102 (50)	110 (50)	350 (124)
2. Pollution Control Board ..	70	64	19	20	103
Total (B)	390 (100)	211 (24)	121 (50)	130 (50)	462 (124)
Total (A+B)	1500 (100)	1198 (24)	307 (50)	390 (50)	1895 (114)

NOTE—Figures in brackets are for hills.

9.0.4. It is evident from the table-I that in first three years of the Seventh Plan Rs.987 lakh had been spent which was 89 per cent of the total outlay for Seventh Plan for programmes of Science and Technology. Up to the fourth year of the plan the total anticipated expenditure would be of the order of Rs.1173 lakh which will exceed the approved outlay for the entire Seventh Plan. In 1989-90

an outlay of Rs.260.00 lakh has been proposed. The total expenditure for programmes of environment and ecology during Seventh Plan will be of the order of Rs.462 lakh which will also exceed the approved outlay for the Seventh Plan.

9.0.5. The agency-wise and programme-wise discription is given in the subsequent paras.

### 9.1. SCIENTIFIC RESEARCH

9.1. *Council of Science and Technology, U. P.*—Council of Science and Technology, U.P. (CST, U.P.) was established on 1st May, 1975. It was re-organised in 1982 to cover more aspects of science and technology as per guidance given by Government of India. Keeping in view the national policy the Council is mainly engaged for creating necessary infrastructure to fulfil the objectives of this sector. The main areas of the activities of the Council are in following disciplines and fields :

(a) Supported and Contracted research in the areas of Physical, Chemical, Biological and Agricultural sciences.

(b) To support Polytechnology Transfer centre established by CSIR, New Delhi in Lucknow.

(c) Development of Appropriate Technology for industrial and rural sector.

(d) Establishment of Planetarium and a Documentation Centre.

(e) Establishment of Museum of Science and Technology.

(f) Establishment of Research Cell in State Universities to develop excellence.

(g) Techno Entrepreneurship Development Programme.

(h) Establishment of District Science Club to popularise science and technology and to disseminate knowledge.

(i) To organise Seminars/Symposiums/Conferences in newly emerging disciplines/areas/subject of science and technology. Also to give financial support for such activities.

9.1.2. An outlay of Rs.570.00 lakh has been approved for the Seventh Plan for the council. During first three years of the plan an expenditure of Rs.326.00 lakh is anticipated. For the current year, of 1988-89 an outlay of Rs.92.00 lakh has been approved. For 1989-90, an outlay of Rs.130.00 lakh has been proposed.

9.1.3. *Supported and Contracted Research*—The emphasis is on development of need based technology and its transfer to users. Time bound research oriented programmes in various disciplines of science and technology in collaboration with State Universities, Technological Institutions and Medical Colleges are being taken up to generate scientifically and technologically trained manpower and also to provide solution for the problems to improve quality of life in the society. About 170 schemes are in hand and during 1989-90 about 70 more schemes are proposed which are in pipeline. The experts have given favourable comments on these schemes.

9.1.4. *Polytechnology Transfer Centre*—Council of Scientific and Industrial Research, New Delhi has set up a Polytechnology Transfer Centre in Lucknow. It is basically diagnostic information and direction centre which bridges the gaps between technology generators and technology users. The Centre acts as vehicle for transfer of technologies to user departments. The State Government through CST, UP provides 50 per cent expenditure to this centre as contribution of the State to CSIR, New Delhi.

9.1.5. *Development of Appropriate Technology/ Technology Extention*—The Council sponsors projects/schemes to technical institutions, voluntary agencies and

directorates of State Government for development of need based new technology.

It also transfer existing technologies to field for industrial and rural development. Few important technologies which are developed in this programme are mentioned below :—

(a) Development of Bullock Driven Harvester

(b) Development of Mini Cement Technology

(c) Development of efficient shell furnace to concentrate cane juice

(d) Development of Expeller for maximising extraction of cane juice.

(e) Development of low cost water resistant shellac Varnish

(f) Effective utilization of corn kernel ash

(g) Design and development of 12 and 24 spindle Charkha for cotton spinning and its extension.

(h) Sewage farming under sub-soil irrigation

(i) Design, development and extension of improved water mill in Garhwal and Kumaon hills

(j) Corrosion scaling and fouling control for Kanpur Municipal water supply system

(k) Catalytic gasification of low-grade coals

(l) Energy conservation and hydraulic transport of coal slurry

(m) Treatment of paper mill waste waters

(n) Chlorination of Resins

(o) Low cost rural housing and sanitation

(p) Treatment and Protection of water supply through hand pumps

(q) Optimum design of armature winding for 3 phase induction machines for effective utilization of supply wave forms

(r) Development of thick film cuprous sulphide/cadmium sulphide solar cell.

9.1.6. At present work on 55 projects is going on in various technical institutions in the State.

9.1.7. *Establishment of Research Cells and support for Centres of Excellence*—It has been found that State universities, institutions and colleges lack several facilities and services for research. It is proposed, therefore, to establish Centres of Excellence in various disciplines of Science and Technology, and also to establish research Cells in the area of Medical Sciences and Botany.

9.1.8. *Establishment of District Science Club*—It is proposed to establish district science club to create scientific temper in society and to disseminate scientific knowledge to masses. Scientists of the Council will have close link with students through science faculty of colleges and schools as also with District Administration to conduct science popularisation programme through these clubs. These clubs will also help district administration to identify science and technology component in district plans.

9.1.9. *Techno Entrepreneurship Development Programme*—The objective is to convert job seeking fresh engineering graduates into job generators. These graduate engineers will be trained in STEP to manage their own small scale industry by imparting them knowledge and training in the areas of material management, finance management, industrial relations and management by objectives. Two Science and Technology Entrepreneurship Parks are being established in the state in HBTI, Kanpur with thrust areas of chemical engineering and chemical technology, Roorkee University with electronics and electrical engineering as thrust areas. The Department of Science and Technology, Government of India, IDBI, Industries Department, Government of U.P. and Council of Science and Technology, U. P. have already consented to fund HBTI, STEP. These agencies have released grants also. CST, UP has given a grant of Rs.10.00 lakh for these activities. Project report for Roorkee University STEP has already been prepared and is being evaluated by various funding agencies.

9.1.10. *Publication/Exhibition/Advertisement*—It is proposed to publish scientific literature, news letters and annual

reports as also to provide grant-in-aid for scientific publications in local languages for disseminating scientific knowledge among common people of the State. The exhibition is one of the most effective media to achieve the objective of disseminating scientific and technological knowledge as also to create scientific temper in society. This means preparation of live demonstration, prototypes or photocharts and model of latest developed technologies so that these can be displayed and demonstrated to impart knowledge to the visitors.

9.1.11. *Grant-in-aid to organise seminars/symposiums/Conferences/Workshops etc.*—As per policy of the Council, financial assistance is also given to meet 50 per cent expenditure on publication of proceedings of the seminars organised within the State subject to a maximum amount of Rs.0.05 lakh only. However, for international seminar a grant upto Rs.0.10 lakh is being given. The Council organises seminars and conferences on its own also. About 50 seminars/symposiums are being supported by the Council every year as a co-sponsor.

9.1.12. *Bio-technology Cell in Uttar Pradesh*—In order to strengthen bio-technology base in the State, schemes with respect to its role in industry, medical-health, and environment and agriculture as well as forestry are being taken up by the Council. Two main projects of prime importance are embryo transplant technology to improve the breed of milch animals and tissue culture for bamboo plantation are being proposed to be taken up by the Council.

9.1.13. *Remote Sensing Application Centre*—Remote Sensing Application Centre, U.P. has developed into an important Centre providing scientific service facilities in respect of application of remote sensing technology in the various natural resources sectors. This centre is co-located with ISRO Telemetry, Tracking and Command Station of Department of Space, Government of India, and it is expected that later on it will be able to utilise the data for real time applications. With the installation of an image processing system configured around VAX-11/780

computer, the Centre has reached a stage of total operational readiness in respect of application of the technology at the grass root level. In the past, the availability of trained scientific man-power was a serious constraint, which has now been overcome with the recruitment of adequate number of scientists. As such, this centre has become the premier centre in the Northern India for all applications related to remote sensing.

9.1.14. An outlay of Rs.280.00 lakh was approved for the programmes/activities of the centre for the Seventh Plan. During 1985-88, an expenditure of Rs.584.00 lakh has been incurred. In 1988-89, it is anticipated to utilise an outlay of Rs.62.00 lakh in full. For 1989-90, an outlay of Rs.45.00 lakh has been proposed.

9.1.15. The centre will be able to cater to the needs of various user departments and other agencies of the state in respect of utilisation of the technology for a variety of purposes. The Centre, therefore, proposes to continue with the on going projects in view of the requirements of various agencies. The indicative list of some of the important activities proposed to be taken up during 1989-90 is given in Annexure.

#### STATE OBSERVATORY NAINITAL

9.1.16. The U. P. State Observatory, Nainital is a leading research institution of the country in the field of astrophysics. The prime objective of Seventh Plan is to consolidate and diversify the instrumental developments carried out in the Sixth Plan with a view to diversify research fields alongwith creation of necessary infrastructure for the same, to establish a large telescope to initiate the establishment of vacuum optical spar telescope for registration of solar activities and also to create facilities for work and housing. To fulfil these objectives, it is necessary to undertake relevant developmental projects in the areas of astronomical optics, electronics and instrumentation technology including telescope designing. For Seventh Plan, an outlay of Rs.260.00 lakh was approved. During first four years of the plan an expenditure of Rs.109.00 lakh is

anticipated. The outlay for 1989-90, is Rs.85.00 lakh. The programme wise description is given in subsequent paras.

9.1.17. *Vacuum Solar Spar Project*—The study of the sun has two aspects:—(i) study of the quiet sun and (ii) study of the active sun. At present facilities for the first aspects are alone available. It is proposed to start construction of a vacuum spar telescope with modern accessories in the Seventh Plan. For starting site and survey work one telescope has already been imported. It would also be necessary to involve competent agencies with in India for providing consultancy on the designs evolved by UPSO scientists. A site survey programme of two years has also been envisaged. The whole infrastructure will be created in a phased manner. During 1989-90, the equipments already acquired would be used for the said purpose and the conceptional design of the telescope would be prepared.

9.1.18. *Establishment of large Telescope*—In 1987, the Central Planning Commission after detailed discussion on the recommendations of the National Expert Committee recommended that the Commission would support the 4 spectre telescope project which would be funded by the state. A large telescope of this kind should be used as a national facility. A Committee has been constituted of eminent scientists by the state to prepare a detailed project report. So far as site and survey work is concerned the site has already been

selected and the analysis of available data is in progress. A photometer has been constructed to measure the sky brightness.

9.1.19. *Development and consolidation*—An electronic unit for infra-red photometer has been fabricated and is being tested for use on the 104 cm. telescope. For the coude spectrograph of the 104 cm. telescope some design modifications were made and two additional optical flates needed are being fabricated in optic-shop. It is now expected that the spectrograph will become operational in near future. The horizontal solar spectrograph has been provided with a precision screw spectrum scanner and an image guide in right ascession and declination. The same unit has been modified so as to produce a reasonably large image for registration of solar activity.

9.1.20. A moderate dispersion solar flare patrol spectrograph has been fabricated and is expected to become operational in 1988-89. The optics of the 52 cm. coude spectrograph has been made while the mechanical components will be fabricated during 1989-90. So far research work is concerned the achievement is encouraging as against the target of publishing 80 research papers in Seventh Plan, in the first three years of the plan the target is over achieved by publishing 94 such papers. During 1988-89, the publication of about 25 research papers is anticipated. Similarly the Seventh Plan target of awarding 6 P. H. D., 8 has already been awarded upto 1988.

## 9.2. ECOLOGY AND ENVIRONMENT

These Programmes are being implemented by the Directorate of Environment. The Directorate supervises the collection of data to make known the status of environment and to plan strategies for environmental conservation and improvement. The project will be formulated for environmental development of critical sensitive and fragile ecosystems and thus control environmental degradation. These Projects will be executed by concerned departments and monitoring will be done by the Directorate.

9.2.2. For the Seventh Plan an outlay of Rs.320.00 lakh (Rs.100.00 lakh for

hills) had been approved. During first four years of the plan an expenditure of Rs.249.00 lakh (Rs.74.00 lakh in hill) is anticipated. The outlay proposed for 1989-90 is Rs.110 lakh which include Rs.50 lakh for hill. Together with this, the expenditure will exceed the total outlay of Rs.320 lakh. The programmes to be taken up during 1989-90 are given in subsequent paras :—

9.2.3. *Control of Environmental Degradation and Environmental Law*—Environmental degradation refers to the process by which resource (natural or man-made) is rendered unfit for some

beneficial use owing to natural, man-made or social factors. Among man-made reasons worth mentioning are: industry hydro-electric projects, mining, major transport and urban development projects. The disposal of community wastes and *recycling* them need planned approach and awareness of concerned agencies to control the environment degradation.

9.3.4. *Environmental Impact Assessment (EIA)*—Environmental impact assessment is an activity designed to identify and predict the impact on the biogeophysical environment and on man's health and well being of developmental proposals, policies, programmes, projects and operational procedures, and to interpret and communicate information about the impacts.

The activities proposed are as under :

- (a) Study on black liquor : a paper industry waste
- (b) Environmental effects of Silica dose in metalware industries in U. P. with special reference to Moradabad
- (c) Environmental impact assessment of Sahaibabad Industrial Complex

9.2.5. *Eco-development* — The ecological system in the state is under great stress. Due to the growing pressure of human and livestock population, forests are being destroyed, marginal lands are being cultivated and grass lands have disappeared. The very resource base of the state is threatened. The situation leads to soil erosion in uplands and excessive sedimentation and floods in the downstream areas.

9.2.6. To counter the enormous ecological disturbances, the scheme for environmental improvement in the State is proposed.

9.2.7. *Conservation of natural living resources*—The information available on flora and fauna of the state, in particular of the Himalayan Region, reveals that there are many endemic species confined to the area and several of them are also under the influence of regression and even

extinction so that their existence is in danger. The basic cause as indicated above are the ecological changes that are taking place, such as deforestation landslides, siltation of river beds etc. These and many others have resulted in the destruction of natural habitats for several plant and animal species. The activities proposed are :—

- (a) Conservation programmes of the sanctuary
- (b) Establishment of a snake park.

9.2.8. *Environmental education, awareness, training, research promotion and information system*—Education is essential for generating wide spread awareness of environmental problems. Awareness is essential for action. Proper educational, awareness and training efforts are key to the success of environmental improvement programmes. The following activities are proposed :—

1. Organisation of World Environment day programmes
2. Organization of training programmes
3. Preparation of audio-visuals
4. Establishment of Documentation and Information Centre
5. Publications of educational materials
6. Activities through voluntary organisations
7. Organization of eco-development camps.

9.2.9. *Pollution Control Board*—For various programmes of the Board, an outlay of Rs.70 lakh has been approved for the Seventh Plan. During 1988-89, an outlay of Rs.19.00 lakh has been approved. An outlay of Rs.20.00 lakh has been allocated for 1989-90. This is in addition to Boards own resources e.g. water cess, consent fee etc.

The Board has proposed the following activities for 1989-90 under two main programmes of control of water and air pollution in the State.

9.2.10. *Commissioning of treatment plant in Industries*—There are about ten

thousand small and big Industries in the State. Besides this, there are about 650 important local bodies. The Board is collecting data of these industries regarding use of their raw material and disposal of industrial waste water. An extensive survey has been made of about 1,100 polluting industries of the State by the Board. As a result of this, about 73 industries have commissioned treatment plants for the disposal of the waste. During 1989-90 all possible efforts would be made to persuade 120 more industries for commissioning treatment plants.

9.2.11. *Collection of samples and their analysis*—Most of the industries of the State are discharging their waste water in rivers and other water bodies of the state causing serious water pollution. As a result of this, water quality is gradually deteriorating. In order to assess water quality of these water bodies, it is proposed to regularly monitor water quality. Water samples from industries, river, lakes and streams will be collected and analysed for physicochemical analysis along with the bacteriological parameter. During 1989-90 it has been proposed to collect and analyse about 4,000 industrial and water samples.

9.2.12. *Consent for discharging effluents*—As per water (Prevention and control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act 1981 and consequent amendments in 1978, it is necessary for every industry to obtain the consent before discharging their effluent, into stream and land and emission in atmosphere. The consent fee is realised from every industries who seek this consent every year. There is target to collect Rs. 30.00 lakh as consent fee of water and Rs. 10.00 lakh for air during 1989-90 plan.

9.2.13. *Water Cess*—As per Water Cess Act, 1977 the Central Government has empowered the State Boards to collect water cess from Industries. The cess is realised on the basis of consumption of water by the industries and local bodies. There is a target of collection of cess of 65.00 lakh during 1989-90.

9.2.14. *Prosecution* — As per Water (Prevention and Control of Pollution) Act of 1974 and Air (Prevention and Control of Pollution) Act, 1981 the local bodies and industries of the state can be prosecuted for violating the provisions of above referred Acts. During 1989-90, all possible efforts will be made to prosecute such industries who fail to comply with the provision of the Act.

9.2.15 *No objection certificate*—It is necessary to obtain no objection certificate from Pollution Control Board by any industrialist who wishes to establish a new industry in the state. No objection certificate is issued with a condition that new industry should not create pollution hazard where it is established.

9.2.16. *Air Pollution* — Under the Prevention and Control of Air Pollution Act of 1981 the Board has been entrusted with the responsibility of prevention and control of air pollution in the state. The Board is engaged at present in monitoring programmes at Dehradun, Kanpur and Agra. During 1989-90 all possible efforts will be made to implement monitoring programme in some of the important cities in the state.

9.2.17. *Ganga Pollution Control*—The river Ganga is the life-line of millions of people. Yet, over the years, the river has been indiscriminately polluted and misused. The main sources of pollution of the Ganga are urban and industrial liquid waste from 29 Class—I cities having a population of over one lakh, 23 Class—II cities having a population between 50,000—1,00,000 and 48 other towns situated on the banks in U.P., Bihar and West Bengal. Pollution control in the river involves many organisations like local authorities, industrial units, voluntary organisations, State and Control Agency. An appropriate mechanism is, therefore, necessary for co-ordinated action at various levels. The State Government has assumed a major responsibility for the successful implementation of the programme. The Urban Development Department of the State has been identified as the nodal department for co-ordination.

9.2.18. In Uttar Pradesh there are seven major towns which are the source of pollution of river Ganga. Priority-wise these towns can be arranged as under :—

1. Rishikesh
2. Hardwar
3. Varanasi including Ramnagar
4. Allahabad
5. Kanpur
6. Mirzapur
7. Farrukhabad/Fatehgarh

9.2.19. The State has prepared feasibility reports for the above major towns located on the banks of river Ganga. Jal Nigam has prepared 63 detailed schemes amounting to Rs.93.96 crore for the above mentioned towns. Different approaches have been adopted depending on the nature and magnitude of the prob-

lem in these towns. The basic approach is to stop the flow of sullage flowing into the river Ganga and to pump it back to the existing sewer or to lay a trunk sewer so that the pollution at the Ghats and into the river is checked in the first instance. The sullage so collected would alternatively be utilised after treatment for land application and/or for producing bio-energy.

9.2.20. The total cost of the project is estimated to about Rs.144.00 crore. Cost of the projects excluding 11 per cent supervision charges are to be borne by the Government of India. An expenditure of Rs.13.25 crore has been incurred during 1986-87. During 1987-88, Rs.17.00 crore have been spent. During 1988-89, it is expected that an amount of Rs.12.00 crore will be spent under this programme. An outlay of Rs.20.00 crore has been now proposed for 1989-90.



## ANNEXURE

1. Ground water targetting in hard rock areas of south U.P. and in the saline tracts of the state.
  2. Utilization of aerial remote sensing in town planning and urban area development of Kanpur—A pilot project.
  3. Urban survey of nine major cities of U.P.
  4. Categorisation and mapping of salt affected soils and its monitoring.
  5. Monitoring change in ravine lands along major rivers.
  6. Location of priority areas for soil conservation programmes in DPAP watersheds.
  7. Integrating remotely sensed data with revenue records for wastelands delineation and development.
  8. Watershed characterisation in Upper Ganga catchment.
  9. Spectral characteristics of soils of U.P.
  10. Preparation of the land capability maps of selected areas of the State.
  11. Monitoring and assessment of sediment distribution in Matatila reservoir.
  12. Snowmelt studies of Himalayan river catchments.
  13. Yearly monitoring of flood inundated areas of the State.
  14. Temporal monitoring of water spread in tanks, reservoirs and other water bodies.
  15. Underground storage of flood waters in Ganga basin.
  16. Study of fluvial dynamics in Gangetic plains of U.P.
  17. Mineral targetting in Himalayas, Bundelkhand and Vindhyaachal Regions.
  18. Route and bridge site location in different areas of the State.
  19. Study of neotectonism and potential landslide zones in U.P. Himalayas.
  20. Broad forest categorisation of the State using satellite data.
  21. Forest vegetation mapping in national park areas of the State.
  22. Monitoring of forest degradation in part of U.P.
  23. Crop acreage and yield estimation of major crops.
  24. Satellite data for rice information system in Eastern U.P.
  25. Catchment and Command Area Investigations on Major Irrigation Project.
  26. Environmental monitoring studies in selected areas of U.P.
-

## CHAPTER X

### GENERAL ECONOMIC SERVICES

#### 10.1. SECRETARIAT ECONOMIC SERVICES

##### LANGUAGE DEPARTMENT

The function of language department of the State Government is to translate documents of the Government which are in other languages and to remove shortage of good Hindi Stenographers and typists by imparting inservice training to typists. The Seventh Plan outlay for this purpose is Rs.5.00 lakh. During 1986-87 two more training centres were opened in Farrukhabad and Saharanpur. The centres have been provided with 6 Hindi type-writers in 1986-87 and 4 in 1987-88. The outlay for 1988-89 was Rs.1.00 lakh and Rs.1.00 lakh has again been provided in 1989-90 for this scheme.

##### STATE PLANNING INSTITUTE

10.1.2. The State Planning Institute was set up in 1972 to provide technical and professional input in states planning process. The Institute has following ten Divisions :

1. Planning Research and Action Division
2. Evaluation Division
3. Training Division
4. Perspective Planning Division
5. Area Planning Division
6. Manpower Planning Division
7. Plan Monitoring and Cost Management Division
8. Project Formulation and Appraisal Division
9. Hill Division
10. Economics and Statistics Division.

##### PLANNING RESEARCH AND ACTION DIVISION

10.1.3. The Planning Research and Action Institute was established in 1954. It became a division of State Planning

Institute in 1972. The division conducts pilot experiments on viability and effectiveness of new ideas, methodologies and technologies, suitable for wide spread application in rural areas and also by undertaking innovation work for development. The division carries diagnostic studies on socio-economic problems. Some of the main activities of the division are described in paras which follows :

10.1.4. *Inservice Training Programme under "Environmental Sanitation and Water Supply"* — The main objective of this programme is to develop an environmental sanitation centre by taking up all the sanitation programmes in an integrated form at an appropriate place and provide facilities of inservice practical training to village-level workers so that they can extend these programmes. The programmes include PRAI type latrines smokeless chullahas, safe washing and bathing platforms. Against Seventh Plan outlay of Rs.7.00 lakh approved for this programme an expenditure of Rs.4.90 lakh has been incurred in first four years of the plan. An outlay of Rs.1.50 lakh is proposed for 1989-90.

10.1.5. *Field Service Cell (Khandsari)* —PRAD is the premier Institution in the field of Mini Sugar Technology and is engaged in research and development, work regarding Open Pan Sulphitation (O.P.S.) on Khandsari plants since 1956. The Division has developed machines and process techniques for an appropriate OPS technology for the manufacture of crystal sugar on small scale, which have been widely accepted in India and abroad. With this technology, it has become possible now to attain 7.2 per cent average recovery of sugar, which was only 5.5 per cent in traditional indigenous techniques. Presently, the main activities of the Division are construction, trail and survey of wet bagasse burning furnaces. technical

consultancy for improving efficiency of machines and process techniques to improve quality and recovery of sugar. The Division also provides consultancy for installation of new plants, modification and renovation of existing plants, preparation and supply of project estimates, drawing and blue prints of building lay-out, machinery, furnaces etc. on payment of nominal fee and travelling expenses etc. of staff.

10.1.6. During first four years of the plan an expenditure of Rs.8.28 lakh has been incurred, against the Seventh Plan outlay of Rs.10.00 lakh. Rs.2.50 lakh has been proposed for this programme in 1989-90.

10.1.7. *Pottery Project Phulpur (Allahabad)*—The Division runs a pottery project at Phulpur in Allahabad District to test decentralised pottery system and to provide service facilities to private units associated with the project. Experiments in developing designs and glaze for pottery wares are conducted in the project. An outlay of Rs.2.00 lakh has been proposed for this project in 1989-90. It is anticipated that Rs.9.06 lakh would have been spent on this project against Seventh Plan outlay of Rs.11.00 lakh.

10.1.8. *Pilot Project on Co-operative Hospital*—There is a remarkable difference in availability of medical facilities in rural and urban areas. With an objective to provide medical facilities in rural areas, the division has evolved a new system of providing medical facilities through co-operative societies. The Co-operative Society constitutes representatives of local people, hospital personnel and Government. The system is based on the recommendations of the Mudaliar Committee which pointed out the need for providing financial assistance to such societies by the Government. At present, three such hospitals are being run by this Division. Two more hospitals will be opened in 1988-89. An outlay of Rs.1.50 lakh has been proposed for this programme in 1989-90.

10.1.9. *Minor Irrigation Cell*—This cell develops cheap powers of irrigation for reducing the cost for the small and

marginal farmers of different topographic conditions. It is expected that some concrete achievements in High Drum research project, Drip Irrigation systems, Solar pumps Bullock Driven centrifugal pumps etc. will be available during the Seventh Plan. The cell is engaged in development of the following systems of irrigation/projects :

1. Development of Bullock Driven Multi-piston pumps
2. Drip Irrigation Project
3. Sprinkler Irrigation Projects
4. Testing of Jal Shakti
5. Development of water wheel/Turbine pump-set
6. Hill Development Project
7. Development of Bullock Driven, centrifugal pump
8. Conservation of water through Portable check Dam and Polythene sheets.

10.1.10. *Mobile Lab for development of Mini Sugar Industries*—The technique of sugar manufacture without the use of complicated machinery has been developed by the division to improve the process of liming sulphitation, settling and filtration to remove non sugar as much as possible. The inversion of sucrose starts as soon as the juiceconce out to the cane. After rab formation the inversion rate is practically negligible. The idea is to check this inversion process because the temperature, long period of juice storage, lower PH accelerate the inversion rate.

10.1.11. It is also likely to carry out research work with this Mobile Lab. Production of sugarcane was from sulphitation process utilization of mud, commercial manufacture of candy sugar manufacture of baker yeast from molasses capsul sugar from molasses etc.

#### EVALUATION DIVISION,

10.1.12. The main objective of this Division is to carry out concurrent as well as ex-post facto evaluation of different schemes/Projects/Programmes of development departments. The schemes/pro-

grammes/projects for evaluation are selected out of the proposals received from different departments, keeping in view problems and priorities of the Government and overall capacity of the Division. The draft reports of the Division are discussed with senior officers of the concerned departments in meetings held under the Chairmanship of Deputy Chairman, State Planning Commission, U.P. and are then finalized. The reports thus finalized are sent to the departments concerned for implementing recommendations contained therein.

10.1.13. Evaluation studies in this Division are conducted by eight evaluation teams, each consisting of one Senior Evaluation Officer, 2 Evaluation Officers, one Senior Field Investigator, 5 Field Investigators and 2 Investigator-cum-Computers. These teams operate under the overall guidance of the Director assisted by two Joint Directors.

10.1.14. Division had completed 269 studies by the end of Sixth Plan, a target of 125 studies has been set, of which 79 studies have already been completed during the first three years of the Plan. An outlay of Rs.60.00 lakh has been provided for the Division in Seventh Plan. Out of which Rs.1.20 lakh, Rs.4.84 lakh and Rs.4.70 lakh were spent during 1985-86, 1986-87 and 1987-88 respectively. The anticipated expenditure during the year 1988-89 is Rs.8.00 lakh. The outlay for 1989-90 is Rs.8.00 lakh.

#### TRAINING DIVISION

10.1.15. The Training Division was created in September 1981, with a view to arranging training programmes for senior and middle level officers of development departments on modern techniques of planning and implementation. The Division organises training programmes for state, regional and district level officers concerned with formulation and implementation of development programmes. The training programmes are conducted with the help of in house faculty of different Divisions of the State Planning Institute and with the assistance of reputed external training institutions in the country.

#### 10.1.16. Objectives of the Division— The objectives of the Division are :

1. To impart training to officers of field and state levels concerned with planning and development administration.

2. Administration and Management of training programmes for newly recruited officers of state planning institute, State Planning Commission and Planning Department.

3. To assess the training requirements in all the development departments of the State .

4. To organize seminars and workshops for senior level officers of the State.

10.1.17. A total number of 3497 officers have been trained since September 1981. It is proposed to further strengthen the Training Division during 1989-90. Some of the areas in which strengthening is proposed to be done are described below :

(a) It is proposed to induct some specialists having excellence in the field of Area/Regional Science, Social Science, project management, financial management and computer science.

(b) Now-a-days use of computers in planning and developmental administration has become unavoidable. For Training Division it has become necessary, therefore, to provide training in computer's use also. One computer may not cater to the needs of the Training Division. It is, therefore, proposed to procure 20 personal computers in this Division in order to make training programmes more effective and purposeful.

(c) Existing Library-cum-documentation centre of the Division has about 1000 books and journals. This library will have to be further developed and strengthened by procuring more books related to newer disciplines proposed to be added for the purposes of training.

(d) The existing hostel situated in the campus of Training Division having 14 rooms and one dining hall is now insufficient to meet requirements. It is proposed to extent the hostel accommodation by adding a new hostel block of 12 double bed rooms, one dining room and one dormitory to accommodate about twenty trainees.

10.1.18. The seventh plan outlay for this Division is Rs.80.00 lakh against which Rs.1.73 lakh have been spent during 1985-88. The anticipated expenditure in 1988-89 is Rs.2.00 and the outlay for 1989-90 is Rs.2.00 lakh.

#### PERSPECTIVE PLANNING DIVISION

10.1.19. The basic function of the Perspective Planning Division is to formulate long term perspective for the state so that of, keeping this in background, the pattern of short term growth of the economy may be visualised. The Division is concerned mainly with studies, which would help in developing and using projective techniques for long-term planning for various sectors of the economy.

10.1.20. For preparing the perspective Plan of the State on scientific lines, some basic studies were necessary. It was also necessary to generate other important data relating to household consumption, investment, saving, labour and capital co-efficients to formulate appropriate policies for future development.

10.1.21<sup>1</sup> The Division carried out a number of basic studies on different socio-economic aspects to provide an effective framework for systematic and comprehensive planning for the State's economy. The studies under taken by the Division can be categorised in four parts :

(1) Perspective Plan of Sectors, District, Region and State economy.

(2)<sup>1</sup> Studies relating to financial aspects, such as capital formation, savings, resources, etc.

(3) Studies relating to consumption pattern and level of living.

(4) Studies relating to Agriculture, Industrial and Tertiary sectors, providing projective techniques for long term planning. These will, *inter alia*, include building up of input-output co-efficients, labour and capital co-efficients, consistency and other models etc. The division also proposes to take up parametric, regional and sectoral studies during Seventh Plan also. The Division has under taken number of studies in 1988-89 relating to above areas. Some important studies which will be completed in 1988-89 are given as below :—

1. Physical and Social infrastructure for 2000 A.D. in Uttar Pradesh ;

(a) Roads infra-structure.

(b) Health Services.

2. Locational Planning for school.

3. District perspective plan of eight districts viz.

(i) Basti, (ii) Kanpur (Dehat),

(iii) Ghazipur, (iv) Hardoi,

(v) Bijnor, (vi) Bahraich,

(vii) Budaun and (viii) Etah.

4. Incremental capital-output ratios for Economy of Uttar Pradesh.

5. Economy of small, marginal farmers and landless labourers and strategy for their future development—A case study.

6. Role of subsidy in Sixth Five Year Plan.

7. Change in standard of living—a comparative study of different rounds of N.S.S.

8. Status paper of industry sector.

9. Formulation of alternative growth model.

The following studies would be continued in 1989-90 :—

1. Computer aided financial planning and budgeting at district/ State level.

2. Analysis of financial expenditure incurred on flood and drought in U.P.

3. Economy of urban poor and identification of suitable programmes for their development (in few selected areas).

4. Requirement of educational infra-structure for 2000 A.D.

5. Problems and prospects of Brassware Industry in U.P.

6. Loaning through banks — a study of problems and policy issues.

7. Basic need approach to development planning for Eighth Plan.

10.1.22. It is proposed to strengthen the Division suitably to make it still more useful for State's planning process.

#### AREA PLANNING DIVISION

10.1.23. This Division is engaged in operationalising the concept of multilevel planning in the State. Studies are also conducted by the Division which help in developing suitable mechanism in multi-level planning framework for better implementation and monitoring of development programmes. One of the major functions of Area Planning Division is to make in-depth studies relating to regional disparities in the level of development within the State. The other functions of the Division are : (i) evolving a research methodology for formulation of integrated development plans for selected units, keeping in view their replicability, (ii) identifying backward regions in the State and preparation of regional plans and (iii) providing consultancy to other departments/agencies in the field of spatial planning.

10.1.24. The Division has recently formulated Model Development Plans of three VDO Circles, one of district Sultanpur and two of district Jhansi. One of its important advantages in drawing up such Model Plans is that, it would have a definite radiation and demonstrative effect and neighbouring areas will also be induced to go in for such model plans. Another advantage of the model plan is that a research methodology for prepara-

tion of an integrated plan of micro level i.e. of a VDO Circle will be evolved which can be a pioneering work in this field not only in the State but in the Country, as a whole.

10.1.25. The division has also conducted, in collaboration with Training Division, six training courses on techniques of district/block level planning and 12 training courses on decentralised planning process for various categories of functionaries.

10.1.26. As already mentioned, the Division is also responsible for providing methodological inputs to various field functionaries engaged in the work of Block/District Planning. In addition, the Division is expected to play a pivotal role in the newly introduced system of decentralised planning.

10.1.27. The Central Planning Commission has initiated an exercise involving preparation of pilot projects for improving methodologies and procedures for decentralised district planning. As a part of this exercise, five representative districts (one from each of the five agro-economic regions of the State) has been identified for preparation of comprehensive district plans on a pilot basis. The districts are Almora, Jhansi, Muzaffarnagar, Sitapur and Ballia. The division has been made responsible for under taking this exercise in close and active collaboration with concerned development departments at the State and district levels. Arrangements for proper documentation of experiences gained during plan formulation as well as implementation of the pilot projects in each of the selected districts are being made by the division. The guidelines for carrying out necessary resource surveys for assessment of resource potential, assessment of financial resources, preparation of perspective plan and formulation of comprehensive five year/Annual plan by the district level machinery under the guidance and supervision of the Area Planning Division are being prepared.

10.1.28. A National level seminar on Decentralised Planning was also conducted at Lucknow in February, 1987 by the Division in collaboration of the

Central Planning Commission in order to evaluate the working of the system and to identify problems faced at various levels in planning and implementation of District Sector schemes. The Planning Secretaries of some of the major States in the Country, Directors of the concerned National and State level research institutes, eminent academicians and representatives of the Central Planning Commission and Ministries of Government of India were invited to participate in the Seminar.

10.1.29. A Model Plan of district Fatehpur is also being prepared on priority basis by the Division. It is expected that this plan would be prepared during 1988-89. The State Government has sanctioned Rs.2.00 lakh for preparation of this plan. The Programme for 1989-90 includes :

1. Formulation of Comprehensive District Plans and their implementation on pilot basis. The comprehensive District Plans (Annual, Five year and Perspective) will be prepared for five districts viz. Ballia, Sitapur, Almora, Jhansi and Muzaffarnagar representing each of the five agro-economic regions of the State.
2. Preparation of District-wise indicators of Development.
3. Blockwise Indicators of development in selected Districts.
4. Ranking of Districts according to indicators of development.
5. Regional Sub-Plans.

#### MANPOWER PLANNING DIVISION

10.1.30. The division was established in 1971 to study different aspects of manpower planning for optimum utilization of available manpower resources. The division has conducted a number of studies covering areas like demand and supply of technical and professional manpower, its stock and utilization, wastage and stagnation in training courses, training needs of different sectors, attrition on staff in position, etc. Studies were also undertaken for identifying size, structure and nature of unemployment, under-employment and other related problems. Some special studies were conducted to find out impact of employment oriented and antipoverty programmes like IRDP, Self-Employment Scheme for educated

unemployed youth etc. The activities of the division can broadly be grouped as under.

1. Assessment of demand and supply of manpower and identification of manpower imbalances;
2. Study of changes in the structure of labour force, employment and unemployment;
3. Formulation of model employment plans ; and
4. Assistance to departments in manpower exercises.

10.1.31. The division has so far completed more than a hundred studies/exercises dealing with different manpower and employment aspects. Recently studies relating to forecasting of technical and professional manpower for Seventh Plan, impact of definitional changes on estimates of employment, unemployment and under employment, stock of allopathic doctors and their utilization in the State, district-wise analysis of population of the State during 1951-81 and migration pattern of unskilled construction workers were completed.

10.1.32. Currently, work is in progress on 14 studies/exercises including texture of population in the context of Eighth Five Year Plan, profile of employment and unemployment, structural changes in employment in organised sector, impact of industrialization on employment in Jhansi district, effects of tractorization on employment and income in agriculture sector, demand and supply estimates for technical medical and para medical, teaching, agricultural and veterinary manpower, popular and unpopular trades of polytechnics and impact of NREP on income and employment of beneficiaries.

10.1.33. In view of increasing emphasis on manpower planning for better utilization of available work-force and on employment for creating more and more productive work opportunities, importance of proper maintenance of quantitative and qualitative manpower data needs not be emphasized. A number of manpower programmes are being implemented even in the distant parts of the state generating manpower budgets are, therefore, new requirements of manpower. Suita-

needed to identify the availability and flow of manpower. There is also need for closely examining the educational and training requirements and studying the sectoral manpower needs etc. In view of this the manpower division needs to be strengthened to shoulder new responsibilities which could be to (i) maintain manpower accounts (ii) assess sectoral requirements of manpower (iii) examine the structure of education and its viability with respect to its use, (iv) study changes in unemployment pattern (v) ascertain new trends in occupational structure (vi) study demographic tendencies (vii) study recruitment policy and identifying areas of imbalances and (viii) develop a data bank. The division has also to act as a catalytic agency in organising manpower workshop and seminars.

#### PLAN MONITORING AND COST MANAGEMENT DIVISION

10.1.34. In U.P. till the end of 1972, only some conventional review techniques were followed and no scientific monitoring system, as it is understood in management circles today, existed in any of the departments of the Government. It was only the early period of 1973 when a Division designated as Information Monitoring and Scientific Management Division was created in the State Planning Institute. However after the abolition of the Materials Management Division, in 1978 the work relating to cost control through development of cost indices for different types of schemes/works was also entrusted to the Monitoring Division and with this change the Division was renamed as "Plan Monitoring and Cost Management Division".

10.1.35. The division was supposed to function as a nucleus for creating awareness of the need of scientific management through development of monitoring cells in different departments and to keep Government informed of progress of projects/schemes and their problem areas which required speedy decisions at various levels. To start with, before undertaking the work of monitoring major projects, the Division carried out some stu-

dies in respect of the existing reporting system in major departments like Irrigation, Power, Local Self Government and public works. On the basis of these studies the Division devised a set of proformae for use in these departments. In order to make monitoring more meaningful and effective the Director of the Division attended the meetings of the monitoring cells/wings of the major departments regularly. This arrangement was introduced with a view to providing guidance and expert advice to the concerned departments. The Division also assumed the responsibility for detailed monitoring of some selected major projects under Irrigation and Power Sectors. In order to make the arrangements more effective and to overcome the initial difficulties, meetings at the level of Chief Secretary and Chief Minister were arranged, where problems identified by the Monitoring Division were discussed. Subsequently, monitoring of some other sectors like, P.W.D., Agriculture, Bridge Corporation, Dairy Development etc. was also taken up on a regular basis by the Monitoring Division of the Institute. At a later stage, selected Industrial Projects of State Enterprises, Housing and Urban Development Programme, Sugar Industry and Water Supply were also taken up.

Monitoring reports have been designed to suit the needs of each department and type of schemes/projects. The frequency of reporting varies depending upon type of scheme, its urgency and stage. The reports are generally monthly/quarterly. The monthly/quarterly reports are prepared on the basis of inputs furnished by the departments/undertakings on specified formats which have been designed in consultation with concerned departments. In the field of Cost Management the Division has developed a number of Cost Indices for buildings, roads, bridges, major irrigation projects, multipurpose projects and thermal power projects with a view to assisting the Administrative, Planning and Finance Departments in updating of projects estimates, scrutinising escalation of expenditure and enabling



Departments/Government to review the status of other project of the same type.

10.1.36. The main objectives and functions of plan Monitoring and Cost Management Division are :

(a) the receipt of progress information from operating and implementing levels in time and its appraisal in terms of financial and physical performance as compared to targets,

(b) identification of short falls, bottlenecks, causes for short-falls, problems and difficulties faced at implementation levels and anticipating future short-falls and problems areas,

(c) examining the effect of these short-falls and problems on the completion of the given projects and its effect on time and cost of other related projects,

(d) to undertake review and analysis of Engineering projects/schemes in construction stages and apprise the Government of its findings and suggestions,

(e) to focus attention on time and cost overruns of important projects involving large investments.

(f) to assess the impact of cost escalations and develop suitable cost indices for typical works to enable a rational assessment of cost estimates from year to year,

(g) to undertake indepth studies of on-going/completed projects/schemes on a selective basis, and

(h) to apply the findings and experience of the studies for development of innovations in the concept of Scientific Monitoring on the same lines as applied research in various fields.

10.1.37. Based on the experience of the work done by Plan Monitoring and Cost Management Division, some of the main findings are listed below :

(1) Lack of adequate survey and investigations at the stage of project formulation is by far the most im-

portant cause of difficulties experienced during the implementation phase of Irrigation, Hydel and Multi-purpose Projects. To a great extent time and cost over-run are attributed due to weaknesses arising from this inadequacy. As a consequence of this recognition, sizeable strengthening of survey, investigation and design organisations has recently taken place in Irrigation Department and the U. P. State Electricity Board.

(2) Many departments, having realised the need for restructuring their departments on a scientific basis; in the light of the nature, volume and diversity of functional responsibility born by them; have already initiated suitable measures in these directions.

(3) One of the significant results of the establishment of the Monitoring System has been progressive development of a detailed and relevant data system to enable the top management not only to know what is going on during the implementation phases but also to store relevant data/information in a manner which would enable it to retrieve it at short notice for preparation and formulation of new schemes and long and short term plans for use at the department, as well as at the Government levels.

(4) Monitoring has created a deep appreciation of the need for using PERT/CPM and other modern techniques as aids for resource based planning.

(5) Monitoring has been acting as a disincentive against the tendency to prepare projects on the basis of unrealistic estimates and schedules as was being done earlier.

(6) It has also created the awareness and importance of adhering to time schedule based on the realistic programmes and preparation of timely identification of deviations, their analysis and remedial measures.

(7) **Monitoring Division** studies on construction Equipment and Materials Management. It has created an awareness on the need of forward planning and improved utilisation and accountability of major construction equipments.

(8) The cost index exercises by the division have been found to be of immense use in examination and approval of revised estimates, as well as bringing out uniformity in repetitive types of work on the basis of updated cost indices.

(9) **Standardization of design, drawing, specification and cost of residential/non-residential buildings of various departments/corporations constructed by PWD/RES/Harizan and Nirbal Varg Awas Nigam etc.** on which Finance Department issued the Government order to avoid the delay in sanctioning the estimates at Government level. Thus, estimates of repetitive type of buildings are now being dealt at district level itself instead of sending the each estimate at Government level for revision.

10.1.38. In the coming years, the main thrust of the Monitoring Division of State Planning Institute will be to get Monitoring Information systems established in as many departments as possible. Simultaneously, this division will also have to assume the responsibility for evolving MIS packages for them so that plan implementation can be supervised with adequate care. To achieve this end, the Monitoring Division will have to apply itself to the following specific tasks:

(a) carry out detailed studies at the project, supervisory, control, decision-making and policy levels to define the functional responsibilities for various activities and also identify the variables which would affect the execution of various projects and programmes.

(b) examine the current procedure for project formulation as well as project management and indicate modifications, if required.

(c) Impart and also organise through various agencies training in project planning, project management and monitoring techniques.

*Proposed works/reports of Monitoring Division during 1989-90*

<u>Coverage</u>	<u>Name of the Report</u>
1. <b>POWER SECTOR</b> Major Power Projects	1. Monthly Monitoring Report Thermal Projects 2. Monthly Monitoring Report of Transmission Lines and Sub-Stations 3. Monthly Monitoring Report of Hydel and Multi-purpose projects 4. Monthly Monitoring Report IREP
2. <b>IRRIGATION SECTOR</b> Major Irrigation Projects	1. Monthly Monitoring Report of Irrigation Projects 2. Quarterly Monitoring report of State Tubewells.
3. <b>Sugar</b>	1. Quarterly Monitoring of Sugar Federation and U P. Sugar Corporation
4. <b>Industry</b>	1. Monitoring of PICUP Projects
5. <b>Housing Boards</b>	1. Quarterly Monitoring report of HUDCO Projects
6. <b>Roads</b>	1. Quarterly Monitoring report of Roads (PWD)
7. <b>Bridges</b>	1. Bridge Corporation

<u>Coverage</u>	<u>Name of the Report</u>
8. Quarterly Inventory Control (Materials)	1. U. P. Housing and Development Board.
	2. U. P. State Bridge Corporation
	3. PWD.
9. Cost Index	(a) Building <ul style="list-style-type: none"> <li>(1) Central zone</li> <li>(2) Eastern zone</li> <li>(3) Western zone</li> <li>(4) Hill zone</li> <li>(5) Bundelkhand zone</li> </ul>
	(b) Bridges
	(c) Roads
	(d) Irrigation Projects
	(e) Multipurpose Projects
	(f) Thermal Projects
10. Others	Miscellaneous standardisation of repetitive type of buildings of various department corporation done and checking of estimates of building as and when send by Government.

#### PROJECT FORMULATION AND APPRAISAL DIVISION

10.1.39. The main objectives of the Project Formulation and Appraisal Division are to undertake ex-ante appraisal of large projects/programmes from technical, financial, economic and social points of view and to motivate various development departments to have "Shelf of Projects" and to prepare guidelines for various development departments for formulation of carefully conceived and detailed project reports. The division appraises investment proposals for the consideration of Public Investment Board and its Standing Committee, Nodal Committee for external assistance and Expenditure Finance Committee and other miscellaneous projects. The Public Investment Board and its Standing Committee for which the Division acts as secretariat are charged with the function of appraising all proposals of public sector enterprises involving investment of Rs. One crore or more in the case of projects funded wholly by State and institutional resources. In case of joint sector projects, reference to the Board or its Standing Committee is made in cases where Government resources of Rs.50.00 lakh or more are involved. All Projects for

which assistance from World Bank or any other external source is sought, and appraised and put up by the division before the Nodal Committee. The division appraises all departmental projects whose non-recurring expenditure is Rs. one crore or more and makes its appraisals available for Expenditure Finance Committee. The division is also required to keep a track of projects approved by the Public Investment Board and its Standing Committee, implementation of which does not start within six months of the approval of the Board or its Standing Committee.

10.1.40. The division has appraised about 260 major projects costing about Rs. 16 thousand crores. A number of other projects posed for Consideration of the Nodal Committee and the Expenditure Finance Committee, have also been appraised. The division has prepared two manuals namely "Project Appraisal For Rural Development and projects Appraisal in U.P. some cases" for the guidance of decision makers. A paper on methodology and data requirement for economic analysis of Irrigation Projects has also been prepared. The division has prepared guidelines relating to industry, fisheries, dairy, social forestry and horticulture.

10.1.41. It has been accepted in principle that proposals of different Departments for Eighth Plan should be in the shape of projects rather than half baked schemes. This new approach, will add to the responsibilities of this division in so far as it will be required to provide guidance and help to Department in accomplishing this task. The Division will need to be suitably strengthened for its enlarged scope of work and growing responsibilities in different areas.

#### HILL DIVISION

10.1.42. The Hill Division has been conceived as a miniature institute to provide multi-disciplinary expertise to carry out systematic diagnostic survey and applied research with a view to improving the process of planning and implementation in hill region of Uttar Pradesh. Besides, a multi-disciplinary team at the State headquarter, two Divisional field units, one each stationed at Garhwal and Nainital are also functioning to assist in monitoring and concurrent evaluation of ongoing programmes and other studies entrusted to them by the Hill Division. The Hill Division also regularly prepares some vital documents incorporating basic data and information to provide adequate data base for formulation of area development plans, evaluation of programmes and for developing planning expertise for the proper development of hill region. Some of the relatively more important studies completed by the Division are listed below :—

1. A Study of extension of horticulture development and its impact on the economy of hill region.

2. Special Component Plan of hill region.

3. A study of socio-economic condition of women in the hill region.

4. Impact of non-conventional energy programmes in hill region.

5. Performance evaluation and maintenance of hydroms in hill region.

6. An evaluation of rehabilitation programmes for bonded labourers in Dehra-Dun.

7. A Study on the impact of Forest Conservation Act on development programmes.

8. Socio-economic survey of Buxas of Pauri and Dehra-Dun districts.

9. Evaluation study of public distribution system in the hill region.

10.1.43. The Division is providing feedback to the government and the programme implementing agencies in respect of plan formulation and proper implementation of plan programmes in three ways. First, by providing necessary technical inputs to the nodal officers of the various development departments in projectisation and to the government sectoral officers in scrutiny and appraisal of projects. The division collects regularly the quarterly progress reports for the various development departments and analyse them with the view to identify the shortfalls (financial as well as physical) and the problems faced by the departments in the implementation of the programmes and to suggest suitable remedial measures.

10.1.44. In addition to works relating to Studies and data bank, the division has been actively involved in works relating to projectisation of schemes and monthly monitoring of programmes. In this connection it is important to mention that since January, 1988 a drastic reorientation has been introduced in the formulation process of the development programmes of the hill areas. The development programmes are being formulated in the shape of 'Projects', with at least 3 years phasing and not as 'schemes', as was the practice since long. The officers of the Division regularly participate and contribute in the Sectoral meetings in the Hill Development Department of the Shashan, which are held for 10-12 days every month in connection with projectisation of schemes and monitoring of the monthly progress of development programmes at the government level. It has started providing the feed back to the government by detailed analysis of past trends to provide more reasonable basis for making investment decisions on better scientific lines.

10.1.45. The feed back provided by the division has ensured the Government

to take corrective measures to improve the implementation of the programmes.

10.1.46. During the year 1987-88 about 10 studies in various fields have been completed and it is anticipated that another 15 studies will be completed during 1988-89. The following studies are proposed to be undertaken during the year 1989-90:

1. Monitoring and evaluation of development programmes.
2. To develop the suitable technology for various programmes of the development of hill region.
3. A study relating to forest development.
4. Evaluation of schemes for the development of horticulture.
5. Perspective plan of Almora district.
6. Preparation of statistical diary.
7. Compilation and tabulation work of district plan 1989-90.
8. Evaluation of NREP, IRD and RLEGP programmes in different districts of hill region.
9. Evaluation of village and small-scale industries.
10. Evaluation of housing schemes.
11. Evaluation of Khadi and cottage industries.
12. Evaluation of TRYSEM scheme.
13. Evaluation relating to facilities, for tourists in the hill area.
14. A study relating to unemployed trained persons in the hill region.
15. Situation of drop outs in primary education.
16. Evaluation of training and visit scheme.

#### OTHER OFFICES

10.1.47. *State Bureau of Public Enterprises*—The Bureau acts as a Central Coordination agency for rendering specialist advice and service to the State Public Enterprises. The Bureau was established in 1974 with the following objectives :

1. To review periodically, the monitoring of individual units as also to undertake in-depth analysis.

2. To provide a central point of reference, consultation and advice in important aspects of management of public enterprises.

3. To provide consultancy on request to departments and enterprises.

4. Laying down policies for career planning and conducting training relevant to each enterprise.

5. To advise steps to improve the productivity and profitability of the enterprises.

6. To explore all avenues of the economy in the functioning of the enterprises.

7. To act as a store house of information relevant to the enterprises and departments.

10.1.48. Keeping in view the above objectives, the Bureau has played a vital role in coordinating the functioning and monitoring the programmes of various schemes and projects implemented by the corporations. It has also paid due attention to development of healthy personnel policies and in laying down efficiency norms for each enterprise, prescribing monthly and quarterly formats for operational monitoring.

10.1.49. The Bureau has also been assigned some additional work connected with Co-operative Institutions and Local Development Authorities. The Bureau is required to monitor important schemes and Projects implemented by these agencies and to evaluate their performance and help them in better management and improving performance.

10.1.50. In view of the increasing responsibilities of the Bureau, it is proposed to strengthen it suitably. To begin with, a new Division is proposed to be created in 1989-90. At present, due to the skeleton staff available, the Bureau is not in a position to take up additional work assigned to it. Computerisation of data bank is also planned so

that necessary statistical information required for reference and monitoring can be updated and generated.

10.1.51. *Institutional Finance*—The Directorate of Institutional Finance (DIF) established in 1972, is playing an important role in mobilising institutional finance through commercial banks and central financial institutions for economic development of the State including poverty alleviation and self-employment Programme. During the year 1988-89 (up to June, 1988) the Directorate was able to achieve significant progress with the co-operation of the commercial banks and other financial institutions. The main achievement during 1985-86, 1986-87, 1987-88 and 1988-89 are as follows :—

1. Loans to the tune of Rs.143.19 crore, Rs.185.35 crore, Rs.215.35 crore and Rs.71.93 crore were distributed to 5.81 lakh, 6.67 lakh, 7.96 lakh and 2.12 lakh persons during 1985-86, 1986-87, 1987-88 and 1988-89 (September, 1988) respectively under the IRDP Programmes.

2. Under Special Component Plan loans amounting to Rs.11.85 crore, Rs.26.45 crore, Rs.29.01 and Rs.6.58 crore were distributed to 495224, 62148, 61063 and 17746 scheduled caste families during the years 1985-86, 1986-87, 1987-88 and 1988-89 (August, 1988) respectively.

3. Institutional Finance to the extent of Rs.1,613.34 crore, Rs.1,897.30 crore, Rs.2,446.71 crore and Rs.513.37 crore (June, 1988) was mobilized during 1985-86, 1986-87, 1987-88 and 1988-89 (up to June, 1988) respectively for public and co-operative sector enterprises and State Sponsored development programmes (including IRDP, Special Component Plan, Sugar Industries etc.).

4. Crop loaning programme through commercial banks was undertaken on priority, as a result of which loans amounting to Rs.305.22 crore, Rs.330.43 crore, Rs.327.32 crore and Rs.79.86 crore (in Kharif) were distributed during the year 1985-86,

1986-87, 1987-88 and 1988-89 (up to July, 1988) respectively.

5. During 1985-86, 1986-87, 1987-88 and 1988-89 (up to August, 1988) Rs.84.31 crore, Rs.86.28 crore, Rs.110.24 crore and Rs.18.08 crore disbursed under minor irrigation programme respectively.

6. During the co-operative year 1985-86, 1986-87, 1987-88, the NABARD has disbursed refinance assistance to the tune of Rs.168.25 crore, Rs.180.01 crore and Rs.203.00 crore under its schematic lending programme/scheme respectively. The ground level investment of NABARD during the co-operative year 1987-88 (July, 1987 to June, 1988) was Rs.249.00 crore which was a record achievement in the State.

7. Under SEEUY Scheme, educated unemployed youths numbering 26362, 23477, 14102 were sanctioned loans amounting to Rs.46.92 crore, Rs.52.61 crore and Rs.31.67 crore (up to August, 1988) during the year 1986-87, 1987-88 and 1988-89 respectively. For the annual plan 1989-90 a target of 31,300 beneficiaries has been fixed.

TABLE 1—Mobilisation of Institutional Finance

(Rupees in crore)			
Year	Target	Amount Mobilised	Percentage
(1)	(2)	(3)	(4)
1985-86	.. 1010.00	1613.34	159.74
1986-87	.. 1650.00	1897.30	115.00
1987-88	.. 2050.00	2446.71	119.00
1988-89 (June 88)	.. 2250.00	513.37	23.00

10.1.52. Targets for the Seventh Plan have been fixed at Rs.7500.00 crore. During the year 1985-86, 1986-87 and 1987-88, against targets of Rs.1010.00, Rs.1650.00 and Rs.2050.00 crore. Institutional finance was mobilized to the extent of Rs.1613.34 crore, Rs.1897.30

crore and Rs.2446.71 crore respectively. It is anticipated that during 1988-89 the target of Rs.2250.00 crore will be over achieved. An outlay of Rs.25.00 lakh has been proposed in the Annual Plan 1989-90 for the activities of this Directorate.

10.1.53. *National Savings* — The importance of National Savings can well be assessed by its percentage contribution to the State's Plan outlays during the previous three years 1985-86 to 1987-88. These percentages were 19.83 per cent, 15.71 per cent and 17.48 per cent respectively. Efforts made in this direction during 1987-88 have yielded 17.80 per cent rise in net collections over previous years, which is higher than corresponding rise of 14.02 per cent at the national level. Like previous year, the State has again maintained its first position in the country in highest net collection in the year 1987-88. With a view to mop up collection through new securities like Indira Vikas Patra and Kisan Vikas Patra, cash incentives to depositors, individuals, institutions and agents have also been introduced.

10.1.54. The target for net collection during 1988-89 is Rs.800.00 crore, which is 11.73 per cent higher than the net deposits during the previous year 1987-88. Accordingly, the target of loan assistance on the basis of net collections up to December, 1988 has been fixed Rs.600.00 crore. The target for net collection and loan assistance from Government of India for 1989-90 is proposed to be fixed 10 per cent higher than the target of the current year viz. as Rs.880.00 crore and Rs.660.00 crore respectively.

#### MACHINERY FOR PLANNING

10.1.55. The State has a well established machinery for planning going right down to the level of development blocks. It needs further strengthening in the context of plan formulation at the district level as per guidelines of the Government of India for 1989-90. Decentralised planning in our state was initiated in 1982-83. The State has already taken some steps to improve the data base for formulation of

plans at district level under the scheme of decentralisation of planning machinery.

#### STATE PLANNING COMMISSION

10.1.56. The State Planning Commission is an apex body of the state which was established in 1972 on the advice of National Planning Commission. The main functions of the State Planning Commission are to advice and help the State Government in the formulation, implementation, monitoring of states plans, to assess states resources and to render advice for their optimal utilization. It has also to determine plan priorities within the frame work of the National Plan priorities and to identify factors which tend to the economic and social development.

10.1.57. The State Planning Institute has been set up to provide technical help to State Planning Commission in its functions. In the context of preparation of district plans under decentralised planning machinery at different levels, i.e. regional and district level has been strengthened.

10.1.58. For this an outlay of Rs.539.47 lakh including Rs.48.80 lakh for hills was approved in Seventh Plan. During first three years of the plan Rs.146.69 lakh has been incurred including Rs.4.25 lakh in hills. During 1988-89 an expenditure of Rs.129.23 lakh including Rs.7.00 lakh for hills is anticipated. For annual plan 1989-90 an outlay of Rs.212.00 lakh has been proposed for this purpose which include Rs.2.00 lakh for hills.

10.1.59. Similarly, for consultancy and seminars an outlay of Rs.75.00 lakh including Rs.50.00 lakh for hills has been approved in the Seventh Plan. In the first three years of the plan, an expenditure of Rs.60.39 lakh including Rs.3.00 lakh for hills has been incurred. During 1988-89 an expenditure of Rs.55.00 lakh including Rs.25.00 lakh for hills is anticipated. For 1989-90 an outlay of Rs.80.00 lakh has been proposed for this purpose including Rs.40.00 lakh for hills.

## DISTRICT SECTOR PLAN

10.1.60. The scheme for providing furniture and fixture and equipments etc. in the offices of District Economics/Statistics officers has been included for the first time in the District Sector Plan of the

Economics and Statistics Division during 1988-89 and an outlay of Rs.63.43 lakh was approved for the plains which will be utilised in full. An outlay of Rs.64.45 lakh (including Rs.12.00 lakh for bills) is proposed under this scheme for the year 1989-90.

## 10.2. TOURISM

Uttar Pradesh is replete with tourists attractions. Its snow-peaked mountains, sacred rivers, glaciers, lush-green valleys, *flora-fauna*, historical and cultural monuments and religious shrines have always been a source of inspiration for the tourists. In fact, this State offers everything to the tourists except beaches. Since there is vast potential for the development of tourism in the state, as per recommendations of the Planning Commission, tourism has been accorded the status of an industry. Accordingly, private sector investment will have to be encouraged and public sector investment will be mainly restricted to promotional activities as well as development of support infra-structure.

10.2.2. As regards development of tourism in the State, nearly Rs.26.00 crore were spent on various tourism promotion schemes by the end of Sixth Plan. under which apart from other promotional works, 3,869 beds were constructed in 102 accommodational units all over the state. Out of these 102 units two units of 43 beds have now been transferred to other departments. Thus, at the base year level 1984-85, only 3,826 beds are considered to be available with the Department of Tourism, Uttar Pradesh in 100 units.

10.2.3. In view of the ever increasing flow of tourist traffic to various tourist places of the state, every care was taken while formulating Seventh Plan to ensure that schemes are prepared in accordance with needs of the tourists especially those coming from foreign countries. Nearly 2.00 lakh foreign tourists visited Uttar Pradesh in 1986 and this figure is likely to rise further to 8.84 lakh in 1990 according to a survey conducted by the Institute of Economic and Market Research.

New Delhi. For the Seventh Plan, total outlay of Rs.36.50 crore was earmarked for tourism which included an outlay of 19.50 crore for hills. By the end of 1987-88 i.e. third year of the Five Year Plan period an expenditure of Rs.31.44 crore has been incurred. If the outlay allotted for the 1988-89 i.e. Rs.10.27 crore is also taken into account then the department would be incurring an expenditure of nearly Rs.41.71 crore by the end of 1988-89 which is much more than the approved plan outlay of Rs.36.50 crore for Seventh Plan.

10.2.4. During first three years of Seventh Plan, one of the major achievements is that tourism has been accorded the status of an Industry in the State. Apart from this, development of the Buddhist Circuit is in progress, which will provide facilities to the International Buddhist Pilgrims. Ram Katha Park at Avodhya and Taj National Park (Mumtaz Bagh) and Convention Centre at Agra have been envisaged in this plan, for which land has been acquired at Agra and is being acquired at Ayodhya.

10.2.5. For the first year of Seventh Plan, an outlay of Rs.580.00 lakh was earmarked for tourism sector which included Rs.300.00 lakh for hill region of the State. Similarly for 1986-87 the approved outlay was Rs.815.00 lakh including Rs.315.00 lakh for hill region. Against these outlays year-wise expenditure of Rs.775.21 lakh and Rs.771.29 lakh was incurred respectively in 1985-86 and 1986-87. For schemes in hill region, the component of expenditure was Rs.222.33 lakh in 1985-86 and 315.49 lakh in 1986-87. In 1985-86 an additional amount of Rs.200.00 lakh was also sanctioned by the State Government for development of Buddhist Circuit in the State.



The works sanctioned for the development of the Circuit include accommodational units at Gorakhpur, Kushinagar, Sravasti and Sankisa, extension accommodational facilities at Sarnath, a Buddhist Museum at Kushinagar, and way-side amenities at Piprahwa. Apart from it, landscaping of Buddhist Places is also among the sanctioned works. Estimates of most of the sanctioned works have been prepared and funds made to the construction agency. Construction work of tourist Bungalow, Gorakhpur, which is now under the development of Ramgarh Tal is in progress. Physical progress of work at Kushinagar is nearly 60 per cent where 84 bedded accommodational units and Buddhist Museum is being constructed. At Sankisa, the construction work is going to start while at Sravasti and Sarnath suitable land is being arranged. Estimates in respect of construction work at Piprahwa are being prepared and for which land is already available.

In 1986-87 Government of India had sanctioned construction of Stupa at Piprahwa for which State Government has provided a sum of Rs.20.00 lakh for purchase of land. The land has been acquired. As a result of these tourism promotion activities, 4284 beds were made available in 115 accommodational units for the tourists in the State. Out of which 33 units with 1067 beds were in plains and 82 units with 3217 beds were in the hills. Construction of a Convention Centre at Agra, construction of a Stupa at Piprahwa and renovation of Dadhichi Kund at Sitapur were among the major projects sanctioned during 1986-87. As regards progress of these works, land has been acquired for Convention Complex at Agra and estimates and designs are being prepared. Work for renovation of Dadhichi Kund is in progress. Possession of the acquired land has been taken at Piprahwa and designs and estimates are being prepared.

10.2.6. An expenditure of Rs.1597.71 lakh was incurred in 1987-88 against the approved outlay of Rs.1269.00 lakh. The component of expenditure for hills was Rs.796.03 lakh and that for the plains was

Rs.801.68 lakh which included Rs.62.26 lakh of district plans. Details of expenditure on various items are as under :

TABLE 2—Expenditure during 1987-88

(Rupees in lakh)			
Item	Plains	Hills	Total
(1)	(2)	(3)	(4)
(A) Construction works	687.56	636.03	1323.59
(B) Other works			
1. Direction and Administration	3.01	..	3.01
2. Publicity	108.54	67.78	176.32
3. Tourist centres	1.81	22.47	24.28
4. Fairs and Festivals	0.76	69.75	70.51
Total (B)	..	114.12	160.00
Total (A+B)	801.68	796.03	1597.71

10.2.7. Construction of Mumtaz Bag at Agra and Ram Katha Park at Ayodhya are major projects sanctioned this year. For acquisition of lands at Agra and Ayodhya, sum of Rs.281.00 lakh and Rs.100.00 lakh have been sanctioned respectively for these projects. Funds have been placed at the disposal of the District Magistrates of Agra and Faizabad for acquiring the land. Acquisition proceedings are in progress. In hills, provision of winter sports facility at Auli in Joshimath is a major project for which a sum of Rs.20.90 lakh has been sanctioned by the Government of India and another sum of Rs.350.00 lakh was sanctioned by the State Government. The work is in progress. Construction work of six accommodational units in plains and seven accommodational units in hills has been completed by the end of March 1988. These units yielded 122 additional beds in plains and 140 beds in hills. In plains, the accommodational units were completed at Neemsar (Sitapur), Deogarh (Lalitpur), Naugarh, (Basti), Kannauj (Farrukhabad), Hargaon (Sitapur), and Munshiganj (Sultanpur). At Kushinagar (Deoria), a tourist rest house hitherto run by the ITDC has now been taken over by the State Tourism Department. Thus by the end of March 1988, there were 4546 beds in 129 accommodational units in the

State, precisely 40 units with 1189 beds in plains and 89 units with 3357 beds in hills. Apart from publication of tourist literature on various tourist places, Ramayan Melas were also organised at Ayodhya and Chitrakut (Banda), Uttar Pradesh Parv at Manipur and Badri-Kedar Utsav in hills. Action in respect of preparation of Cassettes of Video film on Lord Rama, Lord Buddha, Lakes of Kumaon and Garhwal region and fairs and festivals of Uttarkhand was taken.

10.2.8. As a result of wide publicity, there has been considerable increase in the tourist traffic in the state. In 1987, nearly 315 lakh tourists visited Uttar Pradesh as against 299.70 lakh in 1986. This figure is likely to rise to 332 lakh in 1988.

10.2.9. For the Annual Plan 1988-89, an outlay of Rs.1027.00 lakh has been earmarked for the Tourism Sector. Out of the total outlay allocated for the Tourism Sector, a sum of Rs. 54.00 lakh is kept for district sector plan which includes Rs. 5.00 lakh for Rin Upadan Yojna in hills. Most of the outlay is being utilised for the completion of the schemes already in hand. Apart from construction works, a sum of Rs.23.00 lakh is kept for purchase of six buses and another sum of Rs.100.00 lakh as share capital to U. P. State Tourism Development Corporation for joint venture. In hills, an outlay of Rs.200.00 lakh is exclusively kept for winter sports. Detail of expenditure proposed to be incurred on various items is as under :

TABLE 3—Expenditure during 1988-89  
(Rupees in lakh)

Item	Plains	Hills	Total
(1)	(2)	(3)	(4)
(A) Construction works	358.23	505.75	863.98
(B) Other works			
Direction and Administration	5.00	..	5.00
Tourist centres	4.00	20.00	24.00
Publicity ..	24.00	65.00	89.00
Fairs and Festivals	35.77	9.25	45.02
Total (B)	68.77	94.25	163.02
GRAND TOTAL	427.00	600.00	1027.00

10.2.10. In 1988-89, construction works at Sankisa, Kushinagar, Garhmukteshwar, Dadhichi Kund and Suryakund in plains and FRP Huts at four places, tourist bungalows at Saur, Mukteshwar, Puny giri and Dhanolti in hills are expected to be completed by the end of March, 1989. As a result of this target for completion of works, 142 additional beds in plains and 182 beds in hills are likely to be made available to the tourists in 1988-89. It is expected that nearly 332 lakh of tourists would be visiting Uttar Pradesh by March 1989.

10.2.11. The year 1989-90 is the terminal year of the Seventh Plan. Although every care is taken to ensure that maximum funds are mobilised for the completion of on-going works of this plan period, there may be some works which will have to be carried over to the next five year plan. This is only due to the fact that either those works were sanctioned towards the end of the plan period or no suitable land could be made available for projects. Slow progress of works due to non-availability of required funds or revision of the estimates of the works is also one of the reasons for spilling over the schemes to the Eighth Five Year Plan.

10.2.12. For 1989-90, an outlay of Rs.1215.00 lakh is earmarked for tourism sector which includes Rs.775.00 lakh for hills. Out of this total outlay a sum of Rs.80.00 lakh is kept exclusively for district sector schemes. The detailed break-up of the outlay earmarked for tourism sector is as follows:

TABLE 4—Proposed outlay for 1989-90  
(Rupees in lakh)

Item	Plains	Hills	Total
(1)	(2)	(3)	(4)
(A) Construction works :			
Continuing works	350.63	475.00	825.00
New works	..	150.00	150.00

TABLE 4—(Concl.) (Rupees in lakh)

Items	Plains	Hills	Total
(1)	(2)	(3)	(4)
<i>(B) Other works</i>			
Direction and Administration	6.00	..	6.00
Tourist Centres	8.00	25.00	33.00
Publicity	70.37	75.00	145.37
Fairs and Festivals	5.00	50.00	55.00
Total (B)	89.37	150.00	239.37
GRAND TOTAL	440.00	775.00	1215.00

10.2.13. The above break-up clearly shows that a sum of Rs.975.63 lakh is proposed to be spent on construction works. No new works are proposed to be taken up in plains this year but in hills only a meagre sum of Rs.150.00 lakh is kept for new prestigious works like beautification and development of George Everest Estate at Mussoorie and subsidy for construction of 5000 accommodational units in hills by Avas Vikas Parishad. It is expected that nearly 230 additional beds i.e. 138 beds in 7 units in plains and 92 beds in three units in hills will be completed in 1989-90.

### 10.3. SURVEYS AND STATISTICS

The main function of the Economics and Statistics Division is the collection, processing and analysis of data collected through the National Sample Survey, Annual Survey of Industries, Employees Census, Electricity Consumption and other departmental surveys of *ad-hoc* nature from time to time. Secondary data is also collected from various state and Central Government departments and a number of official and non-official agencies. A large number of valuable publications based on the primary and secondary data are being regularly brought out by this division with a view to help the State Government and policy makers to evolve strategies for the planning process in the state. The division also provides

adequate statistical support to the block and district levels in the preparation of district and local level plans. This Division also plays an important role in ensuring the reliability of rural developmental statistics and in monitoring and evaluation of development programmes at various levels. The introduction of decentralised planning and greater emphasis on the 20 point programme in the state has increased the work load of this Division to a great extent at the state head quarter, divisions and district levels.

10.2.14. At present, we have 30 Construction works in plains and 40 in hills. If it is taken for granted that all the works as scheduled will be completed in the year 1988-89, we shall be left with 24 works in plains and 35 works in hills. Out of these continuing works, 10 units are expected to be completed by 1990 meaning thereby that 12 works in plains and 32 in hills will certainly spill over to the next Five Year Plan. The major work expected to be spilled over include Ramkatha Park, Ayodhya, Mumtaz Park at Agra, Convention Complex at Agra, George Everets Estate, Mussoorie and Winter Sports, Auli.

10.2.15. As a result of vigorous publicity of tourist projects for which an outlay of Rs.145.87 lakh is proposed in 1989-90, nearly 365 lakh of foreign and domestics tourists are expected to come to U. P. in 1989-90. After implementation of plan scheme nearly 24.63 lakh mandays employment are expected to be generated.

10.3.2. Keeping in view the growing need of statistics at different levels, specially at lower levels, it is essential to strengthen the Economics and Statistics

Division at different levels. Besides, some new areas need to be covered so as to make this Division more useful and effective. The following old schemes of the Sixth Plan and continuing during the first four years of Seventh Five Year Plan will be continued in 1989-90.

10.3.3. *Installation and operation of computer*—In addition to the continuance of operation of existing computer, installation of personal computers in 57 districts, 12 divisions and 2 personal computers P.C/AT (with a damp terminal) at state head quarters, which was proposed to be taken up in 1988-89, will now be taken up in 1989-90. For smooth operation of personal computers, 71 posts of Assistant Programmers are proposed to be created along with other infra-structure. The total outlay proposed for installation of personal computers and operation of existing computers is about Rs.452.00 lakh during 1989-90.

10.3.4. *Construction of Yojana Bhawan* — The construction phase of Yojana Bhawan is almost complete. For the remaining work and its furnitures and fixtures, an outlay of Rs.50.00 lakh is proposed in 1989-90.

10.3.5. The following new schemes are proposed to be included in the Annual Plan 1989-90 :—

10.3.6. *Improvement of Industrial Statistics* — Reliable and comprehensive statistics in respect of various industries is required to be made available timely for the planned development of industrial sector. This Division conducts every year a survey of 50 per cent non-census factories registered under Factories Act, 1948. The number of such factories has doubled during the past few years, and is likely to increase further. It is, therefore, proposed to create one additional post of Assistant Economics and Statistics Officer in 12 districts where number of such factories is 60 or more. Besides, strengthening of ASI cell of the State headquarters is also proposed. An outlay of Rs. 5.00 lakh is proposed for 1989-90 for this scheme.

10.3.7. *Creation of regional accounts and capital formation cell at the head quarters*—With a view to provide in sight

into the changes in various sectors of the State's economy, break up of regional and lower level estimates of various accounts, expenditure, capital formation and saving etc. of the State Government, Local Bodies, departmental and non-departmental enterprises need to be prepared. The committee on Regional Accounts appointed by the Government of India for building up regional accounts had suggested some standard supporting and supplementary tables in this regard for all the states on uniform and comparable concepts and methodology. It is, therefore, proposed to create a cell on Regional Accounts and capital formation headed by a Joint Director along with adequate supporting staff at the headquarter of this division. An outlay of Rs.7.00 lakh is proposed for 1989-90.

10.3.8. *Establishment of a cell for the hill development work*—It has become essential to maintain separate statistics for the hill region of the state as plans for the hill region are being prepared separately. This involves huge work load at the Headquarters of the Division. To cope with the additional work adequately, it is proposed to establish a separate cell in the Economics and Statistics Division headed by an Additional Director (Hill) along with necessary supporting staff. An outlay of Rs.15.00 lakh is already approved for this purpose in Seventh Plan. However, this cell could not be established so far. An outlay of Rs.5.00 lakh is now being proposed for 1989-90 for this purpose.

10.3.9. *Strengthening of present state income unit of economics and statistics division for rural and urban income estimates* — The need has been felt preparation of state income estimates for rural and urban areas separately. It is, therefore, proposed to strengthen the existing state income unit by creating a post of Joint Director with some supporting staff for this work. An outlay of Rs.6.00 lakh is being proposed for this in 1989-90.

10.3.10. *Strengthening of housing cell*—A housing cell with a nuclear staff was established in Economics and Statistics Division during the Fourth Five Year

Plan. The work load of this cell has tremendously increased due to rapid growth in building construction activities. Keeping in view increasing work load of this cell, it is proposed to strengthen the existing housing cell. An outlay of Rs.5.00 lakh is proposed for this in Annual Plan 1989-90.

10.3.11. *Improvement of social statistics*—The objective of this scheme is to make available statistics regarding social sector. For this purpose, regular sample surveys would be conducted to study the

existing pattern of social consumption and employment and also to study benefits accruing to the society through social and economic development programmes. One additional post of the Assistant Economics and Statistics Officer (in the pay scale of Rs.1400—2275) and Economics and Statistics inspector is required for each district for the work. The scheme will be managed and guided by a Joint Director at the State Headquarters. An outlay of Rs.15.00 lakh is being proposed for this scheme in 1989-90.

#### 10.4. CIVIL SUPPLIES

*Consumer Protection Programme*—In order to protect interest of consumers, Government of India passed the Consumers Protection Act, 1986. Accordingly, the State Government has also issued a notification on August 31, 1987, 'The Uttar Pradesh Consumer Protection Rules, 1987' and a 'Consumer Protection State Council' has been set up at the State Headquarters, which comprises twenty-two officials and forty-five non-official members.

10.4.1. The Government has also set up a Directorate of Consumer Protection with the Controller of Weights and Measures as its ex-officio Director. Twelve District Forums, one each at 12 Divisional Headquarters are the primary units to attend the complaints valuing up to Rs.1.00 lakh received from consumers of the districts. There is a State Commission at State Headquarters to hear appeals against the decisions of these district forums and to settle the complaints from consumers involving a value of more than Rs.1.00 lakh and up to Rs.10.00 lakh.

10.4.2. During 1989-90 it is proposed, to establish district forums in the remaining 47 districts of the state and to strengthen the Directorate of Consumer Protection. An outlay of Rs.100.00 lakh has been, therefore, proposed for this in 1989-90.

10.4.3. *State Employees Welfare Corporation* — U.P. Government Employees Welfare Corporation was established in 1965-66 to provide facilities to State Government Employees. Under this scheme, Sales-tax exempted essential commodities of daily use such as soaps, hair oil, tooth paste, toilet, transistors, pressure cookers, two wheelers etc. are provided to State Employees through its stores and tea, coffee, cold drinks, and snacks through its cafeterias in the Government office campuses at subsidised rates. The State Employees Welfare Corporation is running its business on "No Profit No Loss" basis. It is partially financed and managed by the State Government and supervised by the Board of Directors. The Corporation at present is running 86 stores at different District Headquarters and Tehsil level, and 21 canteens, out of which 17 are at Lucknow, 3 at Kanpur and one in High Court Allahabad premises. One canteen at Lucknow known as Central Hall Cafeteria is being run for members of the Legislature.

10.4.4. An outlay of Rs.10.00 lakh was approved in Seventh Plan to equip canteens run by the Corporation with modern electrical gadgets and crockery and to provide liveries to canteen employees. An outlay of Rs. 2.00 lakh has been provided for this Corporation in 1989-90.

## 10.5. WEIGHTS AND MEASURES

*Weights and Measures* — Under the Central Act of Standards of Weights and Measures 1956, the metric system of Weights and Measures was introduced in 1959. "The U.P. Weights and Measures (Enforcement) Rules 1960" and "Standards of Weight and Measures (Packaged Commodities) Rules 1977" are enforced by the State Weight and Measures Department with a view to establish fair trade practices and price discipline in the state, it was considered necessary to strengthen the existing machinery. At the end of Sixth Plan 129 working standard laboratories, four secondary standard laboratories at Regional level, one reference standard laboratory

of State Headquarter and two mobile squads were functioning. It was considered necessary to strengthen the existing machinery in Seventh Plan. In view of the vast area and volume of responsibilities of the department, it was considered necessary to establish at least one working standard laboratory in each Tehsil, one secondary standard laboratory and a Mobile Squad at each Regional Headquarter

10.5.2. The Seventh Plan outlay for these schemes is Rs.80.00 lakh including Rs.10.00 lakh for hills.

10.5.3. The following programmes were implemented by the Department during the period 1985-86 to 1988-89.

TABLE 5—Programmes for 1985—89

(Number)

Programme	1985-86			1986-87			1987-88			1988-89		
	Plain	Hill	Total	Plain	Hill	Total	Plain	Hill	Total	Plain	Hill	Total
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Establishment of Working Standard laboratories	17	1	18	15	..	15	..	2	2	..	..	..
Establishment of Secondary Standard laboratories	3	..	3	1	..	1	2	2	4	..	..	..
3* Establishment of mobile Squads	2	1	3	5	..	5	..	1	1	..	..	..
4. Strengthening of Staff	19	—	19	..	..	..	..	..	..	..	4	4

10.5.4. An outlay of Rs.37.00 lakh has been approved for 1988-89 which is expected to be utilised in full. For 1989-90, an outlay of Rs.43.00 lakh in-

cluding Rs.8.00 lakh for hills has been provided for continuing the aforesaid programmes.

## CHAPTER XI

### EDUCATION

#### 1. GENERAL EDUCATION

It is universally acknowledged that education has continued to evolve, diversify and extend its reach and coverage since the dawn of human history. Education has been assigned a pivotal role in the development process right from the beginning of the first plan. Directive principles of the constitution lay down that free compulsory education shall be provided to all the children up to the age of fourteen years. Effects have been made in the past to realise this objective. The National Policy on Education 1986 and the new twenty point programme reiterate the commitment of education not only for universalisation but also for improving the content of education at different levels. In keeping with the declared objectives of the Seventh Plan document and guidelines of the National Policy on Education, efforts will be made in the following major thrust areas :

1. Achievement of universal elementary education
2. Broadening access to education through provision of non-formal and adult education programmes
3. Ensuring availability of educational centres for under privileged sections of the society particularly of Scheduled Castes, scheduled tribes and girl in the rural and less deve-

loped areas in order to give effect to the principle of equity in education

4. Vocationalization of Secondary Education and skill-training programmes at different levels of education

5. Distance Education

6. Provision of facilities for qualitative improvement with emphasis on science education

7. Improving the present system of evaluation in order to bring more of reliability, validity and acceptability in the system

8. Value oriented education

9. Work experience

10. Qualitative improvement of higher education

11. Provision of facilities for physical education

12. Involving community in educational development

11.1.2. The programmes of 1989-90 have also been prepared keeping in view the priorities of the National Education Policy and strategy of the Seventh Plan.

#### PHYSICAL TARGETS

11.1.3. The following table will indicate the gradual increase in educational facilities and enrolment at various levels of education during Seventh Plan.

TABLE 1—Physical target and achievement

Item	Base year 1984-85	Seventh Plan target	1987-88 Achieve- ment	1988-89 Antici- pated	1989-90 Proposed
(1)	(2)	(3)	(4)	(5)	(6)
<b>ELEMENTARY EDUCATION</b>					
<b>(a) Primary</b>					
1. No. of Institutions .. ..	72,962	75,702	73,742	73,967	74,279
2. No. of Students 1-5 (in lakh) .. ..	117.07	147.16	124.36	126.86	134.96
3. No. of teachers (000) .. ..	255	264	260	260	261

TABLE 1—(Concl'd.)

Item	Base year 1984-85	Seventh Plan Target	1987-88 Achieve- ment	1988-89 Antici- pated	1989-90 Proposed
1	2	3	4	5	6
<i>(b) Junior High Schools</i>					
1. No. of Institutions .. ..	14112	14,812	14,376	14,446	14,529
2. No. of students (in lakh) .. ..	36.78	43.20	38.78	34.98	40.04
3. No. of teachers (000) .. ..	93	97	95	95	96
SECONDARY EDUCATION					
1. No. of institutions .. ..	5,654	5,850	5,768	5,777	5,804
2. No. of students (in lakh) .. ..	25.58	28.81	27.61	28.15	28.81
3. No. of teachers (000) .. ..	92	95	94	95	96
HIGHER EDUCATION					
1. No. of institutions ] .. ..	..	..	403	407	419
2. No. of students (in lakh) .. ..	..	..	4.10	4.96	5.10
3. No. of teachers .. ..	..	..	19,456	19,800	21,000

11.1.4. It is evident from the above table that the target fixed to open 2,740 primary and 700 junior basic schools during Seventh Plan are not possible to achieve. During first four years of the plan, 1,005 primary and 334 junior high schools were opened leaving a balance of 1,735 primary schools and 366 junior high schools. It is proposed to open 312 primary and 83 junior high schools in 1989-90, the last year of Seventh Plan.

## FINANCIAL

11.1.5. The outlay of Seventh Plan for education was Rs.26,199 lakh including Rs. 7,476 lakh for hills against which expenditure of Rs.17,669 lakh was incurred during the years 1985-86, 1986-87 and 1987-88. The outlay of 1988-89 is Rs.8,506 lakh including Rs.2,250 lakh for hills. This outlay is expected to be utilised in full. An outlay of Rs.9,790 lakh including Rs.2,506 lakh for hills has been proposed for the 1989-90.

TABLE 2—Outlay and Expenditure

(Rupees in lakh)

Head of Development	Seventh Plan outlay 1985-90	1985-86 Expen- diture	1986-87 expendi- diture	1987-88 expen- diture	1988-89 Approved outlay	1989-90 Proposed outlay
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Elementary Education .. ..	17428 (3620)	2934 (748)	3687 (835)	4055 (792)	4524 (996)	5056 (1118)
2. Secondary Education .. ..	5088 (2852)	772 (483)	1139 (581)	1887 (885)	2995 (944)	2867 (1037)
3. Higher Education .. ..	1825 (760)	638 (153)	650 (148)	887 (220)	451 (250)	924 (276)



TABLE 2—(Concl'd.)

(Rs. in lakh)

Head of Development	Seventh Plan outlay 1985-90	1985-86 Expenditure	1986-87 Expenditure	1987-88 Expenditure	1988-89 Approved outlay	1989-90 Proposed outlay
1	(2)	(3)	(4)	(5)	(6)	(7)
4. Adult Education ..	1233 (228)	165 (5)	275 (19)	310 (37)	488 (59)	780 (74)
5. Language .. .. .	281 (7)	33 (0)	40 (1)	88 (0)	28 (1)	96 (1)
6. General .. .. .	344 (9)	39 (0)	36 (0)	34 (0)	20 (0)	67 (0)
<b>Total General Education ..</b>	<b>26199 (7476)</b>	<b>4581 (1389)</b>	<b>5827 (1583)</b>	<b>7261 (1934)</b>	<b>8506 (2250)</b>	<b>9790 (2506)</b>

11.1.6. From the above table it is evident that the approved outlay of Rs.262 crore of Seventh Plan has been more or less utilised by spending Rs.262 crore during first four years of the plan. For 1989-90, an outlay of Rs.97.90 crore has been proposed. Thus the expenditure during Seventh Plan period is anticipated to be Rs.360 crore.

#### ELEMENTARY EDUCATION

11.1.7. The National Policy on Education lays down that the new thrust in elementary education will emphasize two aspects viz. (i) Universal enrolment and universal retention of children up to 14 year of age, and (ii) substantial improvement in the quality of education.

11.1.8. The National Policy on Education gives highest priority to solving the problem of dropping out of children from schools and emphasises adoption of well thought out strategies based on micro-planning to ensure children's retention in schools. It further emphasises co-ordination of these efforts with the net work of non-formal education. It has been suggested that all children who attain the age of about 11 years by 1990, should have had five years of schooling or its equivalent through non-formal system of education. Like-wise by 1995, all children have to be provided free and compulsory education up to 14 years of age.

11.1.9. Universalisation of elementary education involves three basic requirements:

- (a) Universal provision of schooling facilities
- (b) Universal enrolment
- (c) Universal retention

11.1.10. At present, the norms for provision of primary and middle schooling facilities under the formal system are:

- (i) A primary school within 1.5 km. in plains and habitations of 300 or more. In hills the norm has been reduced to 1 km.
- (ii) A Middle School within a radius of 3 kms. and habitations of 800 or more.

11.1.11. During Seventh Plan, as many as 1,317 new primary schools and 417 new middle schools would have been opened. The following table gives year-wise figures of these schools:

TABLE 3—New Schools opened during Seventh Plan Period

Year	New Schools opened	
	Primary	Middle
(1)	(2)	(3)
1985-86 .. .. .	351	114
1986-87 .. .. .	222	72
1987-88 .. .. .	207	78
1988-89 (Anticipated) ..	225	70
1989-90 (Target) ..	312	83
<b>Total Anticipated ..</b>	<b>1317</b>	<b>417</b>

11.1.12. Education Policy of 1986 has given a symbolic name of 'Operation Black Board' for providing essential facilities in primary schools. At the end of Sixth Plan, there were 18,857 primary and 2710 middle schools without building. It was targeted to construct buildings for these schools during Seventh Plan. During 1985-89 in total 9,702 primary and 1,156 middle school buildings were constructed. During 1986-87 a decision was taken to construct primary school buildings under RLEGP also. At present there are only 9,155 primary schools and 1,554 middle schools without buildings.

11.1.13. Even for construction of remaining 9,155 primary school buildings Rs.82.39 crore will be required, which

is beyond state resources. As the Ninth Finance Commission has recommended an award of Rs.69.61 crore for construction of these buildings. It is anticipated that no building less primary school will be left in the state by the end of Seventh Plan. The state will also provide the balance amount required for completion of these buildings.

11.1.14. The percentage of enrolment in formal schools based on projected population in the age-group 6-11 was 75 (98 per cent boys and 50 per cent girls) at the end of Sixth Plan. In terms of numbers, the position at the end of the Sixth Plan along with projected child population for 1989-90 is given below :—

TABLE 4—Enrolment at the end of the Sixth Plan and child population by 1990

Item	Age group 6-11			Age Group 11-14		
	Boys	Girls	Total	Boys	Girls	Total
	(2)	(3)	(4)	(5)	(6)	(7)
Child Population (by 1990)	8687	8029	16716	4931	4350	9281
Enrolment (1984-85)	7930	3777	11707	2821	857	3678

11.1.15. The target of enrolment for Seventh Plan (1985-90) was set at 88 per cent i.e. 100 per cent for boys and 75 per cent for girls in the age-group 6-11 years. Similarly, the projected child population for 1989-90 in the age-group 11-14 years is 92.81 lakh comprising 49.31 lakh

boys and 43.50 lakh girls. The percentage of enrolment target for Seventh Plan is 46 per cent i.e. 65 per cent boys and 25 per cent for girls. The position of enrolment anticipated at the end of Seventh Plan is given in the following table :—

TABLE 5—Enrolment during Seventh Plan period

Year	Age group 6-11 years			Age group 11-14 years		
	Boys	Girls	Total	Boys	Girls	Total
	(2)	(3)	(4)	(5)	(6)	(7)
Seventh Plan (1985-90) Target	100	75	88	65	25	46
Achievement (1987-88)	96	55	76	60	24	43
Anticipated (1988-89)	96	56	77	59	24	43
Proposed (1989-90)	100	60	81	60	24	43

11.1.16. Efforts are being made to activate village level school committees for achieving the objectives of universal enrolment and universal retention. Co-operation is also sought from influential people to get the support of the community. However, enrolment of girls in the age group 6-11 years is still not picking up.

11.1.17. The National Policy on Education (1986) declares that the policy of non-detention at the primary stage will be continued making education as disaggregated as feasible. For retention of

children in primary schools, the State has adopted the policy of "Non-detention" up to class III. Incentive schemes of distribution of free text-books to children of weaker sections and grant of scholarships to meritorious students will be continued. An outlay of Rs.13.79 lakh has been proposed for this in 1989-90.

11.1.18. Non-formal part-time education for children of elementary age group is proving quite successful. The following table shows achievements in non-formal education during 1985-90 :-

TABLE 6—Enrolment in non-Formal Education

Stage	('000)											
	1985-86			1987-88			1988-89			1989-90		
	No. of centre	Total	Girls	No. of centre	Total	Girls	No. of centre	Total	Girls	No. of centre	Total	Girls
1	2	3	4	5	6	7	8	9	10	11	12	13
Primary ..	22854	529	236	32130	779	370	34320	858	590	34320	858	590
Middle ..	2771	56	18	1594	40	15	..	..	..	..	..	..
Total ..	25616	585	254	33724	819	385	34320	858	590	34320	858	590

11.1.19. An outlay of Rs.677.03 lakh including Rs.66.43 lakh for hills (representing state's share only) has been proposed for non-formal education in 1989-90. Considering the importance of girls education, it is proposed to open 2,600 additional non-formal centres exclusively for girls subject to availability of Central Assistance to the extent of 90 per cent of the expenditure involved in these centres.

11.1.20. The National Policy of Education has expressed grave concern over erosion of essential values and increasing cynicism in society and has underlined the need for readjustments in the curriculum in order to make education an effective tool for cultivation of social and moral values. Programmes have been made to train teachers in elementary education, in moral and value oriented education. An outlay of

Rs.43.00 lakh has been provided in 1989-90 for this scheme.

11.1.21. The central focus in the schedule castes educational development is their equalisation with non-scheduled castes population at all stages and levels of education, in all areas and in all the four dimensions—rural male, rural female, urban male and urban female. Special efforts have been made to provide adequate facilities, to Scheduled Castes and Scheduled Tribes. Under Special Component Plan, the proposed quantification of outlay in 1989-90 is Rs.2,021.78 lakh which is 20.54 per cent of the total outlay of Education. In the same way a sum of Rs.274.13 lakh has been proposed for Tribal sub-Plan of 1989-90 which comes to 2.8 per cent.

11.1.22. In order to enable Basic Education Directorate to deal with legal matters and court cases, it has been

found necessary to establish a legal cell in the Directorate. This will require a competent legal officer and his supporting staff. An outlay of Rs. 1.75 lakh has been proposed for this in 1989-90.

#### SECONDARY EDUCATION

11.1.23. Secondary education begins to expose students to the differentiated roles of science, the humanities and social sciences. National Policy on Education holds "This is also an appropriate stage to provide children with a sense of history and national perspective and give them opportunities to understand their constitutional duties and rights as citizens.

11.1.24. The State's Seventh Plan lays special emphasis on the improvement of the content and quality of education. Special efforts are being made to promote girls education in unserved areas. In 1985-86, twelve girls higher secondary schools were opened in those tehsils which had no girls higher secondary schools. During 1986-87 seven girls higher secondary schools were opened, in 1987-88 twelve such girls schools were opened. In the plan of 1989-90 about 19 such girls schools are proposed to be opened and a sum of Rs. 197.42 lakh has been proposed. Provision has also been made during 1989-90 for opening of 8 boys higher secondary schools and upgradation of high schools to intermediate standard in hill area.

11.1.25. National Policy on Education holds that the introduction of systematic, well planned and rigorously implemented programmes of vocational education is crucial in educational reorganisation. A beginning was made in the year 1985-86 for vocationalisation of education at the higher secondary level. Vocational courses in commerce are being run in 126 institutions, vocational courses in home science have been introduced in 160 institutions and vocational course in agriculture have been introduced in 154 institutions. An outlay of Rs. 78.00 lakh has been provided in 1989-90 for vocational education in the state.

11.1.26. Distance learning is the most effective and useful way for those who want to study in their leisure or vacant

time. To provide education through correspondence to the candidates intending to appear privately at the high school and intermediate examination of U. P. board, the institute of correspondence education was established in 1980-81. A provision of Rs. 102.00 lakh has been made in the plan of 1989-90 to effectively continue this scheme.

11.1.27. Institute of correspondence established at Allahabad has been working since 1980-81 from central place. In order to effectively strengthen the present scheme of correspondence education, supporting staff is needed at the central and regional level so that lessons prepared are distributed and evaluated more effectively. For this a provision of Rs. 98.45 lakh has been made in annual plan of 1989-90.

11.1.28. The institute of correspondence education is planning correspondence education through regular contact programme in 22 aided secondary institutions. For this a provision of Rs. 59.18 lakh has been made in the plan of 1989-90. In this scheme 64 aided institutions will be covered.

11.1.29. Value oriented training is essential for student and teachers in our culturally plural society, education should foster universal and eternal values, oriented towards the unity and integration of our people. Such value of education would help to eliminate obscurantism, religious, fanaticism, violence, superstition and fatalism. A sum of Rs. 33.89 lakh has been provided for training of teacher in moral education and value oriented education in the plan of 1989-90.

11.1.30. In order to promote all round excellence in secondary institutions arrangements have been made to provide incentive grant to aided institutions at the rate of Rs. one lakh each. A provision of Rs. 4.00 lakh has been made in 1989-90.

11.1.31. In the context of qualitative improvement the scheme of strengthening school libraries would continue and a sum of Rs. 15.75 lakh has been provided in 1989-90.

11.1.32. In the year 1986-87 the State Government appointed a task force for examining the working of the Board of High School and Intermediate education, particularly its pre and post examination systems of working with a view to suggesting steps for its reorganisation. An outlay of Rs.60.00 lakh has been provided for carrying out the recommendations of the task force.

11.1.33. Community participation is essential for democratic functioning of institution. Parent-teacher associations have been formed in almost all the recognised secondary institutions in the state. Community singing programmes have been introduced in schools in order to develop love and respect for all Indian languages and the programme is proving very effective for National Integration Campaign. National Youth Camps are also being organised for the students of class IX for community living.

#### UNIVERSITY AND HIGHER EDUCATION

11.1.34. The National policy on education emphasizes contribution of higher education to national development through dissemination of specialized knowledge and skills. There are 22 Universities in the State. The Government provides non-recurring grants for the development of these universities and matching share against U. G. C. grants to 19 state universities. An outlay of Rs. 210.00 lakh is proposed for this purpose in 1989-90, out of which Rs.135.00 lakh is for two hill Universities.

11.1.35. In view of National Education Policy, three year degree course has been introduced in all the state Universities. As a result of this additional posts of teaching and non-teaching staff, construction of class rooms and laboratories and purchase of apparatus, equipment, furniture, books etc. are now required. This involves mobilization of more funds. An outlay of Rs.20.00 lakh is proposed for this purpose in 1989-90. An additional outlay of Rs. 80.00 lakh is also required for meeting similar obligations of three year degree course in all Government colleges.

11.1.36 Generally, a matching share is given to non-Government Colleges. Most of non Government Colleges are in a position to get enough grants from the U. G. C. But due to lack of funds it becomes difficult for State Government to sanction matching share in time. The Government has, therefore, to sanction matching share in piece-meal, as a result of which colleges do not get full benefit from the U. G. C. Under the scheme of "Grant to aided colleges for matching contribution against U. G. C. grants and other developmental schemes". An outlay of Rs.31.00 lakh is being proposed for 1989-90, out of which Rs.1.00 lakh is for hills.

11.1.37. At present two Regional Offices one at Gorakhpur and other at Lucknow are functioning under the Directorate of Higher Education. In order to remove the difficulties of distantly situated Non-Government Colleges for getting their accounts audited and for getting regular periodical inspection conducted in collaboration with their respective universities, more Regional Offices are required. At least two more Regional Offices one at Meerut and another at Agra will be established in 1989-90. Improvement in the Physical amenities and more staff is also required for the existing two Regional Office. For this purpose an outlay of Rs.8.50 lakh is proposed for 1989-90.

11.1.38. Regional Office of Indira Gandhi Open University has been established at Lucknow. At present this office is running in a rented building. An outlay of Rs.30.90 lakh is, therefore, proposed for 1989-90. The State Government has only to provide land. Building hostles and guest house will be constructed by the National Indira Gandhi Open University itself. Some part of this land will be reserved for Regional Higher Education Office Lucknow.

11.1.39. Construction of building of 13 Government Colleges (5 in plains and 8 in hills) is under progress. Proposals

and estimates for construction of buildings of 18 Government Colleges (10 in plains and 8 in hills) are under consideration of the Government. Electrification in the newly constructed buildings is also necessary. The extension of existing buildings of Government Colleges is also done from time to time. For purposes of construction, extension, electrification of buildings and residences an outlay of Rs.136.00 lakh is proposed in 1989-90, out of which Rs.56.00 lakh will be for the hills. Similarly, for construction of hostels and extension of buildings, electrification of existing Government Degree Colleges an outlay of Rs.20.00 lakh has been proposed.

11.1.40. The National Education Policy also lays stress on training of teachers and principals to make them more useful for their functions. The Directorate of Higher Education has been organising training programmes for them for the last two years. A programme of training about 150 Principals of Government and non-Government Colleges has been chalked out during 1988-89. It is proposed that in 1989-90 more training camps will be organised. For this purpose, an outlay of Rs.1.00 lakh has been proposed for 1989-90.

#### ADULT EDUCATION

11.1.41. Various studies have shown that literacy affects human resource development in many ways. Past experience shows that programmes of literacy can become meaningful only when they come along with a package of comprising practical information and skills relevant to day-to-day needs of learners. Under National Literacy Mission, emphasis has been laid on skill development and creation of awareness among learners of the national goals of development programmes and for liberation from oppression.

11.1.42. According to the census report of 1981, literacy in Uttar Pradesh was only 27.16 per cent (Men-38.76 and Women-14.04) as compared to All India percentage of 36.23 (Men-46.89 and women 24.82). There has been some increase during seventies in both male (from

31.50 per cent in 1971 to 38.76 per cent in 1981) and female literacy (from 10.55 per cent to 14.04 per cent). Significantly enough, it is female literacy which is picking up faster than male literacy. This is bound to have a salutary effect on the pace of literacy in time to come.

11.1.43. During the first 3 years of Seventh Plan, 27.06 lakh adults belonging to the age-group of 15-35 have been benefited by adult education centres. During 1988-89, another 10.26 lakh adults are likely to be covered by the programme. For 1989-90, 11.52 lakh will be benefited under this programme. An outlay of Rs.779.93 lakh has been provided for this programme. The different projects presently functioning in the state are :—

1—Centrally sponsored Rural Functional Literacy Programmes covers 63 projects with 18,900 Centres in 189 blocks and 5.67 lakh nominations.

2—State Adult Education Programme (SAEP) from state resources is being run in 30 projects covering 90 blocks with 9,000 Centres and 2.70 lakh nominations. 7 additional projects are likely to be sanctioned this year.

3—The voluntary agencies in the state and some other institutions are running 3,440 and 1,153 centres respectively covering 1.46 lakh beneficiaries of these 702 centres covering 0.19 lakh beneficiaries under U. G. C. Programme are run through Universities.

11.1.44. Post literacy and follow up programme for neo-literates will now be looked after by 'Jan Shikshan Nilayam'. 1,369 JSNs are proposed to be started in 37 projects funded wholly by State Adult Education Programmes on the pattern of Government of India. An outlay of Rs.146.35 lakh has been proposed for this programme.

11.1.45. For achieving the targets proposed by National Literacy Mission, mass programmes for functional literacy has

been started Blue prints and action plans for each district have been prepared various agencies have been contacted and literacy kits are being given to them to work under 'each one teach one'. In the annual Plan 1989-90, an outlay of Rs. 53.00 lakh has been proposed for this scheme.

11.1.46. According to the guidelines of Government of India "the State Literacy Mission Authority" has been constituted at the district, block, Nyaya-Panchayat, Village, Municipal Board and Mohalla levels. Local adult education committees are proposed to be constituted to get local support and participation of community in the Adult Education Programme. An amount of Rs. 0.50 lakh has been proposed for The State Literacy Mission Authority in 1989-90.

#### STATE COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

11.1.47. The State Council of Educational Research and Training (SCERT) has been established with a view to conducting research and experimentation in the field of school education and to impart training to various functionaries. The council is responsible for revising curriculum of primary level. It also prepares nationalised text-books and readers technical help in the making of curriculum for higher secondary institution.

11.1.48. The National Policy on Education lays great stress on scientific temper. In order to develop a scientific attitude in the community, district, regional and state level science exhibitions are organised every year by SCERT. An outlay of Rs. 2.68 lakh has been provided in 1989-90 for this purpose.

11.1.49. An outlay of Rs. 15.00 lakh has been provided under the scheme of establishment of science kits workshop to provide for raw materials etc. and to keep the workshop in running condition.

11.1.50. Educational Technology Institute of SCERT is implementing an ambitious and massive education T. V. programme under 'INSAT' project. Selected 900 primary schools of rural areas of three districts of the state namely Basti,

Gorakhpur and Azamgarh have been provided T. V. sets under the scheme. Educational programmes are being telecast from 9.45 a.m. to 10.30 a.m. for the benefit of students. For meeting the obligations of the state in this scheme, a provision of 32.40 lakh has been made in 1989-90.

11.1.51. National Policy on Education also declares that teachers should have the freedom to innovate, to devise appropriate methods of communication and activities relevant to the needs and capabilities of and the concerns of the community. Under the national scheme of inservice training, 70,000 primary and Secondary school teachers were trained in 1986 and 53,000 teachers in 1987. 60,000 teachers of elementary education are being trained in 1988 and 41,000 teachers of secondary schools have already been trained this year.

11.1.52. Under the new Educational Technology scheme of Government of India grants have been sanctioned for the purchase of 12,000 Radio-cum-Cassette players and recorders for Junior High schools.

#### LANGUAGE DEVELOPMENT

11.11.53. *Education Department* — Among Language development programme the scheme of giving grant in aid to Sanskrit Pathshalas and Arabic Madarsas will be continued. An outlay of Rs. 8.00 lakh has been proposed for 1989-90 for promotion of Modern Indian Languages.

11.1.54. *National Integration Department*—It was decided to include establishment of photo-off-set processing press at Urdu Academy as a plan item during seventh plan. An outlay of Rs. 95.00 lakh had been approved. In 1986-87 with an expenditure of Rs. 21.00 lakh one acre land was purchased. Now the proposal for construction of building for Urdu Academy is under consideration and estimates are being made. It is anticipated that Rs. 1.01 crore will be required for this construction. During 1988-89 an outlay of Rs. 15.00 lakh has been approved and an outlay of Rs. 51.00 lakh has been proposed for 1989-90.

## NATIONAL POLICY ON EDUCATION

11.1.55. Due to limitation of resource, only very essential schemes could be included within the outlay indicated for education. The state government has, however, already considered the national policy on education in great detail and on the basis of various exercises done at different levels, proposals were sent to Government of India for funds required to implement various schemes of National Policy of Education. The Government of India sanctioned the following funds for different schemes :

Schemes	Amount (crore)
1. Operation Black Board ..	17.59
2. Non Formal Education ..	10.82
3. Scheme of Consolidated Education for handicapped children	0.10
4. Vocational Education in Higher secondary School	8.30
5. Improvement of Science Education schools	3.13
6. Rural Functional Literacy programme	4.38
7. Establishment of Jan Shikshan Nilayam	0.53
8. Establishment of District Institute of Education Training	5.36
9. Educational Technology ..	0.96
Total ..	51.17

11.1.56. *Operation Black Board*—Provision will be made of essential facilities in primary schools including atleast two reasonably large rooms that are usable in all weather, and necessary toys, blackboards, maps, charts and other learning material. Atleast two teachers including one female teacher, should also work in every school. A phased drive, symbolically called 'Operation Black Board' will be undertaken to improve primary schools. There are 896 Blocks in Uttar Pradesh. Proposals under operation black board were sent to Government of India for 277 Blocks. The Government of India sanctioned 1759 lakh under the scheme. Proposals for another 282 blocks have been sent to Government of India and a sum of Rs.17.59 crore will be required.

Proposal for the remaining blocks will be sent shortly.

11.1.57. *Non for Formal Education*—A large and systematic programme of Non-Formal education will be launched for schools dropouts, for children from habitations without schools, working children and girls who can not attend whole day schools. The scheme of Non-Formal education in being run in 336 blocks and the scheme of Adult Education in 300 blocks. The Government of India sanctioned Rs.10.82 crore for Non-Formal Education. It is proposed to start 2600 Non-Formal Education centres in 1989-90.

11.1.58. *Scheme of Consolidated Education for Handicapped Children*—The objective is to integrate physically and mentally and handicapped with the general community as equal partners, to prepare them for normal growth and to enable them to face of Rs.0.10 crore was sanctioned by life with courage and confidence. A sum of Rs.0.10 crore was sanctioned by Government of India for educating handicapped children. This scheme will continue and a sum of Rs.0.10 crore will be needed in 1989-90.

11.1.59. *Vocationalisation of Education*—The introduction of systematic, well planned and rigorously implemented programmes of Vocational education is crucial in the proposed educational reorganisation. Efforts will be made so that Vocational courses cover 10 per cent of higher secondary students by 1990 and 25 per cent by 1995. Efforts are also being made to identify 600 secondary institutions which will be developed as resource centre for Vocational Education. At present 200 such institutions have been identified and it is proposed to identify 200 more in 1988-89. The Government of India sanctioned Rs.8.30 crore for Vocationalisation of Education in the State. Arrangements are being made to equip 200 institutions with required tools and machines. Working sheds will also be completed shortly. Twentyone trades have been identified for imparting Vocational education. Rs.12.18 crore will be required for this scheme in 1989-90.



11.1.60. *Improvement of Science Education in Schools*—Programmes of science education will be designed so to enable learner to acquire problem solving and decision making skills and to discover the relationship of science with health, agriculture, industry and other aspects of daily life. The Government of India sanctioned Rs. 313.00 lakh for improvement of science education in schools. Efforts are being made to equip libraries with modern books on science. Science laboratories are being equipped with modern gadgets and district resource centres are also being developed to promote science education at school level. This scheme will be continued. A sum of Rs. 7.19 crore will be required for improvement of science education in schools.

11.1.61. *Rural Functional Literacy Programmes*—The Government of India sanctioned Rs. 4.38 crore for rural functional literacy programmes. Centrally sponsored rural functional literacy programme covers 63 projects with 18900 centres in 189 blocks and 5.67 lakh nomination.

11.1.62. *Establishment of Jan Shikshan Nilayam*—Post literacy and follow up programmes for neo-literates will now be looked after by Jan Shikshan Nilayam. 1369 JSNs are proposed to be started in 37 projects funded wholly by State Adult Education Programme on the pattern of Government of India. An amount of Rs. 146.35 lakh has been proposed for this purpose.

11.1.63. *Establishment of District Institutes of Education and Training*—District Institutes of Education and Training (DIET) will be established which will have the capability to organise pre-service and in-service courses for elementary school teachers and for the personnel working in non-formal and adult education. The Government of India sanctioned Rs. 5.96 crore, for establishing 20 DIETs in 20 districts in the State. Proposals for opening 10 more DIETs have been sent to Government of India and a sum of Rs. 3.00 crore will be needed for this purpose. Proposal for the remaining districts will be sent shortly.

11.1.64. *Education Technology*—The Government of India has sanctioned Rs. 0.96 crore under this scheme. Two-in-one sets will be distributed to such institutions as are being covered under operation black board. A sum of Rs. 1.00 crore will be needed for this scheme to distribute two-in-one sets to other institutions which will be covered under operation black board.

#### COLLEGES OF TEACHERS EDUCATION AND IASE

11.1.65. The responsibility for secondary teachers education would continue to rest with colleges of teachers Education affiliated to universities. Some colleges of Teachers Education will be developed as comprehensive institutions organising programmes for primary teachers. Establishment of 30 colleges of Teachers Education and 6 IASE will initially require a sum of Rs. 20.62 crore from Government of India.

### 11.2. TECHNICAL EDUCATION

Engineering and technological activities contribute nearly 35 per cent towards National Economy. The phenomenal expansion and diversification of industry has been posing a challenge to the system. The system has somehow withstood the test of time by supplying technical manpower with the explosion of knowledge and opening of new vistas. Very high quality of manpower will be required in the decade ahead. The National Policy on Education has addressed itself to the needs by laying

maximum stress on quality education, greater emphasis on new and emerging areas and interaction with industry, service sectors and un-organised sectors. In view of the principles laid down in policy, greater emphasis has been laid on starting such activities and removal of mismatch between supply and demand of technically trained manpower.

11.2.2. For 1989-90, an outlay of Rs. 2,685.86 lakh including Rs. 650.00 lakh for hills has been proposed of which

Rs.1135.86 lakh including Rs.300.00 lakh for hills have been allocated for district plan.

11.2.3. The important schemes/programmes which are being implemented are detailed below :

11.2.4. *Strengthening of the Directorate of Technical Education/Existing Regional Offices*—To improve efficacy of the system and to bring about efficiency in its various sub-systems, the management structure needs to be strengthened. Realising this need, National Policy on Education has stressed the establishment of Policy implementing cell in the Directorate of Technical Education. The communication and information system needs to be given more modern and sophisticated inputs. Modern and time saving techniques shall have to be adopted to meet the demand of system. Planning and implementation of the schemes needs to be effectively done with a view to improving the quality of Technical Education. In view of the above Regional Offices of the Directorate will have to be strengthened. In hill region for the effective control over Institutions a new Regional Office for kumaun mandal is also proposed to be established in 1989-90.

11.2.5. An outlay of Rs.28.00 lakh for Directorate of Technical Education and Rs.26.00 lakh including Rs.6.00 lakh for hills for Regional Offices has been proposed for 1989-90.

11.2.6. *Board of Technical Education*—The increased number of institutions and courses calls for the strengthening of existing infrastructure of the Board. An outlay of Rs.2.00 lakh is proposed for 1989-90.

11.2.7. *Strengthening of Institute of Research Development and Training*—The scheme of I.R.D.T. was sanctioned at the end of Fifth Five Year Plan with the objective of improving the quality of polytechnic teachers by organising refresher and short-term courses and development of teaching and instructional material. To achieve the above objective, the State

Government has emphasized strengthening of I.R.D.T. under an independent head of the department. For this purpose an outlay of Rs.10.00 lakh is proposed during 1989-90.

11.2.8. *Degree Level Institutions*—The main emphasis is on consolidation of existing institutions and the implementation of New Education Policy. K.N.I.T. Sultanpur and I. E. T. Lucknow were established during Sixth Plan. Due to paucity of funds in Sixth Plan, essential facilities could not be provided at these institutions. To equip these institutions with adequate land, proper building and essential equipment, necessary funds have to be provided. Two engineering colleges in hill region and one in Bundelkhand region have also been proposed. An outlay of Rs.1250.00 lakh including Rs.300.00 lakh for the hills has been proposed for 1989-90.

11.2.9. *Northern Regional Institute of Printing Technology Allahabad*—Institute of Printing Technology, Allahabad is the only institute imparting training in the field of Printing in the Northern Region. Due to rapid development in the field of Printing Technology, the courses being conducted need updating and modernisation. An outlay of Rs.16.00 lakh has been proposed for this purpose in 1989-90.

11.2.10. *Government Leather Institutes, Agra/Kanpur*—Government Leather Institutes at Kanpur and Agra are two diploma level institutions imparting training at diploma level to meet the requirement of leather industry at supervisory level. The syllabi of the courses has been revised and updated as per requirement of industry. An outlay of Rs.34.00 lakh has been proposed in 1989-90 for providing equipments, library and buildings.

11.2.11. *Women's Polytechnics*—Women constituting about 47 per cent of the population avail only 6 per cent training facilities in Technical Education. Emphasis has been shifted from conventional courses for women to the courses

having greater employment potential. It is also proposed to open new girls polytechnics in Meerut, Moradabad and Jhansi divisions so-as to establish at least one girls polytechnic in each division. An outlay of Rs.141.00 lakh including Rs.44.00 lakh for hills is proposed for this scheme for 1989-90.

11.2.12. *New Diversified Courses*—Two institutions, **Government Polytechnic, Jaunpur and Pratapgarh** which are at present running only one course will be provided facilities to start Electronics and Engineering Courses. Electronics have greater demand of technical manpower at present. An amount of Rs.52.30 lakh including Rs.15.00 lakh for hills is proposed for existing and these two newly proposed courses for 1989-90.

11.2.13. *Consolidation of Polytechnics*—The facilities in polytechnics in regard to the availability of adequate resources of teaching faculty, non-residential buildings, hostels and residential quarters are the necessary prerequisites of technical education and removal of gaps in equipments for intergated and co-ordinated development.

11.2.14. An outlay of Rs.855.34 lakh including 236.25 lakh for hills is proposed for this scheme in 1989-90. An amount of Rs.92.85 lakh for staff quarters is also proposed for 1989-90.

11.2.15. *Replacement and Modernisation of Equipment*—Rapid advancement of technology and explosion of knowledge has necessiated the removal of obsolescence in resources i.e. human, physical and information and constant updating in quality of training. The teachers will be trained to keep them informed about latest development of technology. Up-dated equipments and machines in use in industry will be procured. Higher priority will be given to modernise equipments in Printing, Leather and Electronics Technologies. Rs.9.30 lakh including Rs.2.05 lakh for hills and Rs.38.02 lakh including Rs.2.10 lakh for hills are proposed for 1989-90 for replacement of equipments and modernisation of equipment respectively.

11.2.16. *Reorganisation of Liabraries*—The libraries in Technical Institutions do not have trained librarians and the books are outdated and require replacement. The facilities in libraries need to be strengthened comprihensively. An outlay of Rs.8.82 lakh including 1.20 lakh for hills is proposed for 1989-90.

#### QUALITY IMPROVEMENT PROGRAMMES

11.2.17. *Computer Education*—Computer Education is proposed to be started at all levels. Diploma course in computer application is proposed to be started in two additional institutions at Government Polytechnic, Kanpur and Government Girls Polytechnic, Lucknow. Basic training programmes on Computers will be initiated for student of electronics engineering and Computer application programmes for other institutions. **This supply of manpower will meet the growing requirements of business houses, industrial organisations, Government Offices and other sectors.** An outlay of Rs.15.80 lakh including Rs.3.80 lakh for hills for Computer Education is proposed for 1989-90.

11.2.18. *Organisation or Industry-Institute Interaction Programmes*—Usar agencies often complain of poor quality of diploma holders produced by the system as they do not conform to expectation of the employers. This could be attributed to the lack of interaction with the industry and the curriculum not being designed as per their need. **Interaction with industry and manpower information system will be strengthened qualitatively to meet the requirement of work.** An outlay of Rs.2.80 lakh is proposed for this scheme for 1989-90.

11.2.19. *Equipment Repair Centres*—Equipment Repair Centres are proposed to be started at **Government Polytechnic, Kanpur** and Institute of Rural Engineering and Technology, Allahabad to ensure proper practical training and optimal utilisation of the resources. An outlay Rs.4.50 lakh is proposed for this scheme for 1989-90.

### 11.3. SPORTS AND YOUTH SERVICES

#### *Physical Education and Youth Welfare Programmes for Students*

Physical education has become an integral part of education. The programme is being run mainly in elementary and secondary level schools in order to inculcate interest in games and sports among boys and girls. The N.C.C. has been introduced almost at all levels. Scouting and girls guiding programmes are also being encouraged. For promotion of physical efficiency in sports and games Institute of School games at Faizabad was established during Sixth Plan. It is proposed to strengthen this institute in Seventh Plan.

11.3.2. An outlay of Rs.170.75 lakh including Rs.49.65 lakh for hills has been approved in the Seventh Plan to implement schemes and programmes for promotion of physical education and youth welfare programmes. During first three years of the plan, an expenditure of Rs.137.18 lakh including Rs.11.27 lakh in hills has already been incurred. It is anticipated that Rs.62.22 including Rs.4.25 lakh for hills will be spent in 1988-89. For 1989-90 an outlay of Rs.66.35 lakh including Rs.4.25 lakh, for hills is being provided.

#### SPORT AND GAMES

11.3.3. The Sports Department came into existence on 1st April, 1974 and since its inception, it has made concerted efforts for development of sports activities in plains and hills alike through various schemes. Sports consciousness has developed amongst masses and more and more youths have been taking interest in various games for which infrastructure is being provided by the department.

11.3.4. For Seventh Plan (1985-90) an outlay of Rs.1650.00 lakh including Rs.150.00 lakh for hills has been approved. Against the outlay in first four years of the plan an expenditure of Rs.2260.90 lakh including Rs.158.94 lakh in hills is anticipated.

11.3.5. An outlay of Rs.632.74 lakh has been proposed for 1989-90 as against the total outlay of Rs.707.00 lakh in

1988-89. The state has drawn up a number of schemes for popularisation and promotion of sports amongst its youth in the rural and urban areas. The U.P. Sports Directorate is also implementing various schemes for improving the standard of sports through organisation of coaching camps and tournaments, setting up the sports hostels and sports college.

11.3.6. Establishment of sports infrastructure is another important scheme of the sports department, it has been possible to provide complete stadia in 31 districts; 21 stadia are also under construction. U. P. has been able to provide an Astro-turf stadium with a seating capacity of 25,000 at Sports College, Lucknow and thus brought its name in the international sports field. Prestigious Indira Gandhi Memorial International Gold cup hockey tournament was held on this stadium.

11.3.7. In the field of sports, autonomous sports bodies play their own role, but these bodies are financially handicapped. It is, therefore, necessary to provide them financial assistance to carry on their activities, viz. holding of State Championship and tournaments. Sports department provides grants-in-aid to state sports associations and clubs and tournament committees for arranging tournament upto international level.

11.3.8. Present day sport has achieved the status of most competitive job and only those players can pass survival test who are physically fit. Considering the economic condition of our people, sports department has evolved a scheme to sanction financial assistance to sports-persons who obtain a certain level of achievement. The money given to them in the form of lump-sum financial assistance helps them to bear the cost of nutritive diet and also acts as an incentive to budding players. The amount of financial assistance ranges from Rs.500 to Rs.5,000 based on achievements in various age-groups. Similarly, the role of old players also cannot be over-looked. Sports Department sanctions grant-in-aid (Financial Assistance) to old Sports-persons and the quantity of such amount varies from Rs.50 to Rs.500 depending upon the status of the

players, which is judged from his/her achievement in various tournaments/meets.

11.3.9. Sports Directorate has also given due consideration to the promotion of sports in rural areas through rural sports centres and women sports by helping girls of the State to participate in All India Women's Sports Meets.

11.3.10 A scheme has also been introduced to send players abroad for receiving coaching from eminent foreign experts. Foreign coaches are also invited to the State for coaching players of promise.

11.3.11. Efforts are also being made to provide sports infrastructure in State. It has been decided that every district must have sports infrastructure where talented sportsmen may participate in sports activities. It was agreed upon that within seventh plan every district must have atleast one stadium, one Multi-Purpose Hall, and a Swimming Pool. Swimming Pool of 50 meter long size will be provided at Allahabad, Varanasi Meerut and Lucknow, while 25 meter long size Swimming Pool will be provided at other places. However, due to financial constrains and many other priorities, most of the districts could not provide sufficient funds for the purpose. It is thus proposed that continued works may be completed in 1989-90. For construction of sports infrastructure a sum of Rs. 359.00 lakh has been provided for the year 1989-90.

11.3.12. A health Centre and conditioning Gymnasium fully equipped with recovery and rehabilitation equipments is also being constructed at Lucknow along with crash landing pit. Efforts will be made to equip stadium with modern gadgets like tartan track, hova Court, conditioning equipments etc. in order to get best results from sportsmen.

11.3.13. The hostel building at Jhansi and Banda are under construction. In hill areas the hostels have been set up at Haldwani (Nainital) for football and athletics with strength of 50 students.

11.3.14. It is a matter of satisfaction that sportsmen of the State are showing good performance and bringing laurels to the State in terms of Gold, Silver and Bronze Medals, During 1987-88 Sports-persons won 42 Gold, 43 Silver and 39 Bronze Medals in the National Championship and All India Intervarsity Tournaments.

11.3.15. During 1987-88, the state organised a number of tournaments, viz., All India K. D. Singh "Babu" Hockey Tournament, All India Invitation Football Tournament, All India Women Invitation Hockey Tournament, Inter Varsity Tournament in various items of sports (Men and women) amongst the universities of the State have become very popular and given a boost to the sports activities amongst university students. In addition to it, tournaments for youngsters were also organised in various items of sports, viz. hockey, football, athletics, badminton, swimming, gymnastics wrestling, volleyball, basketball, weight-lifting and Boxing. Indira Marathon was also organised at Allahabad in November, 1987 and it is heartening to note that this race attracted a number of runners from other States.

11.3.16. It has been decided to set up a sports college, at Gorakhpur on the lines of one at Lucknow. The College at Gorakhpur will be ment for boys and girls both. Students have been admitted in class VI of the Sports College. To start with, arrangements have been made to impart coaching in volleyball and gymnastics to boys and girls both and Wrestling to boys only. A Sports College at Dehradun will also be set up and a high altitude training centre at Mussoorie is also being set up.

#### RURAL YOUTH ACTIVITIES

11.3.17. Right from the very beginning Pradeshik Vikas Dal department has been working to channelise youth energy in a manner which is specially useful to the State. This department has organised two voluntary organisations i.e. Pradeshik Vikas

Dal and Yuwak Mangal Dal with a view to achieving rural youth welfare. Youth programmes have received a new impetus in the form of restructured 20 point programme which has directed to create new opportunities for youth. To ensure all round development of youth following schemes are being carried out by the department.

11.3.18. *Strengthening of P. V. D. (P. R. D.) Volunteers*—This voluntary youth force is a disciplined organisation, equipped with training in preliminary military drill, law and order, crowd control duties and social service work etc. These volunteers are capable of working as a catalyst for rural reconstruction programmes. The volunteers of this organisation can be fully trusted at the time of need. Previously, whenever they were called for duty, they proved themselves worthy to the task, and were praised for their deeds. A proposal for strengthening of the Dal has been approved by the Government. Keeping in view the importance of the programme, the department proposes to train about 16000 volunteers. These volunteers will be given 22 days preliminary training. During the course of training the volunteers, will be provided free lodging and boarding, uniforms, honorarium to Block and Nyaya Panchayat level volunteers, actual T. A. from their residence to the place of training and back. Thus Rs.108.36 lakh is proposed for the Annual Plan 1989-90.

11.3.19. *Social Service work*—The volunteers of P. R. D. (P. V. D.) are very useful in doing social service duties, mela duties, examination duties pilgrimage duties and on other occasions for law and order duties as well as in election duties. The assistance of P. V. D. volunteers is frequently sought for public duties and for all types of community work as also in time for emergency like natural calamities flood control etc. It is proposed that a sum of Rs.66.70 lakh be provided for this programme in the Annual Plan 1989-90.

11.3.20. *Encouragement of Yuwak Mangal Dals/Mahila Mangal Dals*—The Prantiya Rakshak Dal now known as Pradeshik Vikas Dal started the youth welfare programmes in the year 1956 on the directives of the Government of India. From then onwards, youth clubs known as Yuwak Mangal Dals/Mahila Mangal Dals were set up in each Gaon Sabha of this State. Many of the Yuwak Mangal Dals are registered under the Societies Registration Act. This organisation is playing a very important role in creating awareness in the rural areas about the programmes and projects launched by different departments of the Government and there by ensuring mass public participation in their execution. Seminars and workshops for youth are organised to impart leadership training. In order to encourage and strengthen the Yuwak Mangal Dals, a programme has been launched to fulfil their minimum requirements, such as establishment of a reading room-cum-library, supply of equipments for rural games and sports. It is also proposed that atleast two Mahila Sangthak in each district will be engaged to organise Mahila Mangal Dals so that the organisation of Mahila Mangal Dals does not suffer. The number of Mahila Mangal Dals is increased in various districts according to its need. It is proposed to spend a sum of Rs.106.72 lakh during the plan period 1989-90.

11.3.21. *Vocational Training of Rural Youth*—The success of vocational training in providing gainful employment to the unemployed youth has encouraged this department to provide vocational training on a wider scale. It has been taken in to account that only these trades are selected for training purposes, which are very much associated with the rural life and day to day needs of the common man, such as armature winding, electric-fitting work, carpentry, work of iron smithi, repairing of agricultural implements, preparation of school bags, brief cases, holdalls, tin trunks/bukharies repairs of tube-well and mini automobiles, biogas machanical work, typing, photography, screen printing work, etc. This department has endeavoured since

1978 to impart the vocational training to unemployed rural youths with the result that up till now about 3,661 youths have been trained in different trades and a good number of them are suitably established in their life. The department proposes to spend Rs.7.05 lakh for this programme during the plan period 1989-90.

11.3.22. *Youth Seminars/ Workshops*—This department has been organising seminars/workshops of youths to enlighten them on the various problems facing the society. Experts from different walks of life are invited in these seminars/workshops to enlighten the youths. This programme helped the youths in bringing out the quality of leadership and also in creating awareness in them about National and social issues. A sum of Rs.11.61 lakh is being proposed for this programme during the plan period 1989-90.

11.3.23. *Rural sports and games*—Since 1952 the P. R. D. (P. V. D.) is the only agency which is conducting the rural sports. This department tries to find out new talents from all the nooks and corners of the State in order to give them a chance to prove themselves worthy of the place where they deserve. Every year this department conducts various competitions from Block level to State level and there after the winners of each item are sent to all-India National Rural Meet. Several gold, silver, and bronze medals were won by our participants during the all-India Competitions. The competitions organised by this department at different levels involve a huge expenditure.

Keeping in view the limited resources Rs.25.00 lakh is being proposed for the Annual Plan 1989-90.

11.3.24. *Establishment of Vyayamshalas*—For the physical development of the youths in rural areas, exercises (Vyayam) are essential. The institution of old Akharas and Vyayamshalas had been neglected during the past years. In order to make a healthy and strong rural society, it is very important to establish as many Vyayamshalas as possible. During the last 4 years provisions were made in annual plan budgets. It is proposed that

atleast two Vyayam Instructors must be engaged on honorarium basis so that the programme of physical fitness may receive further incentive. The target of the department is to establish 38 Vyayamshalas this year in the State. The estimated cost of construction of a Vyayamshala as per specification comes to Rs.1.50 lakh and that of Vyayamshalas equipments is about Rs.0.10 lakh. Thus Rs.65.66 lakh is proposed during for Annual Plan 1989-90.

11.3.25. *Cultural Programme*—To involve the youth in promoting an inspiring cultural environment it is essential to organise cultural festivals folk dances, folk songs etc. A provision of Rs.6.02 lakh is proposed for the year 1989-90.

11.3.26. *Vivekanand Youth Award*—A provision of Rs.7.00 lakh is being proposed for the year 1989-90 for encouragement to youths to be given to the best of Yuvak Mangal Dal/Mahila Mangal Dal at district and State level. This is a continuing scheme.

11.3.27. *Shramdan*—Community participation in organising and completing social work by Pradeshik Vikas Dal volunteers given a term spirit and the spirit of mass participation to the entire rural population. In the year 1989-90 a sum of Rs.6.11 lakh is proposed for Shramdan Camps.

11.3.28. *Training in Swimming*—A sum of Rs.1.95 lakh is proposed for the year 1989-90.

11.3.29. *Adventure Scheme*—It has been felt that the spirit of adventure should have a major place in all the youth programmes. Therefore, a provision of Rs.5.94 lakh is being made for the year 1989-90.

11.3.30. *Training of Scheduled Tribes*—For special training of Scheduled Tribe a provision of Rs.0.40 lakh has been made.

11.3.31. *Strengthening of the Directorate*—Strengthening of Directorate of Youth welfare and those of the District offices of department has been approved

by the State Government and posts have been created by the government, keeping in view the need of an effective monitoring policy and ensuring satisfactory execution of schemes. It is proposed to seek a sum of Rs.37.73 lakh for the year 1989-90.

**11.3.32. Youth Leadership Training of Departmental Officers and Youth Workers**—It is necessary that there should be a continuous programme for youth leadership training organised by the Directorate. A sum of Rs.2.02 lakh is being proposed for this purpose.

**11.3.33. Contingencies**—For successful execution of various programmes of the department, it is necessary to earmark some amount for stationery, printing, publicity, transport, video filming, T.A. and other expenses of members of district

youth committee in their tours, honoraria etc. It is proposed that sum of Rs.38.67 lakh is needed for the miscellaneous expenditure during the plan period 1989-90.

**11.3.34. Training of Scouting and Guiding**—For the training of youths in scouting and guiding a provision of Rs.3.81 lakh has been made.

**11.3.35. Yuvak Kendras**—A sum of Rs.4.76 lakh is being proposed for Yuvak Kendras.

**11.3.36. National Integration Camp**—A sum of Rs.0.07 lakh is being proposed for this scheme.

**11.3.37.** An outlay of Rs.505.63 lakh is proposed for 1989-90. In order to strengthen the department and more of as an effective instrument for social change through the mobilization of youth.

#### 11.4. ART AND CULTURE

Uttar Pradesh has been the cradle of glorious artistic and cultural activities since ancient times. A variety of performing and plastic arts reached heights of perfection under the patronage of art loving rulers. The State has a number of monuments and sites of great archaeological and historical importance and many more still remain to be exposed. The main activities of the department of cultural affairs are promotion of art and culture, development of archaeology and archives, development of State owned museums, education in music etc.

**11.4.2.** An outlay of Rs.880.00 lakh has been allocated for Seventh Plan which includes Rs.150.00 lakh for Hill areas. During first three years of the Plan Rs.725.51 lakh were utilised. It is anticipated that during 1988-89, Plan Rs.387.35 lakh will be utilized. For 1989-90, an outlay of Rs.250.00 lakh including Rs.50.00 lakh for hills has been allocated. Thus, during Seventh Plan period an expenditure of Rs.1362.18 lakh is anticipated which will exceed the approved outlay of Rs.88.00 lakh. It is proposed to give priority for completion of continuing works. The main programmes are as under :

**11.4.3. Fine Arts and Education**—The Department of Cultural Affairs sponsors lectures/demonstrations by eminent musicians and dancers and also organises mobile exhibitions for students in the universities and colleges during working hours exclusively for the student-audience all over the State.

**11.4.4.** The Bhatkhande College of Hindustan Music, Lucknow which is Premier Institution of Classical Indian music and dance in the country is being strengthened. Branches of Bhatkhande Music College are being established at Almora and Dehradun. An outlay of Rs.13.50 lakh (included Rs.10.00 lakh for hills) has been provided for 1989-90.

**11.4.5.** Under the scheme of 'Cultural Talent Search' scholarships are awarded to talented children in the age group of 10-14 years. Scholarships are also awarded for advanced training in the field of Performing Arts to talented artists in the age-group of 18-28 years. Under the scheme of Award of Study Fellowship, specified number of Junior fellowships of Rs.750 and senior fellowship of Rs.1,500 per month would be awarded for research and creative work for specified scheme and project to the persons in



the age-group of 25–65 years. Financial help will also be given to non-Government music institutions for purchase of music instruments and development etc.

11.4.6. An Institute of Folk Art is being established in hills which will survey, document, promote and revive the rare forms of folk art in the State. It would also bring out publications on folk art and establish performing troupes of music and dance.

11.4.7. *Promotion of Art and Culture*—Sharad Utsav at Vrindavan, Ramayan Mela at Ayodhya, Ganga Mahotsav at Varanasi, Yamuna Utsav at Agra, Rachnakar Shivir at Allahabad, All-India folk dance and music festival, All-India music and dance conference, All-India Qawwali/Gazal conference, All-India multi language drama festival etc. will be organised at different places of the State. Badri-Kedar Utsav at Badrinath and all-India drama festival will also be organised in the hills. These festivals will provide opportunity to people of the State to get acquainted with the cultural traditions of other regions of the State and the country. Cultural programmes will also be organised in rural areas of the State. Magazines and journals exclusively dedicated to art and culture, not supported by big business and publishing houses are being subscribed for distribution to libraries of various universities and colleges of the State.

11.4.8. For uniform cultural development of State, Cultural Centres at Divisional Head-quarters will be established. They will serve as nucleus for balanced development of art and culture in various regions of the State.

11.4.9. One auditorium at Almora and another at Pauri is to be constructed. funds will be provided for these constructions during 1989-90. Financial help will also be given to cultural organisations for construction of auditoria, for purchase of equipments and renovations etc. in order to give a boost to performing art activities.

11.4.10. Financial help will be given to voluntary cultural organisations for specific projects relating to research and

development of advanced teaching in performing and plastic arts, establishment and maintenance of repertories, music and dance troupes to promote art activities. An outlay of Rs. 4.00 lakh (Rs. 1.00 lakh for hill) has been provided in 1989-90 for this purpose.

11.4.11. Uttar Pradesh Parve is organised every year at one of the metropolitan cities of the country to provide opportunities to the artists of U. P. to project their art outside the confines of the state. An outlay of Rs. 5.00 lakh has been provided for this purpose in 1989-90.

11.4.12. Travel grant will be given to cultural troupes and eminent artists etc. going abroad to establish/project art and culture of Uttar Pradesh.

11.4.13. The U. P. State Sangeet Natak Academy will be provided additional funds to carry out its activities in the field of survey, study and documentation of folk and classical performing arts in the State. The Kathak Kendra of the Academy is also proposed to be provided with additional funds for production of ballets. Financial assistance will be given to Lalit Kala Academy to undertake projects relating to survey, documentation, collection and research in various styles of traditional and folk art forms and for setting art galleries at some important centres. Financial help will be given to Bhartendu Natya Academy to provide scholarships, additional teaching facilities, equipments, books, furniture etc. A repertory company under the Bhartendu Natya Academy has been established.

11.4.14. A repertory company for providing drama and performances has been established in hills. The company will have two such groups which will produce at least two dramas in a year and give performances in various parts of the State. It will, on the one hand promote dramatic art and on the other hand provide employment to the artists of hills region.

11.4.15. For study, documentation and research on Avadh culture. Ramayan

and all aspects of legends related to Rama and Ramayan, Ayodhya Shodh Sansthan has been established at Ayodhya. It is being strengthened. Weekly programme of Ram Lila at Ayodhya is organised regularly.

11.4.16. During the last 2,500 years Buddhism has spread and taken routes in a large number of Asian countries but no systematic study of Buddhism in different countries in the context of their national culture has been made so far. A research institute namely Acharya Narendra Deo International Research Institute of Buddhist Studies' has been established at Sarnath Varanasi and the institute is making a comparative study of various aspects of Buddhism in India and other countries. It will also encourage indepth study of international aspects of Buddhism.

11.4.17. For study, documentation and research etc. on Jainism, a Jain Shodh Sansthan is also proposed to be established.

11.4.18. *Archives*—In U. P. a State Archives exists at Lucknow with regional units at Varanasi, Allahabad, Agra, Dehradun and Nainital, besides a manuscript library at Allahabad. It is necessary to provide storage facilities, equipment and other facilities for the up-keep of the records in these archives. For Archives an outlay of Rs.10.00 lakh (Rs.2.00 lakh for hill) has been proposed for 1989-90.

#### PUBLIC LIBRARIES

11.4.19. The Education Department is also providing facilities for self-study by means of public libraries in the State. In Seventh Plan the emphasis has been laid on 'Children Libraries', strengthening of 'Public Libraries' at district and divisional levels and provincialization of libraries of state level importance. It has also been proposed to construct buildings for Government district libraries, which are either in a dilapidated condition or in some rented old buildings.

11.4.20. For achieving the above mentioned activities and programmes an outlay

of Rs.230.54 lakh including Rs.74.54 lakh for hills has been approved. During first three years of the plan period (1985-88), an expenditure of Rs.279.10 lakh has already been incurred. During 1988-89 an expenditure of Rs.94.07 lakh is anticipated to be spent. For 1989-90 an outlay of Rs.151.87 lakh including Rs.20.00 lakh for hills has been proposed. It includes an outlay of Rs.98.61 lakh for establishment and development of Government district libraries and an outlay of Rs.28.54 lakh for construction of buildings of these libraries.

11.4.21. *Museums*—The State Government Museums at Lucknow, Mathura, Jhansi and Almora will be developed and strengthened. Funds will also be provided to these museums for acquiring antiquities and art objects. A Buddha Museum at Gorakhpur and Ram Katha Museum at Ayodhya has been established. A new Museum at Sultanpur is to be established. For these museums an outlay of Rs.31.00 lakh (Rs.6.00 lakh for Almora Museum under hills) has been proposed for 1989-90.

11.4.22. There are a few non-Government museums set up by registered societies or private individuals which have really good collections. In order to encourage these museums to properly document, preserve and display their collections, financial aid will be provided. Rs.1.00 lakh has been proposed for it for 1989-90. An amount of Rs.5.36 lakh will be paid to Allahabad Museum as grant-in-aid in the year 1989-90.

11.4.23. The Mathura Museum was established about 100 years ago. Since then, it has acquired a very large number of antiquities particularly from Govind Nagar and Sonkh. It is not possible to exhibit these antiquities in the present building due to shortage of space. Mathura Museum also does not have any auditorium or conference hall to organise seminars, conferences, cultural programmes etc. The Mathura Museum has a big piece of land adjacent to its existing building. It is proposed to construct a new building for the museum at an estimated cost of Rs.58.50 lakh which has

now been revised to Rs.74.60 lakh, Rs.32.40 lakh in 1986-87 and Rs.10.00 lakh in 1988-89 have been released. Rs.25.00 lakh will be released during the year 1989-90 for its completion.

11.4.24. *Archaeology*—State Archaeology exists at Lucknow with Regional Archaeological units at Almora, Pauri and Jhansi. The State Archaeology and its regional units will be developed further to make it a viable unit fit to look after the monuments and sites in the State and to carry out the important task of survey, exploration, excavation, research and publication etc. Kabir Samadhi will be renovated. A new Archaeological unit is being proposed to be established at

Sultanpur. An outlay of Rs.22.00 lakh (Rs.2.50 lakh for hills) has been proposed for the year 1989-90.

11.4.25. *Other Expenditure*—Aged and poor artists and writers who dedicated their lives for the cause of performing/plastic/literary arts, but on account of advanced age or ill health are not in a position to earn their bread are being given suitable pension, not exceeding Rs.500 per month. A lump sum amount not exceeding Rs.5,000 for treatment, marriage of dependant daughter and education of children up to the age of 18 years or for any other contingent need will be given to artists in indigent circumstances.

## CHAPTER XII

### MEDICAL AND PUBLIC HEALTH

Planning for medical and public health services for a large and populous state like Uttar Pradesh poses several problems. The state of health of the people and their vulnerability of various diseases is influenced to a great extent by climate of the region and the socio-economic conditions of different groups. On the health care side, considerable inter regional and rural urban disparities exist in relative distribution of allopathic, indigenous and homeopathic medical services. The declaration of the Alma-Ata of September 1978 envisages the goal of "Health For All by 2000 A. D." Primary health care is main instrument of action programme and emphasis on the same continues in Seventh Plan. The importance of preventive and promotive aspects of health care has also been well recognised in the plan. Efforts will also continue in the plan for organising effective and efficient health services which are comprehensive in nature, early and widely available and accessible to and affordable by common people. The indicators of infant mortality rate, death rate, birth rate and doctor population ratio are often used to measure health status of people. The health status of people of this state, when

compared to some other States and country as a whole, presents a dismal picture :

TABLE 1 -Health Status Indices

States	Infant mortality rate per thousand live births (1985)	Death rate per thousand population (1985)
(1)	(2)	(3)
1. Uttar Pradesh ..	140	15.8
2. Madhya Pradesh ..	122	13.9
3. Bihar .. ..	105	14.9
4. Orissa .. ..	130	13.9
5. Rajasthan ..	108	12.9
6. West Bengal ..	77	9.1
7. Andhra Pradesh ..	83	10.1
8. Kerala .. ..	32	6.4
9. India .. ..	77	11.7

Source ; Health Information of India.

12.0.2. The state is also deficient in network of some other health services.

TABLE 2—Health Service Ratios

Item	U.P. (1987-88)	India	Prescribed Norms
(1)	(2)	(3)	(4)
1. Doctor-Population Ratio	1 : 3820	1 : 2250 (1.1.87)	1 : 3000
2. Bed-Population Ratio	1 : 1625	1 : 1398 (1.1.87)	1 : 1000
3. Sub-Centre-Rural Population ratio	1 : 4500 (5400)	1 : 5300 (86-87)	1 : 5000/3000
4. P.H.C.-Rural Population Ratio	1 : 36700 (43600)	1 : 37150 (86-87)	1 : 30000/20000
5. C.H.C. Rural Population Ratio	1 : 6,41,000 (7,61,000)	5,80,600 (86-87)	1 : 100000

Notes—1931 Census Population has been taken for calculation.

\*Figures in bracket calculated on projected population 1987.





and likely achievement in 1988-89 and targets for 1989-90 given in the following table-4 :

TABLE 4 .Target and Achievement under Urban Health Services

Items	Seventh Plan Targets	Achievements				Targets for 1989-90
		1985-86	1986-87	1987-88	1988-89 anticipated	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Intensive coronary care unit ..	35	..	12	..	10	4
2. Plastic surgery-Burn unit ..	5	1	..	1	..	..
3. Dialysis unit .. ..	..	..	..	1	..	..
4. Pathology unit .. ..	10	..	5	12	7	..
5. Ambulance .. ..	40	12	..	10	7	..
6. Generators .. ..	80	10	14	7	19	..
7. Increase in bed strength ..	2900	66	382	100	185	100
8. CONSTRUCTION OF BUILDINGS ..						
(i) District combined hospitals						
(a) Completion .. ..	15	{ 2	1	2	1	1
(b) New Sanction .. ..		{ 1	..	..	..	..
(ii) Nurses homes						
(a) Completion .. ..	35	{ 4	2	2	3	6
(b) New Sanction .. ..		{ 9	5	..	2	..
(iii) Mortuaries						
(a) Completion .. ..	37	{ 7	8	6	7	6
(b) New sanction .. ..		{ 14	5	..	13	..
(iv) Mini operation theater						
(a) Completion .. ..	10	{ ..	..	..	2	2
(b) New sanction .. ..		{ 2	2	..	..	..
(v) Intensive coronary care units						
(a) Completion .. ..		{ 1	12	8	6	4
(b) New Sanction .. ..	35	{ 32	..	..	..	..

There is also a proposal for construction of 100 staff quarters in 17 districts and 48 staff quarters in Balrampur Hospital, Lucknow. Anticipated expendi-

ture during 1988-89 is Rs. 1115.53 lakh, including Rs. 199.20 lakh in hills. The anticipated expenditure includes expenditure of Rs. 629.65 on buildings. The out-

lay for 1989-90 is Rs.1323.51 lakh including Rs.188.25 lakh in hills. Out of the total outlay, Rs.585.49 lakh is for buildings .

#### EMPLOYEES STATE INSURANCE SCHEME

12.0.5. The E.S.I. scheme is expanding day by day with the development of industries in the state. The Act provides certain benefits of medical treatment and attendance to insured persons and their families in respect of sickness, injury and maternity. The expenditure incurred on medical care of the insured persons and their families is shared between the E.S.I. Corporation and the State Government in an agreed ratio of 7:1. The following proposals have been made for improvement of the medical benefit.

12.0.6. *Establishment of Separate Directorate under the E. S. I. Scheme*—Before June 1985, the administration of the scheme was under the medical department of the State. From June, 1985, the scheme has been placed under administrative control of the Labour Department and a separate Directorate was established by providing some additional officers and staff. The powers, responsibilities and liabilities of this Directorate have now increased. An outlay of Rs.1.60 lakh is proposed in 1989-90 on continuing as well as expansion schemes of the Directorate.

12.0.7. *Establishment of new E. S. I. Hospitals*—There is target to open 10 new E. S. I. Hospitals during the Seventh Plan. Sanction for the establishment of one 50 bedded E.S.I. Hospital, at Saharanpur was given in 1984-85 and the same was commissioned during 1985-86. Five more hospitals were proposed during 1985-86. These included extension of 100 beds in E.S.I. Hospital, Pandunagar, Kanpur, 100 bedded E.S.I. Hospitals at Kidwainagar and Jajmau (Kanpur). The Noida Hospital is being managed by the E.S.I. Corporation itself from April, 1988. One 60 bedded E.S.I. Hospital at Aligarh is proposed to be commissioned during 1988-89 and two 60 bedded hospitals one

at Pipri (Mirzapur) and the other at Varanasi will be commissioned during 1989-90. During 1989-90, additional posts are proposed to be created in these hospitals in accordance with the norms of E. S. I. Corporation. An outlay of Rs.28.20 lakh has been provided for this purpose in 1989-90

12.0.8. *Strengthening and re-organisation of E. S. I. Hospitals and dispensaries*—To improve standard of medical care in the existing hospitals and dispensaries, ambulance facilities and specialised treatment are being provided. One I.C.C. Unit at Pandunagar Hospital, Kanpur has been established during 1988-89 in addition to TUR facilities at Lucknow. An outlay of Rs.2.30 lakh has been provided in 1989-90 for continuance of I.C.C. Unit and for additional equipments in the existing hospitals.

12.0.9. *Establishment of new E.S.I. Dispensaries*—The target of Seventh Plan is to open 20 new E.S.I. dispensaries. However, only two dispensaries have been sanctioned so far. Nine more dispensaries are proposed to be sanctioned during 1988-89. Five dispensaries namely at Azamgarh, Pratapgarh, Bahraich, Etah and Sambhal (Moradabad) are proposed to be opened during 1989-90. Besides these, three dispensaries are also proposed to be established in Hills at Kashipur, Nainital and Kathgodam.

12.0.10. On the basis of recommendation of the Regional Board, Homoeopathic dispensaries in E.S.I. Hospital, Sarvodayanagar (Kanpur), Modinagar (Ghaziabad), Sahibabad (Ghaziabad), Agra, Lucknow, Naini (Allahabad), Kidwainagar and Jajmau (Kanpur), Bareilly and Saharanpur have also been established. In addition to these Homoeopathic dispensaries, ten Ayurvedic dispensaries will also be established in 1989-90. An outlay of Rs.5.80 lakh has been provided for these facilities in 1989-90.

12.0.11. *Establishment of Regional Offices under the E. S. I. Scheme*—Due to transfer of the E.S.I. scheme from Medical Department to Labour Department, the



need for establishment of Regional Offices was experienced. The administration of the scheme was therefore, divided into 9 zones, out of which one zone at Kanpur is being administered by the Directorate. The rest eight zones are being supervised by Senior Superintendents-cum-Deputy Directors. Since Senior Superintendents keep busy in hospital administration, they have very little time to supervise the dispensaries and Annexies in their zones. It is therefore felt that a separate officer should be provided to supervise and administer the zonal dispensaries independently. Therefore, eight posts of Dy. Director for eight regions and one post of Joint Director for Kanpur region are proposed to be created in 1989-90. Some additional staff at the regional office has also been proposed. An outlay of Rs.2.10 lakh has been provided for this purpose in 1989-90 programmes.

#### RURAL HEALTH SERVICES

12.0.12. One of the most important components of Rural Health Services programme is Minimum Needs Programme which includes establishment of sub-centres, Primary Health Centres and Community Health Centres. Besides these additional inputs like specialist treatment facilities in big rural hospitals, provincialization of rural dispensaries run by voluntary bodies and establishment of treatment units against donations are also being provided in rural areas. In the beginning of Seventh Plan, 1493 allopathic dispensaries were functioning in rural areas. These dispensaries are being converted into Primary Health Centres so as to include them into the frame work of Primary Health care, 370 dispensaries were converted into P.H.Cs. during 1985-86, 189 during 1986-87 and 74 during 1987-88. Dental clinics, Children clinics, E.N.T. sections, already detailed in the table-3, have also been established in rural areas.

#### MINIMUM NEEDS PROGRAMME

12.0.13. The physical infrastructure in rural areas is being extended through establishment of sub-centres (S.C.), Primary Health Centres (P.H.C.) and Community Health Centres (C.H.C.) in a phased manner so as to achieve a target of

one sub-centre for 5000 population in plains (3000 in tribal and hilly areas), one P.H.C. for 30,000 population in plains, (20,000 in tribal and hilly areas). For the purpose of referral system 6 sub-centres will be attached to one P.H.Cs. and 4 P. H. Cs. to one C.H.C. The establishment of sub-centres is a cent percent centrally sponsored programme since April 1981.

12.0.14. *Sub-Centres*—In the beginning of Seventh Plan, there were 15,653 sub-centres in the state. According to the prescribed norms, 22,212 sub-centres are required. To achieve this target, 6,559 additional sub-centres are targetted to be established in Seventh Plan. During first three years of Seventh Plan period, 4,500 sub-centres have been established. 1,500 sub-centres have been targetted for establishment during 1988-89, 559 sub-centres are proposed for establishment during 1989-90. The state will thus achieve the target of establishing 22,212 sub-centres by the end of Seventh Plan.

12.0.15. *New Primary Health Centres* — 1,169 Primary Health Centres including 164 Subsidiary Health Centres were available in the state in the beginning of Seventh Plan. 2,533 Additional Primary Health Centres are required to be established to achieve the prescribed norm by the end of Seventh Plan. 1,307 new PHCs have been established by the end of 1987-88 and 550 are likely to be established during 1988-89; 676 new PHCs are proposed to be set up during 1989-90. Thus, by the end of Seventh Plan the requirement of 2,533 additional PHCs will be met.

12.0.16. *Community Health Centres* —Seventy-four Community Health Centres were functioning in the beginning of Seventh Plan. Due to resource constraint, against the requirement of 851 CHCs the target of upgrading only 132 CHCs has been fixed for the Seventh Plan. During first three years (1985-88), 68 CHCs were established, 42 Community Health Centres are likely to be established during 1988-89. The target for 1989-90 is to set up 35 Community Health Centres. There is also emphasis in the plan on

construction of as many buildings of sub-centres, PHCs and CHCs as may be pos-

sible. The present status in respect of these buildings is as given in table-5 :

TABLE 5—Position of buildings of S.C., P.H.C., and CHCs

Item	Position as on 1-4-85	Seventh Plan Target	Achievements			1988-89 Likely achievement
			1985-86	1986-87	1987-88	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>SUB-CENTRES :</b>						
(a) Building in position ..	3493	1408 635N	381	192	321	352
(b) New Sanctions of building ..	..	..	192	574	256	76
<b>P.H.C.</b>						
(a) Building in position ..	682	321 183N	45	41	42	50
(b) New Sanction ..	..	..	52	23	40	27
<b>C.H.C.</b>						
(a) Building in position ..	88	137 9N	36	24	21	40
(b) New Sanction ..	..	..	3	24	17	10
<b>S.H.C.</b>						
(a) Building in position ..	57	97	41	40	6	10
(b) New Sanction ..	..	..	..	..	..	..

12.0.17. During 1989-90, efforts will be made to complete on-going buildings of sub-centres, PHCs and CHCs.

#### INDIAN SYSTEMS OF MEDICINES

12.0.18. The Indian Systems of Medicine can also play an important role in the sphere of medical and public health activities in both rural and urban areas. The popularity of these systems is growing. People are getting attracted towards these systems due to the fact that they are considered harmless and effective in eliminating diseases.

#### AYURVEDA AND UNANI

12.0.19. An outlay of Rs.1587.40 lakh including Rs.87.40 lakh for hill has been approved for the Seventh plan to the Indian Systems of Medicine (Ayurveda

and Unani). Out of this, an outlay of Rs.425.00 lakh has been earmarked for capital works.

12.0.20. An expenditure of Rs.75.88 lakh in the year 1985-86, Rs.81.01 lakh in 1986-87, and Rs.337.34 lakh in 1987-88 was incurred. An outlay of Rs.468.57 lakh (including Rs.56.10 lakh for hills) was allocated to Ayurveda and Unani for the year 1988-89, which will be utilised in full. An outlay of Rs.624.10 lakh (including Rs.47.10 lakh for hills) has been proposed for the year 1989-90. The proposed schemes for implementation during the year 1989-90 are categorised as below.

12.0.21. *Urban Health Services-Other systems of Medicines (Ayurveda and Unani)*—An outlay of Rs.251.45 lakh has

been proposed to carry out urban health programmes. Under this programmes, 58 twenty five bedded Ayurveda/Unani Hospitals are functioning in the urban areas. Other scheme of expansion of existing State Pharmacies, strengthening of Ayurvedic and Unani-Sewa Nideshalaya, establishment of office of Ayurvedic and Unani Officers and establishment of herbal gardens in Ayurvedic colleges are proposed for 1989-90. It is also proposed to take up in 1989-90 new Schemes of Ayurvedic specialities in existing urban hospitals and establishment of herbal centres for collection and cultivation of herbs and drugs.

12.0.22. *Rural Health Services-Other Systems of Medicine (Ayurvedic and Unani)*—An outlay of Rs.325.10 lakh (including Rs.33.00 lakh for hills) has been provided in 1989-90 to carry out programmes under the Rural Health Services—other systems of medicine. Under this programme, 297 Ayurvedic and Unani dispensaries including 20 in hills were sanctioned upto 1987-88. Sixty new dispensaries are likely to be sanctioned during 1988-89. 60 new State Ayurvedic and Unani dispensaries are proposed for 1989-90. It is also proposed to complete construction of buildings of 14 State Ayurvedic/Unani dispensaries during the year 1989-90.

12.0.23. *Education*—An outlay of Rs.34.50 lakh has been proposed in 1989-90 for the development of Ayurvedic and Unani Education. An outlay of Rs. 290.00 lakhs has been allocated for Ayurvedic and Unani Education during the Seventh Plan, against which an expenditure of Rs.68.40 lakh was incurred upto 1987-88. An expenditure of Rs.36.00 lakhs is likely to be incurred during 1988-89. It is proposed to raise the standard of these colleges in accordance with the norms prescribed by the Central Council of Indian Medicine. It is also proposed to complete the construction of buildings of 12 hostels during 1989-90.

12.0.24. *Training Programmes*—Training of Medical Officers in National Health Programmes. Training of Teachers of Ayurvedic and Unani colleges, Training of Ayurvedic/Unani Nurses and Refresher course for Ayurvedic/Unani Medical Officers etc, are proposed to be

carried out during the year 1989-90. An amount of Rs.1.00 lakh has been proposed for 1989-90 for continuing this programme.

12.0.25. *Other expenditure*—Other programmes of 1989-90 include provision of funds for organising Seminars and Lectures, grant in aid to Ayurvedic/Tibbi Academy, Board of Indian Medicine and the Development of Yoga and Naturopathy. An expenditure of Rs.1.00 lakh was incurred on these schemes upto 1987-88 and Rs.0.50 lakh is likely to be spent during 1988-89. An outlay of Rs.0.85 lakh has been proposed for this purpose in 1989-90.

#### HOMOEOPATHIC SYSTEM OF MEDICINE

12.0.26 Homeopathic treatment also gaining popularity among people in rural and urban areas. Several important schemes have been started for the development of Homoeopathy in the State. 10 Homoeopathic medical colleges and attached Hospitals are functioning in the state. All the Homoeopathic Medical Colleges have been affiliated to Agra University to enhance their standard and to bring similarity in education. B.H.M.S. Degree Course approved by Central Council of Homoeopathy has been started in these Homoeopathic Medical Colleges. Admission to these colleges is done through C.P.M.T. There are 295 seats in these colleges. Efforts are being made to provide furniture, equipments, books, teaching and non teaching staff in these Homoeopathic medical colleges and allied hospitals as recommended by Central Council of Homoeopathy.

12.0.27. There is acute shortage of library, laboratory, museum, buildings and Hostels for male/female students in these Homoeopathic Medical Colleges. An outlay of Rs.41.18 lakh has been provided in 1989-90 for construction of building/hostels.

12.0.28. Keeping in view the increasing work in the Homoeopathic Directorate which is functioning from 1981 there is a proposal for increasing staff during 1989-90.

12.0.29. 775 Homoeopathic dispensaries were established in the State up to the end of Sixth plan. Out of these, there were 687 State Homoeopathic Dispensaries, 10 Hospitals of Homoeopathic Medical Colleges and 78 private Homoeopathic Dispensaries Hospitals. Upto the end of 1985-86 there were 912 Homoeopathic Dispensaries. The figure went upto 995 by 1986-87 and to 997 by the end of 1987-88, 65 Homoeopathic dispensaries are proposed to be established in 1988-89 and 60 Homoeopathic Dispensaries in 1989-90.

12.0.30. The outlay for Seventh plan is Rs.137.60 lakh for urban Health service, Rs.130.00 lakh for rural Health services and Rs.255.00 lakh for medical education, training and research, making a total outlay of Rs.522.60 lakh for this system of medicine.

12.0.31. During first three years (1985-88) of the plan, an expenditure of Rs.140.06 lakh has been incurred. The anticipated expenditure in 1988-89 is Rs.185.80 lakh. The outlay for 1989-90 is Rs.227.37 lakh.

#### MEDICAL EDUCATION AND RESEARCH

12.0.32. Efforts have been made to improve the standards of medical care in the Seventh Plan (1985-90) for people of the state. Some of the schemes taken up in the field of medical education are as follows :—

1. Strengthening of specialised units like Cardiology, Neurology, Virology, Renal Dialysis and Endocrinology in various medical colleges.
2. Construction of Post-graduate Girls Hostel
3. Construction of Hostel facilities for medical students (both girls and boys)
4. Transfer of T.B. Hospital at Kanpur to Medical College
5. Construction of eye ward at Gorakhpur
6. Starting New Cobalt Unit and Catscan facility at Lucknow

7. Starting construction of Private Wards at Lucknow and Meerut

8. Welfare Scheme for Orthopaedically handicapped persons thus providing artificial limbs and other aids to this weaker-section of society

9. Increase in the intake of medical students at Meerut (50 seats), Gorakhpur (50 seats) and Jhansi (25 seats)

10. Increase in the stipend of junior-doctors

11. It may be mentioned here that the yearly intake of the various Medical Colleges is as follows :

- (i) 940 Under-graduate students.
- (ii) 780 Post-graduate students.
- (iii) 300 Pharmacists.
- (iv) 340 Laboratory Technicians.
- (v) 80 X-Ray technicians
- (vi) 50 Dental Hygienists

12.0.33. The important schemes proposed for 1989-90 are :

1. Establishment of Renal Dialysis units and providing free dialysis to more patients
2. Further development of Cardiology units and provision for more pace-maker implements at State expenses
3. Expansion of Cardio-thoracic Institute at Kanpur so that patients of this state need not go outside the state for By-pass Surgery
4. Provision for providing artificial limbs and other aids to more needy patients
5. Providing more hostel facilities to medical students

12.0.34. Efforts have also been made in the past to improve medical facilities. Though the Medical Colleges are situated only in 7 important cities of the state but the improvement made by them or new

standards of treatment set by them become a model for other hospitals of the state. The benefit of modern scientific diagnosis and treatment thus percolates down, though gradually, even to remote health centres and dispensaries. Not only this, as the quality of trained doctors and other associated paramedical staff in modern Hitech areas improves, the same personnel would one day move out to various districts and sub-districts carrying with them ideas of Hi-technology. It is imperative, therefore, that Medical Colleges are adequately funded and made centres of excellence.

12.0.35. The outlay for Medical Education in Seventh Plan is Rs.12.50 crore. An outlay of Rs.2.45 crore has been proposed for 1989-90.

12.0.36 *Sanjay Gandhi Post-graduate Institute of Medical Sciences, Lucknow*—Sanjay Gandhi Post-graduate Institute of Medical Sciences was established under an Act of Government of Uttar Pradesh to create a centre of excellence mainly to provide medical care, education and research of high order in specified super-specialities. There would also be departments of Pathology, Microbiology, Radio-diagnosis, Nuclear Medicine, Radio-therapy and Anaesthesiology to provide necessary support to the superspecialities. Its campus is spread over an area of 218.80 hectares in Lucknow. The total covered area of the main hospital and its ancillary services would be around 40 000 sq. metres. The Institute would be of National and International character.

12.0.37. The Institute comprising 21 superspecialities is proposed to be completed in 3 phases. First phase of the Institute comprising 6 superspecialities is under completion and is expected to become functional towards the end of 1988-89. The project (Phase-I) was estimated to cost Rs.144.00 crore. But on the basis of expenditure already incurred and expenditure still to be incurred, Phase-I of the project is now likely to cost Rs.180.00 crore by the end of 1989-90 with spill-over works of Rs.24.00 crore

to Eighth Plan. The total projected cost is likely to be Rs.204.00 crore. The 6 super-specialities are.

1. Genetics-Immunology
2. Renal Sciences
3. Gastroenterology
4. Endocrinology
5. Neuro-Sciences
6. Cardio-Sciences

12.0.38. The Institute is being fully funded by the state Government. However, as a result of efforts made by the Government of India, the Japanese Government has agreed to provide medical equipments worth 3.319 billion yen for the Institute. The rupee equivalent of this would be about Rs.33.25 crore. In addition, there is a likelihood of 3rd phase of Japanese assistance worth Rs.20.00 crore for providing medical equipments during 1989-90. A proposal for this external assistance from Japan is in an advanced stage and is under the active consideration of the Government of India. The supply of medical equipments under phase II is likely to be completed by the end of 1988-89.

12.0.39. The actual work of establishment of the Institute including development of its site commenced in 1982. While most of its building and works in first phase are already completed and the remaining few are also in an advanced stage of construction, internal partitioning of the main hospital and its wards will be taken up during 1987-88 and 1988-89. It is expected that the present construction activities involving an expenditure of about Rs.66.00 crore will be completed by the end of 1988-89. However, some additional buildings such as library, mortuary, animal house, workshop, radiotherapy and anaesthesia block, lecture theatre block etc., besides residences for faculty, nursing and other staff would also need to be constructed.

12.0.40. It is expected that medical care in the main hospital would start with 150 beds by December, 1988 in the first instance. Another 150 beds would become functional by March, 1989.

Teaching work in the Institute is likely to start by January, 1989 with first batch of 115 residents. The laboratory research programme is also expected to start functioning.

12.0.41. The total expenditure incurred up to end of 1987-88 on establishment of the Institute is about Rs.71.00 crore, out of which about Rs.47.00 crore have been spent on construction of buildings. The rest of expenditure has been incurred on establishment of electric-substation, afforestation, horticulture, acquisition of land and some other similar items.

12.0.42. During 1988-89, the anticipated expenditure is Rs.43.00 crore. The main item of expenditure will be medical equipments, costing about Rs.19.00 crore against Japanese Grant-aid, and construction of buildings at a cost of about Rs.14.00 crore.

12.0.43. Even though the requirement of funds for the Institute in 1989-90 is much higher-somewhere about Rs.54.00 crore, a provision of Rs.33.00 crore only could be made for the Institute in 1989-90 on account of resource-enrich.

#### TRAINING

12.0.44. During the Seventh Five Year Plan the following schemes under training programme have been included for which a total outlay of Rs.50.00 lakh has been provided with this outlay the following schemes/programmes has been proposed :-

1. Expansion of Degree Course in Pharmacy.
2. Starting of four years basic B.Sc. Nursing Programme.
3. Orientation training of officers.
4. Training of Laboratory Technicians, X-Ray Technicians and Dental Hygienists.

12.0.45. To get the required number of para-medical workers for the State Institution Training Programmes are

being continued and during 1989-90 and outlay of Rs.31.00 lakh has been proposed.

#### PUBLIC HEALTH

12.0.46. *Control and prevention of diseases*—The National Programmes for Control and Prevention of Communicable Diseases like, Malaria, Filariasis, T.B. Leprosy, Blindness, Goitre etc. have been running in the State. All these programmes have also found a place in new 20 point programme. Programmes for eradication of blindness and leprosy and goitre control are hundred per cent funded centrally sponsored programmes while Malaria, Filariasis and T.B. control programmes are run on a sharing basis between the State and Central Governments.

12.0.47. *Malaria*—The modified plan of operation for control of malaria disease was introduced in 1978 in rural areas. Under the modified plan of operation the main objective is to control the disease and ensure that no person dies of malaria. Search for malaria cases is carried out door to door and insecticided spray is done in affected areas. As a result of these efforts, malaria and P.F. endemicity have been reduced by 46 per cent and 49 per cent respectively by November 1987. In urban area, where the disease is more endemic, anti-larval measures are taken up through 14 Urban Malaria Control Units to reduce mosquito density. Ten more such units are targetted to be set up, during Seventh Plan in phases of two units each year, however, Encephalitis in epidemic form has recently been reported in 10 districts of the State. Adequate measures have been taken to control the disease in these districts. Rs.639.30 lakh are required to launch effective preventive measures during 1988-89 and 1989-90.

12.0.48. *Filariasis*—Twenty-four Filariasis Control units and 9 clinics were functioning in the State in the beginning of Seventh Plan 10 Filariasis Control Units and 20 Filariasis Clinics were proposed for establishment during Seventh Plan. One unit and 5 clinics have been established during 1985-86 and 1986-87. Two units

and 10 clinics have also been established during 1987-88. Two units and 5 clinics are likely to be established during 1988-89.

12.0.49. Under Food Adulteration Control Programme, infrastructure has been provided in the newly created district Kanpur-Dehat and Moradabad Division during 1985-86. Drug Control Organization has been strengthened during 1986-87 by providing additional posts of Drug Inspectors etc. so as to implement the recommendations of task force. New buildings of Public Analyst Laboratory at Lucknow and Combined Food and Drug Laboratory at Meerut are being constructed for increasing capacity of sample testing during Seventh Plan. Necessary provisions have also been made for medical and sanitation facilities on pilgrim routes in hills. **Eight** Sulabh Complex were sanctioned for construction during 1985-86 on yatra routes of Sri Kedarnathji, Badrinathji Gangotri and Yamnotri routes. **Two** Public Health Laboratories—one in Dehradun and the other in Nainital were established during 1986-87 in hills.

12.0.50. *General*—Schemes relating to monitoring and evaluation, grant in aid to voluntary organizations, provision for additional dearness allowance and incentives for family planning have also been

included. For strengthening monitoring and evaluation systems in the Health Directorate a Cell has been created during 1987-88. Incentives are also provided for family planning acceptors from State funds.

#### CENTRALLY SPONSORED SCHEMES

12.0.51. National Programmes for control and eradication of Malaria, Filariasis and T.B. are Centrally sponsored schemes and are funded on sharing basis with the Government of India. Schemes for eradication of leprosy and blindness, control of goitre are hundred per cent funded centrally sponsored schemes. Family Planning Programme is also a hundred per cent funded centrally sponsored programme while costs of M.P.W. Scheme and E.P.I. are shared between State and Central Governments. The details of some of these programmes have been given earlier. Other programmes are briefly described below :—

#### LEPROSY ERADICATION PROGRAMME

Infrastructure available under the programme as on 31st March, 1985 and developed during 1985-86, 1986-87 and 1987-88, 1988-89 is given in the following table :—

TABLE 6 - *Infrastructure under Leprosy Eradication Programme :*

Item	Position at the end of Sixth Plan	Achievement during				
		1985-86	1986-87	1987-88	1988-89 Likely	1989-90 Target proposed
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Leprosy control unit ..	32	15	32	(20)x	25(20BL)	60
2. S.E.T. units ..	990	5	5	(4)x	4(BL)	..
3. Urban Leprosy Centre ..	54	5	..	..	5	140
4. Reconstructive surgery units ..	6	..	..	..	..	..
5. Temporary Hospitalization 20 bedded ward	16	..	..	..	8	10
6. Training Centre ..	3	..	..	..	..	3
7. District Leprosy Control units	12	15	..	..	..	1
8. Regional Leprosy Control Units	12	..	..	..	..	..
9. Modified Leprosy Control units	4	10	4	..	..	30
10. Government Leprosy Hospitals	5	..	..	..	..	..

TABLE 6—Infrastructure under Leprosy Eradication Programme (Concl'd.)

Item	Position at the end of Sixth Plan	Achievement during				
		1985-86	1986-87	1987-88	1988-89 Likely	1989-90 Target proposed
(1)	(2)	(3)	(4)	(5)	(6)	(7)
11. Voluntary Organization	47	..	..	..	..	..
12. Leprosy Beds	1987	..	..	..	..	..
13. Sample Survey-Cum-Assessment Units	1	..	2	..	2	5
14. Zonal Leprosy Officer Units	10	..	..	..	..	2
15. Leprosy Rehabilitation Promotion Units	..	..	..	..	..	1

12.0.52. The State comes in the category of middle range endemicity from all India perspective with average prevalence rate of 5.27 per thousand population. The prevalence rate of disease varies geographically from place to place. On the one hand, there is Kanpur where the rate is as high as 12.71 per thousand. Ghaziabad is on the other end where the rate is below one per thousand population. But there are pockets of high endemicity in low prevalence districts also. As per guidelines of Government of India, all 30 hyper-endemic districts have to be brought under Multi Drug Therapy Regimen Project for the cure and eradication of leprosy. For this purpose, cent percent

coverage of population is an essential condition for introducing multi drug therapy (M.D.T.) in the district.

12.0.53. *National Control of Blindness and Visual*—It is also a hundred per cent funded centrally sponsored scheme. The main causes of blindness are Cataract, trachoma, mal-nutrition, injuries, glaucoma, etc.. Treatment facilities for eye diseases due to these causes, are provided in all district hospitals, selected PHCs and all medical colleges of the State. Mobile treatment facilities have also been provided and their extension is proposed during Seventh Plan. The following table gives details of physical targets and achievements :—

TABLE 7—Eye Relief Infrastructure

Item	Position as on 31-3-85	Achievements during				
		1985-86	1986-87	1987-88	1988-89 Likely	1989-90 Target
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Upgradation of Eye Department</i>						
District Hospital	55	*	*	*	*	*
Primary Health Centre provided with eye relief facilities	175	200	90	75	74	*
Mobile units (Divisional and district)	17	..	8	4	6	*
Medical Colleges	5	..	1	..	..	*
Regional Institute	1	..	..	..	..	*
Training centres	3	..	..	..	..	*
Eye Banks	5	1	..	3	..	*

\*Targets are to be communicated by Government of India.



12.0.54. *School Health Programme*—It is also hundred per cent funded centrally sponsored scheme. The Government of India had initiated a pilot project of School Health Programme during 1984-85 in selected 2 blocks of Gonda and Basti. This programme has been extended during 1985-86 to two more districts of Lucknow and Meerut. The scheme is in experimental phase and is being run in 18 blocks. The components of the programme are training of teachers, health education, health check-up, immunization, treatment of sick children and supply of weighing machines and measuring tapes to school teachers.

12.0.55. *Specialist and Para-medical workers training*—It is also a hundred per cent funded centrally sponsored scheme. The Scheme is for imparting training to specialist and para-medical workers required for manning the service units of rural areas. Twenty training centres for laboratory assistants were sanctioned in March 1986. These centres had started functioning. The first batch of 300 trainees was admitted during 1987-88. According to the training schedule 1,200 laboratory assistants are expected to be trained by the end of 1989-90.

12.0.56. *National Goitre Control Programme*—A notification has been issued by the State Government for banning sale of common salt with effect from October 2, 1987 in the State. A cell has been created in the Directorate for effective monitoring of the programme during Seventh Plan.

#### FAMILY WELFARE, MATERNITY AND CHILD HEALTH PROGRAMME

12.0.57. For successful implementation of "Health For All" by 2000 A.D. it is vital that we reduce death rate to 9/1000, birth rate to 21/1000, infant death rate to 60/1000 (live deliveries) and raise the couple protection rate to 60 per cent per year which is currently 29.01 per cent. The achievements under family welfare were satisfactory during

1987-88.

	Target	Achievements	Per centage
Sterilisation	6,50,000	7,50,240	115.42
I.U.D.	9,82,000	11,98,759	122.07
C.C. Users	10,00,000	10,06,067	100.61
O.P. Users	1,17,000	1,55,493	132.90

12.0.58. In view of these achievements, effective couple protection rate of the State has gone up to 29.04 per cent. The state got first position at the National level amongst its group of States. To achieve 1988-89 targets Family Welfare and M.C.H. programmes are required to be so organised that it is converted into a people's movement and social revolution. Emphasis is being given to all contraceptive methods so that an individual may choose any of them according to his personal needs and choice. Efforts are also being made to strengthen and augment sterilisation services. Taking into consideration the popularity and growing demand of Laparoscopic, sterilisation, all medical colleges, District Hospitals a large number of Tehsil level hospitals and selected voluntary organisation have been provided with Laparoscopes. Action is being taken to purchase some Laparoscopes.

12.0.59. The strategy of family welfare includes—

(i) Allocation of targets to all the Government Departments. The Medical Health and Family Welfare Department is responsible for 50 per cent of sterilisation targets and other Departments are expected to fulfill rest of the targets.

(ii) Maximum involvement of Voluntary Agencies influential persons, local leaders and Gram Panchayat etc.

(iii) Regular and adequate supplies including financial allotments.

(iv) Regular concurrent and terminal programme monitoring and Evaluation to ascertain quality of the programme.

(v) Training and refresher courses for various categories of staff members.

(vi) Urban revamping scheme.

(vii) Special Innovative scheme like Green Card, awards etc.

(viii) Special drives numbring 2-3 in a year.

(ix) Strengthening of IEC (Information, Education and Communication) activities.

(x) Obtaining maximum cooperation of Press, All India Radio and Television.

12.0.60. The Green Card scheme has already been introduced and has proved to be a good incentive for adopting small family norms. Under this scheme a Green Card is issued to couples who have 2 children only and who accept sterilisation operation in order to limit the family upto two children. Cash prizes are also awarded for meritorious work under Family Welfare Programme.

12.0.61. Several award schemes have also been introduced. These are meant for senior officers as well as field workers, office bearers of voluntary agencies and individual motivators.

12.0.62. *Immunisation Programme under Technology Mission (Govt. of India)*—Immunisation scheme for restricting, infant death rate is being carried out vigorously. A large number of children are being protected every year from six fatal diseases. Immunisation programme has been accorded same priority as assigned to Family Welfare Programme. Besides Immunisation series, three other Prophylactic series have been also started and which are —

(i) Oral Rehydration Therapy

(ii) Distribution of Vitamin 'A' solution to prevent eye disease and blindness.

(iii) Distribution of Iron Folic Acid tablets to prevent anaemia in pregnancy.

12.0.63 During Sixth Plan, achievements under the EPI programme were

as given here under—

Scheme	No. of beneficiaries (In lakh)
T.T. (Expected mothers)	31.65
T.T. (Children upto 10 years)	9.96
T.T. (Children upto 16 years )	8.08
D.P.T.	51.00
D.T.	55.22
Polio	23.08
E.C.G.	67.64
Typhoid	29.45

12.0.64. During seventh plan, Universal Immunisation Programme (U. I. P.) has been taken-up in phases. In first phase, districts of Varanasi and Allahabad were covered under U.I.P. during 1985-86. The U.I.P. programme has now been extended to 20 districts of the state, Gradually the rest of the 37 districts would also be covered. It is anticipated that, about 15 districts will be covered during 1988-89 and the remaining 22 districts during 1989-90.

12.0.65. Protection of the mothers and children against anaemia is another important scheme. Regular doses of Iron and Folic Acid tablets are being distributed free of charge.

12.0.66. Some of the main physical targets of 1988-89 and 1989-90 are as hereunder :

Items	1988-89	1989-90
(i) Sub-Centres	1000	559
(ii) Training of ANMs		
Institution .. .. .	46	46
Intake .. .. .	2355	2355
Outturn .. .. .	2100	2100
(iii) Training of Multi-purpose Workers		
District concerned	57	57
Trainers trained	..	..
Workers Trained ..	420	420
(iv) Village Health Guides		
Working in the field	85220	85220
(v) P.P. Centres	54	..

**CHAPTER XIII**  
**WATER SUPPLY, SANITATION, HOUSING AND URBAN DEVELOPMENT**

**1. WATER SUPPLY AND SANITATION**

Safe drinking water hygenics living conditions, and clean environment are necessary for keeping fit and for maintaining productivity of human resource. The present decade, 1981-90, has been declared "International Drinking Water Supply and Sanitation Decade". Augmentation of Rural and Urban Water Supply and sanitation schemes has been therefore, given high priority during the current plan.

13.1.2. Sewerage and water supply schemes in urban and rural areas are being generally implemented by U. P. Jal Nigam. Urban low cast sanitation programme is being implemented by the Directorate of Local Bodies. Drinking water supply facilities to Harijan Basties in rural areas are being provided through Rural Development Department and low cast sanitation programme is now being implemented by Panchayat Raj Department.

13.1.3. For the Seventh Plan an outlay of Rs. 432.00 crore including Rs. 145.00 crore for hills has been provided for Water supply, sanitation and sewerage programme. The programme wise provisions and targets of the plan are as follows—

TABLE 1—Programmeswise outlays and targets of Seventh Plan

Programme	Financial outlay (Rs. crore)	Physical target
(1)	(2)	(3)
<b>1. URBAN WATER SUPPLY</b>		
(a) New Towns	27.00	118 towns
(b) Reorganisation	129.00	200 towns
(c) Corporation Towns		100 Mld.
	156.00	

Table—1—(Concl.d.)

Programme	Financial outlay (Rs. crore)	Physical target
(1)	(2)	(3)
<b>2. URBAN SEWERAGE</b>		
(a) New Towns	5.00	11 towns
(b) Reorganisation	10.00	10 towns
(c) Corporation towns		10 Mld.
	15.00	
<b>3. RURAL WATER SUPPLY Jal Nigam</b>		
(a) District sector programme (MNP)	205.00	11884 villages
(b) Dutch programme(MNP.)	21.00	150 villages+ saturation 571 villages+sanitation/ drainage work in 1289 villages
(c) Rejuvenation of defunct schemes (Non M.N.P.)	2.00	
(d) Rural Development Department (Drinking Water Supply to Harijan Basties)	17.00	
	245.00	
4. Rural Sanitation	1.50	15000 seats
5. Low cost sanitation	14.50	
	432.00	
Total water supply, sewerage and sanitation	432.00	

13.1.4. The outlay for water supply, sewerage and sanitation for 1989-90 is Rs. 13735.05 lakh including Rs. 3493.00 lakh for hills. The break ups of this outlay are given in the following tables—

*Sectorwise breakup of outlay (1989-90)*

(Rupees in crores)

Outlay

Plains Hills Total

District sector (By Jal Nigam) ..	26.29	29.40	55.69
District sector (by Rural Development)	5.62	0.50	6.12
State Sector (By Jal Nigam) ..	70.00	5.00	75.00
State Sector (By Panchayat Raj)	0.51	0.03	0.51
<b>Total</b> ..	<b>102.42</b>	<b>34.93</b>	<b>137.35</b>

*Programmewise break-up of outlay 1989-90*

(Rupees in Crore)

Programme

Outlay

Plains Hills Total

<b>A --Water Supply</b>			
(i) Urban Water Supply	27.00	2.85	29.85
(ii) Gokul Barrage ..	7.00	..	7.00
<b>B --Urban Sewerage</b> ..	2.50	1.15	3.65

TABLE 2. Financial and Physical Progress—Urban Water Supply

Year	Outlay/Total Gokul Barrage (Crore Rupees)	Physical		
		New towns (No.)	Increase in Cap- itation towns. (MLD)	Towns (No.)
(1)	(2)	(3)	(4)	(5)
1. Seventh Plan (outlay)	156.00	118	100	200
2. 1985-86 (Achievements)	16.93	10	63.60	15
3. 1986-87 (Achievements)	23.44	10	39.12	20
	2.60			
4. 1987-88 (Achievements)	23.27	16	15.60	19
	3.00			
1988-89 (Anticipated)	24.70	10	20.00	20
	3.00			
<b>Total</b>	<b>88.34/8.00</b>	<b>46</b>	<b>138.32</b>	<b>74</b>
<b>1989-90 Target</b>	<b>36.85/7.00</b>	<b>10</b>	<b>20.00</b>	<b>20</b>

(Rupees in Crore)

Programme	Outlay		
	Plains	Hills	Total
<b>C Minimum Needs Programmes</b>			
(i) District Plan ..	26.29	29.40	55.69
(ii) Dutch ..	30.00	..	30.00
<b>Total (i+ii)</b> ..	<b>56.29</b>	<b>29.40</b>	<b>85.69</b>
(iii) Harijan Basties (Rural Development Department)	5.62	0.50	6.12
<b>D Rejuvenation of defunct schemes</b>	..	1.00	1.00
<b>E Low cost sanitation</b>			
(a) Urban ..	3.50	..	3.50
(b) Rural ..	0.51	0.03	0.51
<b>Total</b> ..	<b>102.42</b>	<b>34.93</b>	<b>137.35</b>

#### URBAN WATER SUPPLY

13.1.5. There are 685 towns in U.P. By end of the Sixth Plan, 556 towns have been provided partial piped water supply facilities. 36 more towns have also been provided these facilities during 1985-88, thus making a total of 592 towns by March 1988. During 1988-89, 10 more towns will be provided water supply facilities. Financial and physical progress of urban water supply during seventh plan as under—

13.1.6. On the basis of the total outlay approved for seventh plan, the annual average of funds should have been Rs.30-35 crore, against which about Rs.17,23,22 and 20 crores were released in the first four years. On account of this shortfall, it will not be possible to achieve physical targets.

13.1.7. It may also be stated here that an outlay of Rs.156.00 crore only could be provided in Seventh plan against Rs.545.00 crore required to supply adequate water to 100 per cent urban population to end of 'international drinking water supply and sanitation decade' i.e. 1990. Funds available are thus, much too short of requirements. There is acute scarcity of drinking water in urban areas, as the augmentation and extension of existing water supply systems is unable to match increasing demands for water of the fast expanding urban centres. An outlay of Rs. 36.85 crore has been provided for 1989-90 out of which Rs. 7.00 crore are earmarked for Gokul Barrage.

13.1.8 *New Facilities*—Ten more towns are expected to be covered with urban water supply during 1988-89. Thus by March, 1989, 602 would have been covered. During 1989-90, a provision of Rs.5.00 crore has been kept for providing water supply in 10 new towns, raising the number of towns with water facilities to 612 against a total number of 685 towns in the state.

13.1.9 *Re-organisation/extension/ augmentation schemes*—A number of schemes for augmentation and expansion of existing water supply systems in urban areas could also not be taken up on the desired scale because of shortage of funds. Some towns have only tube-well and skeleton distribution system. The average *per capita* water supply in most of the towns is barely 100 lpcd. There is need for advance planning and of a number of projects to cope with the problem of continuing shortage of water in towns. A number of existing systems have become old and need repairs/replacement/augmentation/extension. If concerted efforts are not made now to suitably augment urban water supply system, the situation will further deteriorate resulting into health problems and great inconvenience to people.

13.1.10. For 1989-90, an outlay of Rs.24 85 crore is being proposed these to reorganise/extend/augment water supply systems of 20 towns, besides augmenting water supply by 20 mld in corporation towns.

#### RURAL WATER SUPPLY

13.1.11. A survey was conducted during 1971-72 to identify problem villages of the state. The criteria adopted for identification of these villages, as prescribed by the Government of India, were:—

Villages where no water sources exist within a distance of 1.6 kilometre or where water is available at a depth of more than 15 metres and for hilly villages where water sources are available at an elevation difference of more than 100 metres from the habitation.

or

Villages where water sources are having excessive salinity, iron-flourides and or other toxic elements hazardous to health.

or

Villages which are exposed to the risk of water borne diseases, such as cholera, guinea-worm etc. due to the available water.

13.1.12. On the basis of the above criteria and a survey made in 1972, 35,506 villages out of total 1,12,566 villages in the state were declared problem villages. By 1980, only 7,001 village could be provided with safe drinking water supply with a view to provide drinking water facilities in all the problem villages as speedily as possible and keeping in view financial constraints at the same time. Installation of India mark-II hand pumps was decided to be taken up from 1982-83 onwards. Piped water supply was to be provided only at places where hand pumps are not feasible or where the quality of water is not suitable on health considerations. In order to extend coverage and with a view to provide atleast one source of drinking water in each problem village, it was decided by the State Government to provide India Mark-II hand pumps in rural areas at the rate of one handpump for every

250-300 persons, with a maximum of two handpump in a village, out of which one handpump was decided to be provided for Harijan population of the village. On the basis of works already done on these lines, 35,132 problem villages have been covered by March, 1988. The balance 374 villages, out of which 292 are in hills could not be covered due to disputes on water sources and pumping schemes in hills. 210 villages will remain to be covered as on 1-4-89 and 162 as on April, 1990.

13.1.13 With the passage of time and due to a number of ecological changes such as drought, deforestation etc., a large number of other villages have also come in the category of problem villages. According to the information received from District Magistrate, a list of 42,544 additional problem villages has been prepared in 1985 out of which 30,750 villages have been covered by March, 1988. Since then more lists have been received for inclusion in the list of problem village :

TABLE 3—Progress of Rural water supply

(1)	Problem Villages			Other villages	Grand Total
	1972	1985	Total		
(1)	(2)	(3)	(4)	(5)	(6)
1. Total	35506	42544	78050	34516	112566
2. Total coverage up to March 1988	35132	30750	65882	6618	72500
3. (a) Balance as on April 1, 1988	374	11794	12168	27898	40066
(b) Out of which disputed/unpopulated	30	429	459	..	459
(c) Net balance ..	344	11365	11709	27898	39607
4. Anticipated to be covered	134	6866	7000	3687*	10687
5. Balance as on April, 1989	210	4499	4709	24211	28920
6. Proposed to be covered during (1989-90)	48	3722	3770	11000**	9325
7. Balance as on April, 1988	162	777	939	18656	19595

\*Includes 3618 of supplementary list

\*\*Includes 5500 of supplementary list.

#### MINIMUM NEEDS PROGRAMME

13.1.14. An outlay of Rs.226.00 crore including Rs.130.00 crore for hills has been provided under Minimum Needs Programme in Seventh Plan for safe drinking water supply. The programme is being implemented by U. P. Jal Nigam. An expenditure of Rs.42.02, Rs.57.40 and Rs.55.21 crore has been incurred during 1985-86, 1986-87 and 1987-88 respectively. An outlay of Rs.66.42 crore has been provided for 1988-89 and it is expected that 630 problem villages and 54 non-problem villages will be covered by pipes and 1,334 problem villages by India Mark-II hand pumps. 2,246 new problem villages affected by drought will also be

covered by handpumps. Besides this, re-organisation of some existing piped water supply schemes and saturation of some partially covered villages will also be undertaken.

13.1.15. An outlay of Rs.85.69 crore has been proposed for 1989-90. The target to cover 673 problem and 40 non-problem villages by piped and 597 problem villages by India Mark-II hand pumps. 5,000 problem villages (effected by drought) will also be covered by hand pumps. Besides this, reorganisation of some existing piped water supply schemes and saturation of some partially covered villages will also be undertaken.

13.1.16. *The Dutch Assistance for Rural Water Supply Schemes*—This scheme is a part of Minimum Needs programme. An agreement for providing water supply in problem villages of the state was entered into between Government of India and Dutch Government. Sub-project-I estimated to cost Rs.16.35 crore has already been completed under which 724 villages of district Rai-Bareilly, Allahabad and Varanasi have been provided with piped water supply. Sub-project-III estimated to cost Rs.11.04 crore with a programme to cover 603 villages of district Allahabad, Agra, Mathura and Etawah by India Mark-II handpumps is nearing completion. Sub-project-IV estimated to cost Rs.11.26 crore and to provide piped water supply in 199 villages of district Allahabad and Varanasi and sub-project-V estimated to cost Rs.2.09 crore with the objective of providing drainage/sanitation/health education in villages covered under Dutch assisted schemes have also been approved and work has started. Sub-project-VII estimated to cost Rs.30.00 crore has been submitted to Government of India by Jal Nigam for approval. Rs.16.00 crore have been proposed under this programme for 1988-89 and of a total provision of Rs.66.42 crore under Minimum Needs Programme, Rs.30.00 crore have been proposed for 1989-90 out of total provision of Rs.85.69 crore.

13.1.17. *Accelerated Rural Water Supply Programme*—This is a centrally sponsored programme for which 100 per cent assistance is given by Government of India. Funds under this head are utilized to accelerate the rural water supply programme in problem villages. The Seventh Plan outlay for this programme is likely

to be Rs.226.00 crore, Rs.46.00 crore, Rs.34.61 crore and Rs.37.50 crore have been provided for this programme during 1985-86, 1986-87 and 1987-88 respectively. An outlay of Rs.46.46 crore has been approved for this programme in 1988-89. The outlay for 1989-90 is Rs.50.00 crore. It is proposed to cover 507 problem villages and 15 non-problem villages by piped water supply and 1,993 problem villages by India Mark-II hand-pumps during 1989-90. Five hundred new problem villages affected on drought will also be covered by India Mark-II handpumps.

13.1.18. *Rejuvenation of Defunct Schemes*—Many rural water supply schemes in hills have become defunct due to land slides and other damages. These schemes require immediate rejuvenation/rehabilitation. Kumaun and Garhwal Jal Sansthan are given funds for restoration of these schemes. An outlay of Rs.2.00 crore has been provided in Seventh Plan for this purpose out of which Rs.0.75, Rs.0.55 and Rs.1.50 and Rs.1.00 crore have been provided during 1985-86, 1986-87, 1987-88 and 1988-89 respectively. An outlay of Rs.1.00 crore has been proposed for this purpose in 1989-90.

13.1.19. *Rural Water Supply in Harijan Basties*—The Harijan Drinking Water Scheme was introduced in 1971-72. The scheme is being administered by Gram Vikas Vibhag and aims at providing drink-water facilities in Harijan basties in rural areas. Under this scheme, drinking water resources are provided through construction of diggis in hills and wells and hand-pumps in plains. The construction work of wells and diggis is being done by block agency and the work of installation of

handpumps (India Mark-II handpumps) under the scheme is with Jal Nigam since 1984-85. An outlay of Rs.17.00 crore including Rs.2.00 crore for hills has been

provided in Seventh Plan for this scheme. Financial and physical progress under this scheme has been as under :

Year	Financial (Rupees in lakh)	Item	Physical Achievement (No.)
1985-86	278.40	1. Wells	660
		2. Hand pumps	1845
		3. Diggis	320
1986-87	345.46	1. Wells	803
		2. Handpumps	2820
		3. Diggis	287
1987-88	453.00	1. Wells	825
		2. Handpumps	2742
		3. Diggis	270
1988-89 (Outlay)	567.00 (Anticipated)	1. Wells	1667
		2. Handpumps	2672
		3. Diggis	250

13.1.20. An outlay of Rs.612.77 lakh including Rs.50.00 lakh for hills has been proposed for 1989-90. The targets under the scheme for 1989-90 are construction of 713 wells, 3,845 handpumps and 500 diggis.

#### URBAN SEWERAGE AND SANITATION

13.1.21. It is necessary from the point of view of health of the community that all excreta, organic wastes and waste water is quickly removed from inhabited areas

of towns. Sewerage and sanitation scheme should, therefore, proceed alongwith water supply schemes to avoid in sanitation due to increased amount of waste water and to make use of waste water to transport night-soil and other human wastes away from habitation. However, work on sewerage schemes could not be given same priority in the past as was assigned to water supply. The main reason for this was to high cost involved and limited financial resources. Outlay and expenditure are given below :

TABLE: 4—Outlays and Expenditure—Urban Sewerage and Sanitation

Year	Financial (Rs. in crores)	Physical achievements		
		New towns No.	Increase in corporation (Mld.) <sup>a</sup>	Reorgani- sation/ex- tention in other towns
(1)	(2)	(3)	(4)	(5)
(1) Seventh Plan (outlay) .. .. .	15.00	11	10	10
(2) 1985-86 (Expenditure) .. .. .	2.28	2	..	1
(3) 1986-87 .. .. .	2.37	1	..	..
(4) 1987-88 .. .. .	2.04	..	..	1
(5) 1988-89 .. .. .	2.00	..	..	2
(6) 1989-90 (Outlay) .. .. .	3.65	..	..	2



13.1.22. *New Towns*—By end of March, 1988, 57 towns have been provided with partial sewerage facilities out of which 20 are class-I towns. No provision could be made providing this facility to new towns during 1989-90.

13.1.23. *Reorganisation / extension / augmentation schemes*—Sewerage facilities in already covered towns are partial and inadequate. The present status of sewerage in most of the towns is not satisfactory. This is causing pollution of rivers and serious environmental problems. A provision of Rs. 3.65 crore has been provided during 1989-90 to extend the existing sewerage facilities in two towns.

13.1.24. *Urban Low Cast Sanitation*—The works of low cast sanitation are now being done by local bodies themselves under administrative control of Director, Local Bodies, U.P. The two main programmes of conversion of dry latrines into flush latrines and Shulabh Shauchalaya have been taken up under low cast sanitation programme. There is a provision of Rs. 14.50 crore in Seventh Plan for conversion of dry latrines into flush latrines and construction of public latrines. During 1985-86, 1986-87 and 1987-88, Rs. 205.00 lakh, Rs. 230.00 lakh and Rs. 353.00 lakh were spent. There is a provision of Rs. 284.00 lakh including Rs. 5.00 lakh for hills in 1988-89 and an outlay of Rs. 350.00 lakh is proposed for 1989-90.

#### RURAL SANITATION PROGRAMME

13.1.25. The "International Water Supply and Sanitation Decade Programme" envisages coverage of 25 per cent of the rural population with the facility of sanitary latrines. However, on account of limited financial resources, only an outlay of Rs. 3.30 crore—Rs. 1.50 crore under water supply and sanitation and Rs. 1.80 crore under Community Development and Panchayat was included in the Seventh Plan. In the first three years Rs. 63.69 lakh were utilized. During 1988-89 an outlay of Rs. 37.65 lakh has been earmarked for the programme. For next year 1989-90, an outlay of Rs. 53.28 lakh has been proposed. Thus, an expenditure of Rs. 154.62 lakh is anticipated in the

Seventh Plan. Besides, UNICEF is also assisting the State Government for this programme. This programme has also been implemented under Rural Landless Employment Guarantee Programme and National Rural Employment Programme. The Government of India is also supplementing the efforts of the State Government by providing funds through centrally sponsored scheme of Rural Sanitation. The latrines constructed under different programmes are narrated below :

13.1.26. *Rural Landless Employment Guarantee Programme (RLEGP)*—During 1985-87 Rs. 212.00 lakh and 6,000 Mt. of wheat was made available to construct 30,000 latrines. Similarly in 1987-88 Rs. 106.00 lakh in cash and 3,000 Mt. of wheat was allotted to construct another 15,000 latrines. However, a total of 44,436 latrines covering all the 57 districts of the State were constructed. As per decision of the Government no funds will be made available henceforth for construction of sanitary latrines under the programme.

13.1.27. *National Rural Employment Programme (NREP)* — In 1986-87 Rs. 106.00 lakh in cash and 3,000 Mt. of wheat was allotted for construction of 15,000 latrines. Similarly, in 1987-88 Rs. 106.00 lakh in cash and three thousand Mt. of wheat was allotted to construct 15,000 latrines. However, a total number of 29,280 latrines were installed in these two years. The allotment of funds for construction of rural sanitary latrine has now been discontinued since year 1988-89.

13.1.28. *Central Rural Sanitation Programme (CRSP)* — In 1987-88 the Government of India earmarked an outlay of Rs. 25.00 lakh in the State Plan and decided to supplement it by an equal amount under central programme. The amount provided in the State Plan however could not be utilized under central programme, an amount of Rs. 24.00 lakh was utilized and 2,406 latrines were constructed. During 1988-89, Rs. 25.00 lakh have been provided in the State Plan and an equal amount is expected from the centre. With this, it will be possible to

construct 2,625 latrines. During 1989-90, it is anticipated that the centre will supplement the State's efforts on equal basis.

13.1.29.—*United Nations International Emergency Fund (UNICEF)*—The State Government is being assisted by the UNICEF in constructing the latrines for the rural households in some selected dis-

### 13.2. HOUSING

The expansion in the activities of different departments is inevitably linked with the increase in responsibilities as well as pace of development of the State. Construction of buildings has to follow this expansion. The essential requirements of residential and non-residential accommodation of departments dealing with non-plan activities could not be provided under the non-plan sector of the state budget and the Planning Commission decided during the Fifth Plan to provide these requirements in the plan. For the Seventh Plan the Planning Commission has further regrouped the entire housing activity charged to state Plan under the following three heads:—

1. Government Residential buildings.
2. Urban Housing.
3. Rural Housing.

13.2.2. The programme of construction of non-residential buildings has been kept under 'Public Works' which includes construction of office buildings and other functional buildings.

#### GOVERNMENT RESIDENTIAL BUILDINGS

13.2.3. The programme of construction of residential buildings of developmental and non-developmental departments has been included as a plan scheme

tracts. They have agreed to meet the 50 per cent of construction cost besides meeting expenditure on training, seminar, jeeps, motor-cycles and strengthening of rural sanitation cell. In the first three years of the Seventh Plan, 3,603 latrines were constructed. The programme for 1988-89 is to construct 3,216 latrines.

since Fifth Plan. Under this programme outlay is provided for General Pooled Accommodation, Police, Judicial, Revenue, Estate, Public Works Department, Finance (Loan to Government Servants), Karmik and Legislature Departments.

13.2.4. Although serious efforts have been made to meet this demand but due to increase in population and establishment of big offices particularly in urban areas, still there is acute shortage of accommodation in the State for the Government Offices and other categories of Government employees. It is, therefore, necessary to construct more buildings to accommodate the officers as well the employees of the State and to reduce the present backlog in residential accommodation.

13.2.5. *General Pool Accommodation*—The residential buildings of various departments for their employees are being constructed under pooled housing scheme. An outlay of Rs. 11.46.00 lakh has been provided in the Seventh Plan and it is planned to construct 1,372 residences for various categories of officers and officials including 497 buildings as spill-over works of Sixth Plan. During the year 1987-88 Rs. 109.00 lakh including Rs. 2.00 lakh for hills has been spent and an expenditure

of Rs. 656.00 lakh including Rs. 110.00 lakh for hills is anticipated to be incurred during 1988-89. Against a target of 402 buildings 96 buildings are expected to be completed. This scheme has been transferred to district sector from 1988-89. An outlay of Rs. 755.74 lakh including Rs. 115.00 lakh for hills is proposed for the annual plan 1989-90 to construct 290 buildings in different districts of the state.

13.2.6. *Police Department* — Provision of residential accommodation to different categories of State police personnel is necessary to increase their efficiency. At the beginning of the Seventh Plan the deficiency of living accommodation viz. quarters and barracks was for 85,753 non-gazetted policemen besides deficiencies in accommodation for offices. An outlay of Rs. 890.00 lakh including Rs. 18.00 lakh for hills has been provided in the Seventh Plan and during this period target for constructing 4,081 residential units was fixed against which it is expected to construct 4,114 residential buildings of various types and barracks for 4,914 men during Seventh Plan period.

13.2.7. During 1985-86, 465 residential buildings and barracks for 850 men, in the year 1986-87, 791 residential buildings alongwith barracks for 755 men and during 1987-88, 486 residential buildings and barracks for 420 men could be constructed. It is expected to construct 790 residential buildings alongwith 600 men barracks during 1988-89 for which an outlay of Rs. 425.00 lakh including Rs. 25.00 lakh for hills has been provided.

13.2.8. An outlay of Rs. 525.00 lakh including Rs. 25.00 lakh for hills has been proposed for the annual plan 1989-90

and during this period it is proposed to construct 1,033 residential units and barracks for 1589 men.

13.2.9. *Judicial Department* — The number of offices of the department has increased considerably at district level as also for honourable judges of the High Court. It has, therefore, become necessary to provide them residential accommodation. There were about 200 residences for Judicial Officers before 1975 and sanction for construction of 669 residences (including 63 houses purchased) for Judicial Officers, 262 residences for employees of subordinate courts at tehsil headquarters have been issued during the period 1976—1988. During the year 1988-89 sanction for purchasing 52 type IV constructed houses and construction of 12 type IV residences has also been issued. The requirement of the department is still for 562 residences for Judicial Officers, 30 residences for honourable high court judges besides residential accommodation for other categories of judicial staff.

13.2.10. With the purpose of meeting the requirement of Judicial Department an outlay of Rs. 180.00 lakh including Rs. 19.00 lakh for hills has been provided in the Seventh Plan. An expenditure of Rs. 480.55 lakh including Rs. 18.21 lakh has been incurred during the period 1985—88 and construction of 120 units completed. Expenditure of Rs. 188.00 lakh including Rs. 25.00 lakh for hills is anticipated to be spent during 1988-89. An outlay of Rs. 325.00 lakh including Rs. 25.00 lakh is proposed for the year 1989-90.

13.2.11. *Public Works Department* — The Public Works Department undertakes the construction work of residential, non-residential and functional buildings of its own as well as of other departments. An outlay of Rs. 304.00 lakh including Rs. 70.00 lakh for hills has been provided in the Seventh Plan and the target is to construct 250 residential units. The achievement during 1985—88 has been of 61 residential units. Expenditure of

Rs.55.00 lakh including Rs.30.00 for hills is anticipated during the 1988-89 and the target of 50 residential units is anticipated to be achieved. An outlay of Rs.60.00 lakh including Rs.30.00 lakh for hills has been proposed for 1989-90 and the proposed target is to construct 48 residential units.

13.2.12. *Revenue Department*—An outlay of Rs.44.00 lakh including Rs.15.00 lakh for hills has been provided in the Seventh Plan for construction of residential buildings of Revenue Department officials specially at tehsil level. This scheme has been transferred to district sector from 1988-89. An outlay of Rs.318.91 lakh including Rs.28.00 lakh for hills has been proposed for 1989-90 and the proposed target is to construct 170 residential units.

13.2.13. *Estate Department* — The Estate Department provides residential accommodation to Government employees posted at Lucknow and also to the members of the Government and the Legislature. During Seventh Plan 5,280 residences for various categories of Government servants are proposed to be constructed. Besides, it is also proposed to construct/purchase 100 residences for Ministers, 150 residences for legislatures and 100 residences for journalists. An outlay of Rs.827.00 lakh, including Rs.64.00 lakh for hills has been provided in Seventh Plan. The total expenditure during 1985-88 has been at Rs.521.12 lakh and expenditure of Rs.901.40 lakh is anticipated to be incurred during 1988-89. A transit hostel, a guest house and a V.V.I.P. Guest house are expected to be completed during 1989-90 for which outlay of Rs.795.96 lakh has been provided.

13.2.14. *Finance (Loan to Government Servants)*—To provide government servants the facility of their own accommodation advances/loans for residential houses, are being extended. Hundreds of new houses are being constructed every year, as a result of this facility. The demand for house building advances has been increased in the recent past. The

limit of house building advance admissible to government employees of different categories was revised upward in 1981-82 and again in 1984-85 to 75 months pay or Rs.1,25,000 whichever is less. An outlay of Rs.2,940.00 lakh including Rs.150.00 lakh for hills has been provided in Seventh Plan. An expenditure of Rs.2,416.00 lakh including Rs.219.00 lakh for hills has been incurred during the period 1985-88 and expenditure of Rs.768.00 lakh including Rs.100.00 lakh for hills is anticipated in 1988-89. An outlay of Rs.1,600.00 lakh including Rs.100.00 lakh for hills is proposed for 1989-90.

13.2.15. *Karmik Department* — The Karmik Department provides residential accommodation to the members of the State Public Service Commission as well as to the gazetted and non-gazetted employees of the commission. It also provides hostel accommodation and residences to the employees of Administrative Academy Nainital and Institute of Management Development Institute, U.P. An outlay of Rs.30.00 lakh has been provided in Seventh Plan. An expenditure of Rs.35.30 lakh has been incurred during the period 1985-88 and expenditure of Rs.10.00 lakh is anticipated to be incurred during 1988-89. An outlay of Rs.12.00 lakh is proposed for the annual plan 1989-90.

13.2.16 *Urban Housing* — There has been an increased of 4.9 per cent per annum in the population of urban areas of the state during 1971-81. The corresponding increase in the country during the period has been 3.8 per cent per annum. It is expected that the urban population of the State will be around 32.42 million by 1991. The housing programme in urban areas assumes special importance in the light of this phenomenal increase in population of these areas. However, the housing problem in urban areas is getting more and more acute owing to non-availability of enough serviced land, competing demands on urban space and soaring prices of land. The economically weaker section and low income groups of society, which

constitute about 75 per cent of the urban population, have to face much greater problem in getting shelter and they need special consideration in provision of houses.

13.2.17. According to pilot survey of National Building Organisation, the backlog of urban dwelling in 1981 was estimated to be 7.06 lakh units and the anticipated shortage in the beginning of the Seventh Plan was 8.20 lakh housing. About 12.78 lakh additional houses were required to be constructed during the Seventh Plan to accommodate increased numbers in urban population. The additional demand of urban dwelling in the Seventh Plan is estimated to be about 21 lakh units. The housing policy therefore lays particular emphasis on the following :—

1. Availability of new tracts of urbanised land in convenient locations alongwith basic support services needed for economically weaker sections of the society

2. Provisions of shelter for urban poor in the shape of sites and services scheme

3. Implementation of the slum improvement scheme in a more effective manner through provision of essential services in the residential areas inhabited by weaker section of society and low income groups

4. Using indigenous material for construction of economically weaker section houses along with traditional forms of layout and cluster groupings.

5. Effecting adequate changes in building norms and bye-laws to allow for increased scope for self construction.

#### SEVENTH FIVE YEAR PLAN—OUTLAY

13.2.18. An outlay of Rs.75.50 crore including Rs.0.50 crore for hills was provided for this sector during Seventh Plan against which a sum of Rs.45.19 crore has already been spent during the first three years (1985-88) of

the plan and Rs.10.66 crore are likely to be spent during 1988-89. The proposed outlay for 1989-90 is Rs.13.00 crore including Rs.1.00 crore for hills. Thus the total expenditure under this sector is expected to be Rs.68.85 crore.

13.2.19. So far as physical achievements of Seventh Plan are concerned, 20,968 EWS/Sites and Services, 2,743 Low Income and 546 Middle Income Group houses are likely to be completed against the target of 18,000, 4,000, and 700 houses respectively under these schemes.

13.2.20. An outlay of Rs.13.00 crore has been proposed for 1989-90 including Rs. one crore for hills. A brief description of the housing schemes for which the outlay has been proposed in 1989-90 is as follows :

13.2.21. *Sites and Services* -- This scheme was started during Sixth Plan with a view to make available cheaper and small size plots to persons of economically weaker sections of the community. Under this scheme 25 to 40 sq. metre plots are developed. A minimum need based dwelling unit can be constructed by beneficiary on a plot of this size. These developed plots are allotted on hire purchase basis to persons under E.W.S. category having a monthly income up to Rs.700.00. There is provision of one water-tap and one flush type latrine on the plot. The cost of one such plot is about Rs.5,000.00 which is treated as loan to the executing agencies. The outlay of Seventh Plan for this scheme is Rs.225.00 lakh, against which a sum of Rs.67.11 lakh has already been spent during the first three years of the plan. Rs.26.00 lakh is likely to be spent during 1988-89. The outlay for 1989-90 is Rs.25.00 lakh and the programme is to develop 500 plots.

13.2.22. *Economically Weaker Section Housing* -- Under this scheme one room tenements are built by executing agencies viz. U. P. Housing and Development Board, Development Authorities and Local Bodies. The Government provides financial assistance to these agencies in the shape of loans.

based on ceiling cost and quantum of loan fixed by the Government of India from time to time. The present ceiling cost is Rs.10,000.00 and the amount of loan is Rs.8,300.00 per dwelling unit. Houses constructed under this scheme are allotted to persons whose monthly income is Rs.700.00 and below. The outlay for this scheme in Seventh Plan is Rs.1,810.00 lakh including Rs.10.00 lakh for hills, against which a sum of Rs.1,041.16 lakh has already been spent during the first three years of the plan. An outlay of Rs.293.00 lakh including Rs.18.00 lakh for hills is provided for 1988-89. The outlay for 1989-90 is Rs.390.00 lakh including Rs.15.00 lakh for hills. The physical target for 1988-89 is to construct 3,530 houses and the target for 1989-90 is to construct 4,700 houses.

13.2.23. *Low Income Group Housing Scheme* — Under this scheme houses are provided for persons having monthly income between Rs.701.00 to Rs.1,500.00. The ceiling cost of each dwelling unit is Rs.30,000.00. The Government provides financial assistance to the executing agencies in the shape of loan for the construction of these units. As per revised guidelines of the Government of India, the loan amount has been raised to Rs.23,500 per dwelling unit. The outlay of Seventh Plan for this scheme is Rs.1,000.00 lakh. Against this outlay a sum of Rs.300.84 lakh has already been spent during the first three years of the plan. In 1988-89, an outlay of Rs.57.00 lakh including Rs.7.00 lakh for hills is provided and the target is to construct 360 houses. The outlay for 1989-90 is Rs.115.00 lakh including Rs.15.00 lakh for hills, and 750 houses are targetted for construction.

13.2.24. *Middle Income Group Housing Scheme*—Persons having monthly income between Rs.1,501.00 and Rs.2,500.00 are covered under this scheme. The revised ceiling cost of a dwelling unit under this scheme is Rs.75,000.00 with the maximum loan assistance limited to Rs.40,000.00 per unit to the executing agencies. The outlay of this scheme in Seventh Plan

(1985—90) is Rs.340.00 lakh. Against this outlay, a sum of Rs.141.72 lakh has already been spent during first three years of the plan. An outlay of Rs.30.00 lakh has been provided in 1988-89 to construct 100 houses. The outlay for 1989-90 is Rs.50.00 lakh with a target of construction of 150 houses.

13.2.25. *Land Aquisition and Development Scheme*—This scheme had envisaged in the past acquisition of land for planned area development in accordance with land use provisions of the Master Plan. The scheme is intended to help stabilise land prices and to make available sufficient number of developed plots at a reasonable cost specially for persons belonging to weaker sections and low income groups. An outlay of Rs.2,520.00 lakh including Rs.20.00 lakh for hills was provided in Seventh Plan (1985—90) for this scheme, against which a sum of Rs.2,126.57 lakh has already been spent during first three years of the plan. The outlay for 1988-89 is Rs.385.00 lakh. The outlay for 1989-90 is Rs.320.00 lakh out of which Rs.160.00 lakh will be as loan and Rs.160.00 lakh as subsidy or interest free loan. Uptill now, financial assistance under this scheme was in the shape of loan only but from 1989-90 a subsidy component is also proposed to be introduced. The main idea behind this new proposal is to financially assist implementing agencies so that they may be able to acquire land required for basic town infra-structural facilities proposed in the Master Plan and Zonal Development Plan. It has been experienced that area earmarked for development of non or less remunerative nature of land uses viz. master plan roads, green belt, community facilities etc. are left unacquired by the executing agencies resulting in un-authorised and haphazard development in or around the vicinity of the planned developed areas.

13.2.26. *Seed capital* — In order to solve housing problem in urban areas expeditiously, the State Government have created development authorities in various important urban centres of the state. These authorities are being provided

with financial assistance in the shape of seed capital. The seed capital is also provided to U.P. Housing and Development Board, and new development authorities to be created in future. The main purpose of providing seed capital is to strengthen the financial base of these agencies so that they can obtain institutional finance from HUDCO for their housing and other admissible projects. An outlay of Rs.2.25 crore including Rs.25.00 lakh for hills has been kept in 1988-89 for this purpose. The outlay for 1989-90 is Rs.3.50 crore including Rs.50.00 lakh for hills.

13.2.27. *Share Capital to U.P. Co-operative Housing Federation*—The U.P. Co-operative Housing Federation is the apex body of primary housing societies and it disburses house building loans to individual members of the societies. The State Government provides financial assistance to this apex organisation in the shape of share capital. An outlay of Rs.100.00 lakh was provided in Seventh Plan for this purpose against which a sum of Rs.50.00 lakh is provided in 1988-89. The outlay for 1989-90 is also Rs.50.00 lakh.

#### RURAL HOUSING

13.2.28. *Allotment of house sites in Rural areas*—The scheme envisages allotment of house sites to Agricultural Labourers and village artisans residing in rural areas and belonging to scheduled castes, scheduled tribes and other agricultural labourers residing in rural areas who have no land to construct their houses. Under this scheme, 100 to 150 sq. yards (83.61 sq. metres to 125.42 sq. metres) of land is allotted to a family. Generally, Gram Sabha land is allotted but where such land is not available, land of private parties is acquired, the cost of which is borne by Government and the same is the allotted to eligible families. This scheme is a part of M.N.P.

13.2.29. During Sixth Plan survey was completed and time bound programme was drawn up for allotment of house sites. Since then, the number of eligible families has increased consider-

ably. For Sixth Plan the target of allotment of house sites was 2,90,000 families against which 5,58,374 families were allotted house sites.

13.2.30. There is a provision of Rs.550.00 lakh including Rs.50.00 lakh for hills in Seventh Plan with a target of providing house sites to 2.50 lakh families. Against this provision a sum of Rs.86.92 lakh has already been spent during first three years of the plan and 2,51,982 families were benefitted under this scheme. An outlay of Rs.31.00 lakh including Rs.10.00 lakh for hill has been provided for 1988-89 and the target is to benefit 50,000 families. The outlay for 1989-90 is Rs.19.92 lakh with a similar target of 50,000 families.

13.2.31. *Construction assistance to rural poor*—To provide suitable habitat to homeless rural poor who are permanent residents of the rural areas, land for houses is provided by the Revenue Department. To construct a houses on such land a monetary aid in the shape of material to the extent of Rs.2,000.00 in plains and 3,000.00 in hills was being given through the agency of the Rural Development Department. Assistance is also provided for development of land and for incurring contingent expenditure. The amount of financial aid now falls short of requirements due to increase in the cost of building materials as labour charges. Augmentation of this assistance through loans from HUDCO or other institutional sources has now been envisaged.

13.2.32. *Nirbal Varg Avas Yojana* was introduced in the plains during 1979-80 and was extended to hills during 1980-81. The scheme is continuing without any substantial change during Seventh Plan also. An outlay of Rs.2,080.00 lakh including Rs.800.00 lakh for hills has been provided in Seventh Plan for construction of 66,662 houses. During the past three years i.e. 1985-86, 1986-87 and 1987-88, Rs.299.98 lakh, Rs.267.23 lakh and Rs.350.00 lakh have been spent and 21,157, 12,195 and 16,919 houses respectively have been constructed. The outlay for 1988-89 is Rs.707.00 lakh including Rs.50.00 lakh for hills.

13.2.33 Now the old scheme "Nirbal Varg Avas Yojana of Rural Development Department and U.P. Harijan and Nirbal Varg Avas Yojana has been dropped and in its place a new scheme called a "Nirbal Varg Gramin Avas Yojana" was introduced on 2nd October, 1988. Under this scheme a house costing Rs.6000 in plains and Rs.7800 in hills and black cotton soil areas can be constructed. For which a subsidy Rs.4000 will be given in plains. Rs.3000 out of this subsidy will come from funds available under employment schemes and Rs.1000 from general funds of the state government and Rs.2000 will also be given as loan to beneficiary. In the difficult areas, the subsidy component will be Rs.5800 out of which Rs.4800 will come from employment schemes and Rs.1000 from state budget. However the loan component in this case will continue to be Rs.2000. The outlay for this scheme in 1989-90 is Rs.3000.00 lakh including Rs.267.00 lakh for hills and there is a target of constructing 3,00,000 houses including 14400 houses in hills.

13.2.34. *Indira Avas Yojana*—Under Rural landless employment Guarantee programme Indira Avas Yojana was started in 1985-86. Under this scheme a dwelling unit is provided to weaker section families belonging to scheduled caste/scheduled tribes and free banded labourers, along with an employment of at least 100 mandays in a year. A house costing Rs.6000 in plains and Rs.7800 in hills and black cotton soil areas in constructed through Districts Rural Development Agencies. For each dwelling unit, one latrine costing Rs.1200 is also constructed and infrastructure work at the rate of Rs.3000 per unit is done to provide necessary facilities like potable water, link road, drainage etc.

13.2.35. During 1985-86, 1986-87 and 1987-88, 67367 houses were constructed and employment to the tune of 266.85 lakh mandays was generated involving a total expenditure of Rs.5,907.78 lakh.

13.2.36. For 1988-89, there is a target of constructing 22265 houses and of gene-

rating employment of 70.69 lakh mandays involving an expenditure of Rs.2368.90 lakh. In 1989-90, 27735 houses will be constructed under this scheme.

13.2.37. *Construction of Houses through U. P. Harijan and Nirbal Varg Avas Nigam Ltd.*—Most of Scheduled Caste, Scheduled Tribe and Denotified tribe families do not have proper living accommodation. It was proposed to construct about 1,00,000 houses for them in Seventh Plan at a cost of Rs.6000 per house through the Nigam. These houses are being constructed through U. P. Harijan and Nirbal Varg Avas Nigam Ltd. Land required for the houses is provided free of cost by the State. The houses are provided to members of the Scheduled Caste, Scheduled Tribes and Denotified tribes living below the poverty line. Under this scheme Rs.3000 is provided by the Harijan and Social Welfare Department as subsidy, Rs.1000 through NREP and the balance Rs.2000 is the contribution made by beneficiaries by obtaining loan from commercial Banks. The subsidy is given to beneficiaries selected by a committee at the District level, through the Harijan and Nirbal Varg Avas Nigam Ltd. The houses are constructed by beneficiary himself under the supervision of Nigam staff, for which 2 per cent of the cost of the house is charged by the Nigam as supervision charges. An outlay of Rs.1625.00 lakh including Rs.100.00 lakh for hills has been approved for this scheme in Seventh Plan. During 1985-86 an expenditure of Rs.286.13 lakh (Rs.11.00 lakh in Hills) was incurred and 8887 houses were constructed. During 1986-87 an expenditure of Rs.222.97 (Rs.12.00 lakh in hills) was incurred and 7531 houses were constructed. An expenditure of Rs.310.00 lakh (Rs.15.00 lakh in hills) has been incurred during 1987-88 and 9233 houses were constructed. As already mentioned earlier, this scheme has now been merged with the new scheme namely "Nirbal Varg Gramin Avas Yojana" and as such no target has been fixed under this scheme for 1989-90.



### 13.3. URBAN DEVELOPMENT

The increase in urban population has brought about significant changes in the proportion of population in each class of town. The number of urban settlements (counting urban agglomeration as one unit) has also increased sharply from 293 in 1971 to 659 in 1981. Out of these, Kanpur and Lucknow are metropolitan cities. These cities have problems in providing adequate employment opportunities and urban services to their growing population. The present condition of urban infrastructure services and shelter is far from satisfactory. A review of urban physical condition and functions reveals deficiencies in land management policies, services and housing. Most of the executing agencies do not have adequate management and financial system to expand their operations. It is imperative, therefore, to strength urban planning and services delivery institutions.

13.3.2. The objectives of urban development for Seventh Plan emphasize improvement in the environmental conditions of the slums, availability of shelters, water supply and sanitation and transport systems. For this, an outlay of Rs.247.00 crore including Rs.2.00 crore for hills has been provided in Seventh Plan for urban development programme. Against this outlay, a sum of Rs.8396.06 lakh has already been incurred during first three years of the plan. A sum of Rs.6766.00 lakh is likely to be spent during 1988-89. The outlay for 1989-90 is Rs.86.80 crore including Rs.1.50 crore for hills. Out of this, Rs.0.70 crore has been allocated for the "Uttar Pradesh Urban Development Project" and Rs.6.30 crore for the work of environmental improvement of slum under "Minimum Needs Programme". A brief resume of the urban development schemes included in annual plan 1989-90 is being given in the following paragraphs.

13.3.3. *Nagar Vikas Yojana*—Under this scheme financial assistance is provided to Nagar Palikas, Nagar Mahapalikas and development authorities etc. of the development of parks, construction of offices and community centres, and beautification

projects. The assistance was provided in the shape of loan up to 1986-87, but from 1987-88 grants are now provided under this scheme, keeping in view non-remunerative aspects of the scheme. The total outlay of Seventh Plan for this scheme is Rs.100.00 lakh against which Rs.527.23 lakh has already been spent during first three years of the plan. The outlay for 1988-89 is Rs.130.00 lakh including Rs.70.00 lakh for hills. This outlay is likely to be utilized in full. The outlay for 1989-90 is Rs.205.00 lakh including Rs.120.00 lakh for hills.

13.3.4. *Town and Regional Planning*—The main functions of Town and Country, Planning Department are preparation of Master Plans and Regional Plans and co-ordination and monitoring the urban development schemes. Apart from this, the department provides technical guidance to various development authorities and local bodies in the field of housing and urban development. It also prepares lay out and building plans for their schemes and makes its recommendation to Government for providing financial assistance to various executing agencies for schemes of housing and urban developments. The department also scrutinises proposals and makes its recommendations to Government for changes in land-uses, in the master plans. A small unit for integrated planning of urban transportation system is also being created in this department. This unit will be known as "Traffic and Transportation Appraisal Unit". In addition to this another planning unit for effective implementation of the programmes under "National Capital Region scheme is also being created in this department. The outlay for this Department in Seventh Plan is Rs.145.00 lakh. Against this outlay, an expenditure of Rs.93.94 lakh has already been incurred during the first three years of the plan. There is a provision of Rs.40.00 lakh for 1988-89 and an outlay of Rs.50.00 lakh is proposed for the Department in year 1989-90 to meet expenditure on establishment of the proposed as well as existing units.

13.3.5. *Environmental Improvement of slums*—This programme is currently under implementation in 63 towns. The main thrust is on improving environmental condition of slums in urban areas out of these towns, 30 are class I towns, having a population of more than one lakh, and the remaining 33 are mostly small and medium towns, selected under another scheme of "Integrated Development of small and Medium Towns". These include 3 hill towns also. Financial assistance for executing programmes approval under this scheme is provided to local bodies of the selected towns in the shape of grants. The financial assistance is computed at a rate of Rs. 250.00 per capita. The outlay of this scheme for Seventh Plan is Rs. 3700.00 lakh, against which Rs. 1250.67 lakh have already been spent during first three years of the plan. There is an outlay of Rs. 430.00 lakh including Rs. 30.00 lakh for hills for 1988-89. The outlay for 1989-90 is Rs. 630.00 lakh including Rs. 30.00 lakh for hills. The target for 1988-89 is to benefit 1,50,000 persons including 10,000 persons in hills. The target for 1989-90 is to benefit 2,10,000 persons including 10,000 persons in hills.

13.3.6. *Integrated Development of small and Medium Towns*—This is a centrally sponsored scheme and is funded on a matching basis. The scheme is implemented in accordance with the guidelines issued by the Ministry of works and Housing, Government of India. The components of the scheme eligible for central assistance are land acquisition and land development, traffic and transportation. The projects prepared under this scheme also provide for construction of roads and improvement/upgradation of existing roads, development of mandies, markets and processing facilities and low cost sanitation, all of which are required to be funded by state plan. This scheme is being currently implemented in 35 towns. A few more towns are likely to be taken up during the remaining period of Seventh Plan. The outlay of this scheme for 1988-89 is Rs. 1.35 crore and the outlay for 1989-90 is Rs. 300.00 lakh. There are state share only for the scheme and

will be supplemented by contributions received from Government of India as their share for the scheme.

13.2.7. *U. P. Urban Development and Water Supply Project*—The state Government has formulated an urban development and water supply project covering 12 cities in the State for assistance from the world bank. The project has already been appraised by the appraisal Mission of World Bank in June 1986. The cost of the project is Rs. 225.50 crore out of which Rs. 151.40 crore have been provided in the Seventh Plan. The objective of the project is to improve urban management, finance and resource mobilisation through the strengthening of key urban institutions in the towns included in the project, particularly management and financing of services through a programme of physical works designed to reduce existing serious deficits in urban services like shelter, water supply, sanitation, drainage, solid waste management, traffic management etc. The following towns have been selected for inclusion in the project :

1. Group "A" KAVAIL Towns of Kanpur, Agra, Varanasi, Allahabad and Lucknow
2. Group "B" Bareilly, Moradabad, Aligarh, Gorakhpur and Ghaziabad
3. Group "C" Shaktinagar (Mirzapur)
4. Group "D" 18 selected towns for which UNDP/TAG feasibility studies on Low cast sanitation have been carried out

13.2.8. While physical components for each town have been identified specifically, investments in the group 'A' and 'B' cities would be made on some or all the following types of schemes viz. sites and services, slum upgrading, Area Development, Traffic Engineering and Management, maintenance, Drainage, Water supply, sewerages low cost sanitation, sector Management, technical Assistance and training.

13.2.9. In the case of group 'C' town viz. Shaktinagar, the project will provide technical assistance to improve efficiency of the proposed special Area Development Authority and subsequently identify a programme of investments.

13.2.10. Group 'D' towns consist of 20 small and medium towns for which UNDP/TAG has prepared feasibility reports for low cost sanitation. Only low cost sanitation will be provided in these towns under this project.

13.2.11. The project components are envisaged to be implemented primarily by the local authorities namely Development Authorities, Municipal Corporations/Municipal Boards/Jal Sansthan or Municipal water undertakings.

13.2.12. In 1986-87 and 1987-88 Rs. 8.32 crore and Rs. 18.00 crore respectively were released to implementing agencies under this project. The approved outlay for 1988-89 is Rs. 57.00 crore. An outlay of Rs. 70.00 crore is proposed for 1989-90. The town-wise break-up of outlay during 1988-89 and 1989-90 under various components are given in Annexure 1 and 2.

13.2.13. *Kanpur Urban Development Project*—The world Bank assisted Kanpur Urban Development Project (externally aided), with an estimated cost of Rs. 41.35 crore, is being implemented in Kanpur since 1981. The major components of the project are (1) sites and services (2) slums upgrading (3) sewerage (4) water supply (5) drainage (6) solid waste management (7) Traffic and transportation (8) Maintenance and (9) Technical assistance and training.

13.2.14. Out of the total cost of Rs. 41.35 crore, an expenditure of Rs. 39.36 crore has been incurred up to March 1986. Rs. 4.68 crore have actually been spent during 1986-87. The project was originally envisaged to be completed in 4 years period (1981-85). However, the target of slum upgrading component had to be reduced from 20,000 to 12,000 households, necessitating restructuring of cost for various components.

Rs. 7.00 crore only has been provided for 1987-88 for completing the project. Against this outlay, Rs. 820.48 lakh has actually been spent. The works have since been completed. No outlay is, therefore, provided for this scheme in 1988-89 and 1989-90.

13.2.15. *National Capital Region*—The scheme is financed on 50 : 50 matching contribution basis by the Central and State Government. Under this scheme, four priority towns of U.P. Sub-region viz. Meerut, Hapur, Bulandshahr and Khurja will be developed. In 1986-87, project reports in respect of these towns involving an expenditure of Rs. 151.14 crore, were submitted to the National Capital Region Planning Board for approval. However, due to lack of resources, only one town in each participating state has been selected for financial assistance by the Board. Accordingly a revised project for Meerut town only costing Rs. 57.37 crore has been submitted for consideration of NCR Planning Board. The additional population during 1987-90 in Meerut town has been assessed as 60,000 out of which workers will be 19,200. Provision of industrial areas, commercial areas, office spaces, residential-cum-work centres and infrastructures has been made in the project for these workers and the estimated requirement of funds for these works out to Rs. 17.06 crore and Rs. 19.95 crore in 1987-88 and 1988-89 respectively. The requirement for 1989-90 is Rs. 20.76 crore. The outlay under this scheme for 1988-89 is Rs. 225.00 lakh representing state's share only. The outlay for 1989-90 is Rs. 380.00 lakh.

13.2.16. *Urban Basic Services*—The Government of India and the UNICEF have proposed this scheme in Seventh Plan. The scheme aims at improving environmental conditions of slum areas and for implementing low cost sanitation programmes in Urban areas. The programme is designed to enhance the survival and development of children and women of urban low income families and to provide them basic education in personal and environmental hygiene so as to reduce infant

mortality rate and improve environmental condition. The scheme also envisages creation of Cretches, Balwaris for infants of working mothers so that they are in a position to work without having to care for their infants and can thus improve their economic condition. An outlay of Rs. 1.00 lakh is available for 1988-89 and the outlay for 1989-90 is Rs. 5.00 lakh.

13.2.17. *Urban Transport* — All major cities in the state are facing transport problems due to increase in population and expansion of limits of urban areas. With a view to achieve maximum degree of access in terms of master plan of towns and at the same time keeping in view, resource-crunch, integrated planning of urban transport, net work has been emphasised in Seventh Plan. Under this scheme, financial assistance will be provided to development authorities in the shape of loans for implementation of the transportation projects. An outlay of Rs. 1.00 lakh is available for 1988-89 and the outlay for 1989-90 is Rs. 5.00 lakh.

13.2.18. *Smt. Indira Gandhi Memorial* — Indira Gandhi memorial cultural complex is being constructed at Lucknow in memory of the Late Prime Minister

Smt. Indira Gandhi. The memorial is designed to include auditorium, meeting hall, library, exhibition room, cafeteria, art gallery etc. Land has been acquired for this project. The works of flood production, accessibility, improvement and land development are under progress. The construction of building is proposed to commence in 1988-89. There is a provision of Rs. 15.00 crore, in the Seventh Plan for this project. Against this outlay, a sum of Rs. 1.71 crore has already been spent during first three years of the plan. An outlay of Rs. 1.00 crore is provided for this project in 1988-89. The outlay for 1989-90 is Rs. 1.00 crore.

13.2.19. *Regional Centre—Lucknow University* — Financial assistance is given to this centre for urban and environmental studies. The centre is constructing a complex at Indira Nagar, Lucknow for extending training facilities in different fields of urban development. The allocation for this centre in Seventh Plan is Rs. 15.00 lakh against which Rs. 12.29 lakh has been spent during 1986-87. An outlay of Rs. 4.00 lakh is provided for 1988-89 and the proposed outlay for 1989-90 is Rs. 5.00 lakh.

**ANNEXURE -1**  
*U. P. Urban Development Project - Allocations for 1988-89*

Name of the Town	Shelter			Water Supply and Sanitation			Low cost sanitation	Solid waste management	Maintenance	Traffic engineering and management	T.A. and T	Total
	Sites and services	Slum upgradation	Area development	Water supply	Sewerage	Drainage						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
<i>Group "A" Towns</i>												
Kanpur ..	372.660	23.680	19.370	223.845	48.360		122.760	49.270	34.540	46.820	..	941.305
Agra ..	..	16.235	..	446.150	31.460	57.990	79.300	..	..	1.000	..	632.135
Varanasi ..	45.000	27.560	0.000	501.070	50.870	64.560	..	..	..	1.000	..	690.060
Allahabad ..	30.00	18.680	4.290	400.00	200.00	70.000	75.000	31.660	47.010	1.000	..	877.640
Lucknow ..	365.200	24.530	0.000	156.040	57.600	205.370	14.930	..	..	1.000	..	824.670
Sub-Total "A" ..	812.860	110.685	23.660	1727.105	388.290	397.920	291.990	80.930	81.550	50.820	..	3965.810
<i>Group "B" Towns</i>												
Bareilly ..	15.000	5.490	..	85.520	12.940	113.310	22.520	32.600	..	..	..	287.380
Moradabad ..	45.610	14.940	..	62.670	2.800	97.030	5.290	0.000	..	..	..	228.340
Gorakhpur ..	190.000	27.780	..	63.270	3.590	50.410	20.350	46.710	12.540	..	..	414.650
Aligarh ..	42.720	..	..	116.120	28.060	33.380	14.370	..	..	..	..	234.650
Saharanpur ..	..	1.045	..	95.550	39.880	40.535	..	..	3.710	..	..	180.720
Ghaziabad ..	..	8.610	..	227.880	36.090	..	..	..	..	..	..	272.580
Sub-Total "B" ..	293.330	57.865	..	651.000	123.360	334.665	62.530	79.310	16.250	..	..	1618.320
Total (A+B) ..	1106.190	168.550	23.660	2378.115	511.650	732.585	354.520	160.240	97.800	50.820	..	5584.13
<i>Group "x" towns</i>												
Group "C" Towns	..	..	..	..	..	..	..	..	..	..	..	69.870
Group "D" Towns	..	..	..	..	..	..	..	..	..	..	..	..
SECT. MGT. TRNG.	..	..	..	..	..	..	..	..	..	..	46.000	46.000
Total 'x'	..	..	..	..	..	..	69.870	0.000	..	..	46.000	115.870
Grant total A-B+X	1106.190	168.550	23.660	2378.115	511.650	732.585	424.390	160.240	97.800	50.820	46.000	5700.00

## ANNEXURE-2

## U. P. Urban development Project Proposed allocation for 1989-90

Name of City	Shelter		Water Supply and Sanitation				Solid waste management	Maintenance	Traffic engineering	T.A. and T	Total	
	Sites and services	Slum upgradation	Area Development	water Supply	Sewerage	Drainage						Low cost sanitation
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
<i>Group "A" Towns</i>												
Kanpur ..	309.470	41.210	22.120	351.445	225.050	93.690	67.930	46.910	0.000	14.320	0.000	1172.145
Agra ..	0.000	73.415	0.000	801.000	165.860	77.410	19.690	42.000	46.640	103.690	0.000	1329.765
Varanasi ..	22.870	35.200	0.000	203.340	98.880	100.430	0.000	0.000	25.950	99.150	0.000	585.820
Allahabad ..	52.950	57.840	10.000	0.000	0.000	4.150	10.730	0.000	0.000	26.360	0.000	162.030
Lucknow ..	70.000	16.240	0.000	330.800	93.880	147.110	16.200	92.270	141.250	49.090	0.000	956.930
<b>Sub-Total "A"</b> ..	<b>455.290</b>	<b>223.905</b>	<b>32.120</b>	<b>1686.585</b>	<b>583.670</b>	<b>422.790</b>	<b>114.610</b>	<b>181.180</b>	<b>213.840</b>	<b>292.610</b>	<b>0.000</b>	<b>4206.630</b>
<i>Group "B" Towns</i>												
Bareilly ..	15.050	45.660	0.000	124.180	61.840	194.640	34.420	0.000	0.000	0.000	0.000	475.690
Moradabad ..	37.550	10.000	0.000	66.280	14.620	153.220	64.160	26.830	0.000	0.000	0.000	372.660
Gorakhpur ..	12.260	36.310	0.000	55.490	17.080	2.980	8.850	20.400	0.000	0.000	0.000	151.370
Aligarh ..	31.490	0.000	0.000	209.300	110.670	21.050	12.270	24.680	0.900	0.000	0.000	409.360
Saharanpur ..	0.000	6.565	0.000	143.700	169.140	79.955	0.000	9.520	0.000	0.000	0.000	408.880
Faizabad ..	0.000	65.660	0.000	248.680	194.020	0.000	0.000	0.000	0.000	0.000	0.000	533.360
<b>Sub-Total "B"</b> ..	<b>96.350</b>	<b>164.195</b>	<b>0.000</b>	<b>847.630</b>	<b>567.370</b>	<b>451.745</b>	<b>117.700</b>	<b>106.330</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>2351.320</b>
<b>Sub-Total A+B</b> ..	<b>551.640</b>	<b>388.100</b>	<b>32.120</b>	<b>2534.215</b>	<b>1151.040</b>	<b>874.55</b>	<b>232.340</b>	<b>287.510</b>	<b>213.840</b>	<b>292.610</b>	<b>0.000</b>	<b>6557.950</b>
<i>Group 'X'</i>												
Group "C" Towns	20.560	0.000	0.000	39.260	0.000	27.960	0.000	0.000	0.000	24.410	0.000	112.190
Group "D" Towns	0.000	0.000	0.000	0.000	0.000	0.000	130.000	0.000	0.000	0.000	0.000	130.000
SECT. MGT. TRNG.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	199.860	199.860
<b>Total 'X'</b> ..	<b>20.560</b>	<b>0.000</b>	<b>0.000</b>	<b>39.260</b>	<b>0.000</b>	<b>27.960</b>	<b>130.000</b>	<b>0.000</b>	<b>0.000</b>	<b>24.410</b>	<b>199.860</b>	<b>442.050</b>
<b>GRAND TOTAL (A+B+X)</b> ..	<b>572.200</b>	<b>388.100</b>	<b>32.120</b>	<b>2573.475</b>	<b>1151.040</b>	<b>902.495</b>	<b>362.340</b>	<b>287.510</b>	<b>213.840</b>	<b>317.020</b>	<b>199.860</b>	<b>7000.000</b>

## CHAPTER XIV

### INFORMATION AND PUBLICITY

For the planned and balanced economic growth, a two-way communication between Government and the people of the State is essential. With this objective, the Department of Information and Publicity is utilizing different media for conveying to the people policies and programmes of the Government through press releases, articles, folders, posters, documentary films, radio, television and exhibitions etc. On the other hand public reactions, suggestions and comments are also brought to the notice of the Government through daily scrutiny of articles appearing in the newspapers, magazines etc. The two way communication between the Government and the people not only helps in securing public participation and co-operation in various developmental activities of the Government but also provides required basic information to the Government for framing the future policies.

14.0.2. The Department of Information and publicity is carrying out its field activities through its offices/centres at regional as well as district level. But the vast area and population of the State require expansion of activities of the department expanded so that rural masses living in the remote villages can be covered effectively. Efforts are being made therefore to establish information office/centres at all tehsils which would help in covering rural masses effectively.

14.0.3. The Seventh Plan (1985-90) strategy aims at developing a package of communication technique including printing of reading materials, and developing audio-visual material such as documentary films and news-reels, for dissemination of Government policies and programmes. For effective implementation of publicity programmes, efforts are being made to strengthen the publicity set-up at regional, district and tehsil levels. To carry out all these activities, the Seventh Plan provides an outlay of Rs.1,250.00 lakh,

against which an expenditure of Rs.892.92 lakh has been incurred during the first three years of the plan.

14.0.4. The physical progress achieved during the first three years 1985-88 comprises production of 12 documentary films, 8 news-reels, publication of 147 district-wise booklets, 4 posters, organisation of 419 exhibitions, 3,145 cultural programmes, 104 sponsored radio programmes and installation of 2,136 television sets and 9 V.C.R units. Besides, installation of two T.V. towers each at Mainpuri and Manakapur (Gonda) was sanctioned during 1986-87. In order to provide encouragement to small newspapers and news agencies, an amount of Rs.18.00 lakh has been provided as loan in 1987-88 to small newspapers for strengthening/replacement of newspaper printing equipments and to news agencies for strengthening the press.

14.0.5. An outlay of Rs.288.00 lakh has been approved for 1988-89, which is expected to be utilized in full. The physical targets for 1988-89 include production of 5 documentary films, 6 news-reels, publication of 70 booklets and 2 posters, release of 4 display advertisements, organisation of 784 exhibitions and 2,444 cultural programmes, installation of 880 television sets, which are expected to be achieved in full. Besides, 11 new tehsil information offices/centres are expected to be established in 1988-89.

14.0.6. For 1989-90 an outlay of Rs.319.50 lakh has been proposed to strengthen and boost the on-going programmes. The physical targets-proposed for 1989-90 include production of 6 documentary films and 6 news-reels, organisation of 800 exhibitions and 2,444 cultural programmes, relay of 52 sponsored radio programmes, installation of 800 television sets, publication of 90 district-wise development book-lets and 2 posters as well as release of 6 display advertisements.

## CHAPTER XV

### WELFARE OF SCHEDULED CASTES, SCHEDULED TRIBES AND OTHER BACKWARD CLASSES

One of the major concerns of the planned development is to raise economic and social level of weaker sections of the society, specially Scheduled Castes, Scheduled Tribes, Denotified Tribes and other backward classes who have remained neglected and cut of from the main stream of the society for long and therefore, continued to remain backward socially as well as economically. Concerted steps are required to raise their social and economic level. To achieve this objective, a number of programmes for welfare of Scheduled Castes, Scheduled Tribes, Denotified Tribes and other backward classes have been taken up as an integral and important part of the State's Plan.

15.0.2. The weaker sections of the society specially Scheduled Castes are most backward in the field of the literacy. While literacy for the State as a whole has increased from 21.7 per cent in 1971 to 27.16 per cent in 1981, the literacy rate for Scheduled Castes, which was 10 per cent in 1971 could increase to 14.96 per cent only in 1981. According to 1981 census, the total population of Scheduled Castes in the State is 2.34 crore which is about 21.2 per cent of the total population of the State. The Scheduled Tribes population in the State is 2.32 lakh which is about 0.2 per cent of the total population of the State.

15.0.3. The economic status of Scheduled Castes, Scheduled Tribes and other backward class families is low. They have few assets and are generally dependant on agriculture, labour and other low income occupations. For the economic development of Scheduled Castes, a 'Special Component Plan' approach was adopted in the beginning of Sixth Plan. Under Special Component Plan, quantified allocations in various development sectors, are made available exclusively for the development

of the Scheduled Castes. The "Special Component Plan" has special central assistance component also, which provides additionality to State's Plan Programmes. Similarly, Tribal sub-Plan approach was adopted in Fifth Plan to raise economic level of the Scheduled Tribe families. Under Tribal sub Plan approach, quantified allocation in various development sectors are made available for the development of the Scheduled Tribes. Besides, special central assistance is being provided by Government of India under Tribal sub-Plan to accelerate the development programmes for welfare of Scheduled Tribes.

15.0.4. Besides Special Component Plan and Tribal sub-Plan approaches, funds from state's plan are also provided for welfare of Scheduled Castes, Scheduled Tribes, Denotified Tribes and other backward classes.

15.0.5 The strategy of Seventh Plan as well as of Annual Plan 1989-90 is to bring socially, economically and educationally backward Scheduled Castes, Scheduled Tribes, Denotified Tribes and other backward classes to the economic, social and educational level of other sections of the society. Programmes have been designed to assist this segment of population to cross the poverty line. Efforts would be made to check drop-outs both amongst boys and girls in primary classes and to reduce the same to the minimum by providing incentives in the form of scholarships in primary classes.

15.0.6. The Seventh Plan provides an outlay of Rs.10,905.00 lakh for the welfare of Scheduled Castes, Scheduled Tribes, Denotified Tribes and other backward classes; against which an amount of Rs.7,000.96 lakh has been utilized during first three years 1985-88. An outlay of Rs.3,580.00 lakh is approved



for 1988-89 and the proposed outlay for 1989-90 is Rs. 4,330.85 lakh. The details of outlays/expenditure are given in the table-1.

TABLE-1 *Outlay/Expenditure*

Item	(Rupees. in lakh)						
	Seventh Plan 1985-90 Approved outlay	1985-86 Expenditure	1986-87 Expenditure	1987-88 Expenditure	1988-89 Approved outlay	Anticipated expenditure	1989-90 Proposed outlay
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>1. DIRECTION AND ADMINISTRATION</b>							
(i) Scheduled Castes	332.00	..	...	3.98	34.50	34.50	38.00
(ii) Scheduled Tribes	5.00	0.30	0.50	2.17	7.50	7.50	8.00
Sub-Total (1)	337.00	0.30	0.50	6.15	42.00	42.00	46.00
<b>2. ECONOMIC DEVELOPMENT</b>							
(i) Scheduled Castes	215.00	26.85	27.00	27.56	45.21	45.21	59.50
(ii) Scheduled Tribes	138.00	33.83	12.06	9.05	11.50	11.50	12.00
(iii) Denotified Tribes	159.00	21.44	30.11	10.56	42.22	42.22	19.88
Sub-Total (2)	512.00	82.12	69.17	47.17	98.93	98.93	91.38
<b>3. EDUCATION</b>							
(i) Scheduled Castes	7830.00	1113.21	1445.20	2243.91	2492.06	2492.06	3058.15
(ii) Scheduled Tribes	227.00	36.15	17.84	46.03	143.75	143.75	132.00
(iii) Backward Classes	681.00	86.08	188.18	428.77	440.55	440.55	608.96
(iv) Denotified Tribes	215.00	22.05	55.62	86.60	124.71	124.71	148.94
Sub-Total (3)	8953.00	1257.49	1706.84	2805.31	3201.07	3201.07	3948.35
<b>4. ASSISTANCE TO PUBLIC SECTOR AND OTHER UNDER TAKINGS</b>							
(i) Scheduled Castes	..	..	..	452.00	5.00	5.00	10.00
(ii) Scheduled Tribes	..	..	..	..	..	..	..
Sub-Total (4)	..	..	..	452.00	5.00	5.00	10.00
<b>5. OTHER PROGRAMMES</b>							
(i) Scheduled Castes	216.00	44.85	33.60	32.00	45.25	45.25	46.72
(ii) Scheduled Tribes	887.00	130.12	162.39	170.95	187.75	187.75	188.40
Sub-Total (5)	1103.00	174.97	195.99	202.95	233.00	233.00	235.12
<b>Total (1-5)</b>	<b>10905.00</b>	<b>1514.88</b>	<b>1972.50</b>	<b>3513.58</b>	<b>3580.00</b>	<b>3580.00</b>	<b>4330.85</b>

## ECONOMIC DEVELOPMENT

15.0.7. The economic programmes for these sections aim at removing poverty among Scheduled Castes, Scheduled Tribes, Denotified Tribes and other backward classes. The Seventh Plan provides an outlay of Rs.512.00 lakh, against which an expenditure of Rs.198.46 lakh was incurred during first three years (1985-88). An outlay of Rs.98.93 lakh is approved for 1988-89 and the proposed outlay for 1989-90 is Rs.91.38 lakh. 'Subsidy for development of agriculture and horticulture and 'Subsidy for development of Small Scale and Cottage Industries are two important schemes under the programme of economic development of these sections. However, these two schemes under welfare programmes of State Plan have been dropped as Scheduled Caste and Scheduled Tribe families are already being benefited through similar economic development programmes taken up under special component plan and tribal sub-plan approach respectively.

15.0.8. To help Scheduled Caste and Scheduled Tribe students for taking admissions in engineering and medical classes and for appearing at Judicial Services Examinations, pre-examination training centres have been established. At these centres, the beneficiaries are provided accommodation, fooding and educational facilities free of cost. For running these centres, an expenditure of Rs.12.76 lakh has been incurred during first three years 1985-88. An outlay of Rs.8.89 lakh is approved for 1988-89 and the proposed outlay for 1989-90 is Rs.11.00 lakh.

15.0.9. Discretionary grant is provided to the Scheduled Caste families for marriage of their daughters and for treatment of persons suffering from severe diseases. Besides, grant is also provided for rehabilitation of Denotified Tribes and for economic development of Denotified Tribes who are included in the list of Scheduled Castes.

## ASSISTANCE TO PUBLIC SECTOR AND OTHER UNDERTAKINGS

15.0.10. Uttar Pradesh Scheduled Castes Finance and Development Corpo-

ration is executing various economic programmes for Scheduled Caste specially taken up under special component plan. For the proper functioning of the corporation, assistance in the form of share capital is provided. Share capital to be provided to the corporation is subscribed by the Central Government and the State Government in the ratio of 49 : 51. The State Government provided Rs.452.00 lakh as share capital during 1987-88. For providing share capital to the corporation, an outlay of Rs.5.00 lakh is provided for 1988-89 in the State Plan. The proposed outlay for 1989-90 for share capital is Rs.10.00 lakh.

## EDUCATIONAL PROGRAMMES

15.0.11. To improve educational level of the Scheduled Castes, Scheduled Tribes, Denotified Tribes and other backward classes, various educational programmes have been taken up. The Seventh Plan provides an outlay of Rs.8,953.00 lakh against which an expenditure of Rs.5,769.64 lakh has been incurred during first three years 1985-88. For the annual plan 1988-89, an outlay of Rs.3,201.07 lakh is approved. The proposed outlay for 1989-90 is Rs.3,948.35 lakh.

15.0.12. To encourage primary education and to check drop-out level both amongst boys and girls belonging to Scheduled Castes, Scheduled Tribes, Denotified Tribes and other backward classes, scholarship is provided in primary classes (class I to V) at the rate of Rs.12.00 per month. Besides scholarship is also provided in classes VI to VIII and classes IX to X at the rate of Rs.20.00 per month and Rs.30.00 per month respectively. Against the Seventh Plan target of providing scholarship to 20.83 lakh students in class I to X, 26.91 lakh students were provided scholarships during first three years 1985-88. The target for 1988-89 is to provide scholarship to 10.65 lakh students and the target for 1989-90 is to provide scholarship to 13.72 lakh students.

15.0.13. Non-recurring assistance for purchase of books and other appliances is provided to Scheduled Castes and Scheduled Tribes students in the post matric classes studying medical, engineering and other technical subjects. Against Seventh Plan target of providing this assistance to 21,800 students, 8,302 students were provided assistance during first three years 1985-88. It is proposed to benefit 4,000 students during 1988-89. The proposed target for 1989-90 is to benefit 3,700 students.

15.0.14. In post-matric classes, scholarship is also provided to Scheduled Caste and Scheduled Tribe students under cent per cent centrally sponsored scheme so that beneficiaries may continue their studies smoothly. Against the Seventh Plan target of 4.52 lakh student, 1.76 lakh students were benefited during 1985-88. It is proposed to give scholarship to 82,500 students during 1988-89. The proposed target for 1989-90 is to benefit 83,000 students.

15.0.15. To encourage education among Scheduled Caste and Scheduled Tribes, 37 ashram-type schools for Scheduled Castes and 10 ashram-type schools for Scheduled Tribes were established by the end of 1987-88. In these schools, fooding, lodging, clothing and study material facilities are provided to beneficiaries free of cost. For the annual plan 1988-89, the anticipated achievement is to establish 5 ashram-type schools for Scheduled Caste and 4 ashram-type schools for Scheduled Tribes. The proposed target for 1989-90 is to establish, 7 ashram-type schools for Schedule Castes and 1 ashram-type school for Scheduled Tribes.

15.0.16. A scheme for the construction of hostel buildings is being implemented to solve residential problems of students belonging to Scheduled Castes and Scheduled Tribes. By the end of 1984-85, 48 hostel building had been constructed. To encourage hostel building construction work funds were provided for the construction of 20 hostel buildings during 1985-88. The target for 1988-89 is to construct 14 hostel buildings. The target for 1989-90 is to construct 16 hostel buildings.

15.0.17. To make available books to Scheduled Caste students studying in medical and engineering classes, book-banks are being established for them in engineering/medical colleges. The scheme for establishment of book-banks is centrally sponsored scheme and is funded on 50 : 50 basis. Under this scheme an expenditure of Rs.7.50 lakh has been incurred as State share during 1985-88. To provide matching State's share during 1988-89 and 1989-90, Rs.7.05 lakh and Rs.7.06 lakh respectively have been provided.

#### OTHER PROGRAMMS

15.0.18. Grant in aid is also being provided to the Scheduled Caste families who suffer from atrocities. Under this programme an expenditure of Rs.102.85 lakh has been incurred during 1985-88. An outlay of Rs.45.00 lakh is approved for 1988-89 and the same outlay is proposed for 1989-90.

15.0.19. For socio-economic development of Scheduled Tribes, Integrated Tribal Development Project Kheri, Tharu Development Project Gonda, and Buxa Primitive Tribes Development Project, Bijnore are being implemented. For implementation of these projects, an amount of Rs.149.75 lakh has been provided under State Plan during 1985-88. In the annual plan 1988-89, an outlay of Rs.39.00 lakh is approved for these projects. The proposed outlay for 1989-90 is Rs.42.00 lakh. Besides, special central assistance is also provided for these projects by the Government of India under Tribal sub-Plan approach.

15.0.20. For the development of Scheduled Castes, Scheduled Tribes, Denotified Tribes and other backward classes, the State Institute of Research and Training has been established in 1986-87. The main functions of the Institute are :-

(i) to conduct action oriented research for development of backward communities,

(ii) to evolve suitable methodologies for planning and implementation of area specific and culture specific programmes,

(iii) to design suitable programmes of training for functionaries involved in the task of development of these communities,

(iv) to conduct evaluation studies for improving upon the programmes,

(v) to collect relevant statistics and bench mark data on the current status of development of different communities in order to assess the impact of development programmes, and

(vi) to document the researches and other imperical studies on the subject to assist planners and administrators.

15.0.21. The Research and Training Institute is a centrally sponsored scheme and is funded on 50 : 50 basis. An expenditure of Rs.12.03 lakh was incurred as State's share during 1986-88. An outlay of Rs.12.50 lakh is approved for 1988-89 as State share only. The proposed outlay of State share for 1989-90 is Rs.15.00 lakh.

## CHAPTER XVI

### LABOUR AND EMPLOYMENT

#### LABOUR WELFARE

It is primary responsibility of a welfare State to safeguard the interest of working classes by ensuring reasonable wages, preventing exploitation and securing better working conditions. These steps contribute to a planned economic growth and an increase in productivity. It is for these reasons that we have, a proper labour management policy which may ensure maximum workers participation in management to achieve an accelerated pace of overall development.

16.0.2. The activities under labour and labour welfare are mainly of two types viz. regulatory and welfare. The regulatory activities include enforcement of labour laws and settlement of labour disputes. The welfare activities include provision of medical facilities, games, library and reading rooms, recreation and cultural activities. The organisation of Labour Commissioner functions for achieving these two main objectives. The enforcement machinery supervises coverage and ensures implementation of various labour laws relating to working conditions, working hours, wages etc.

16.0.3. On account of multiplicity of laws for the welfare of working class, the volume of work has increased in the past few years. The number of registered factories, which was 2,482 in 1960 has increased to 9,444 in 1987. Similarly, the number of workers in these establishments has also gone up from 28,500 in 1960 to 7,70,000 in 1987. The work of prevention of strikes and lock-outs through amicable settlement of industrial disputes has also increased in the recent years. The Labour Commissioner's Organisation is supposed to contribute to the maintenance of industrial peace. It has to ensure payment of minimum wages and other welfare benefits to workers.

16.0.4. The strategy in 1989-90 for labour welfare includes the following :—

(1) Wide coverage and effective enforcement of Minimum Wages Act, Contract Labour (Regulation and Abolition) Act and other enactments specially designed for the protection of unorganised and weaker sections of the working class

(2) Continuous Identification and Rehabilitation of Bonded Labour

(3) Opening of Labour Welfare Centres in areas of new industrial development and strengthening of the existing ones

(4) Greater emphasis on improving working conditions of workers

(5) Creating greater awareness of productivity amongst workers and employers and involving them in fruitful participation in management.

16.0.5. For the Seventh Plan, an outlay of Rs.270.00 lakh including Rs.150.00 lakh for hills has been approved. In first three years (1985-88) of the Plan, an expenditure of Rs.449.78 lakh including Rs.187.21 lakh for the hills has been incurred. In the fourth year (1988-89, against an anticipated expenditure of Rs.101.93 lakh including Rs.42.55 lakh for hills, a sum of Rs.51.79 lakh is being utilised for rehabilitation of 1,230 bonded labourers including administrative expenditure and the rest outlay is being utilised for other continuing programmes.

16.0.6. An outlay of Rs.111.56 lakh (Rs.46.42 lakh for the hills) has been proposed for 1989-90. Out of this an outlay of Rs.53.93 lakh will be spent on rehabilitation of bonded labours including administrative expenditure required for the implementation of the schemes and Rs.57.63 lakh

on schemes which will continue during 1989-90. An outlay of Rs. 1.15 lakh has been allocated for new schemes. The programme-wise description of main activities is given below :—

16.0.7. *Enforcement of minimum wages to agricultural labour*—The enforcement of Minimum Wages Act, 1948 is being looked after by the department through their inspectors. Apart from Labour Inspectors of the Labour Department, Tahsildars, Naib-tahsildars and Assistant Development Officers (Agriculture, Co-operative and Panchayat) have been vested with powers of these inspectors for agricultural labourers under Minimum Wages Act, 1948. Besides, Project Officers, Dehradun and Allahabad have also been authorised to make inspections in their areas. The target of inspection under Minimum Wages Act, 1948 for Inspectors of Labour Department has been fixed at the rate of 15 inspections per Inspector in the districts of Tehri Garhwal, Pauri, Chamoli, Uttarkashi, Almora and Pithoragarh and 30 inspections for the remaining districts of the State. By the end of 1987, in total 1,07,488 inspections were conducted out of which 89,019 inspections were done by the officers of Labour Department and the rest 18,469 by the officers of the Revenue Department. Minimum Wages for agricultural workers were fixed for different regions as under :—

(Rs. per day)

- |   |       |
|---|-------|
| (1) Eastern, Central, Hill and Bundelkhand Regions .. | 11.50 |
| (2) Western Region ..                                 | 12.50 |

16.0.8. For the enforcement of Minimum Wages for agricultural labourers, an outlay of Rs. 40.55 lakh has been approved for Seventh Plan. An outlay of Rs. 21.75 lakh has been proposed for 1989-90 for effective enforcement of rates.

16.0.9. *Rehabilitation of Bonded Labour*—Under the abolition of Bonded Labour System Act, the scheme for identification and rehabilitation of bonded labourers is being executed since 1976 by the Labour Department. By the end of Sixth Plan 12,709 bonded labourers had

been rehabilitated and an expenditure of Rs. 191.00 lakh was incurred on their rehabilitation. The year-wise achievements and expenditure during seventh plan, under this scheme are given in the following table :—

TABLE I—Yearwise expenditure and achievement under the programme of Rehabilitation of Bonded Labour

Year	Expenditure (RS. in lakh)		Bonded Labourer Rehabilitated (No)
	Total	State share	
(1)	(2)	(3)	(4)
1985-86 ..	240.49	126.27	4199
1986-87	286.38	149.20	4749
1987-88 ..	195.33	104.23	2196
1988-89	90.23	51.79	1230
1989-90 ..	96.06	53.93	*

\*Note:—The target will be fixed, if any bonded labour is identified

16.0.10. *Grants-in-aid to Voluntary Agencies*—At present there is no role of voluntary agencies to identify and rehabilitation of bonded labourers. Efforts are being made to identify agencies which could help officers in dealing with this problem.

16.0.11. Besides, continuing programmes the few important schemes such as opening of an Additional Labour Welfare Centre to provide welfare facilities to the industrial organised labourers and their families have also been proposed to take up during 1989-90.

#### EMPLOYMENT SERVICE

16.0.12. National Employment Service in the State has a network of 97 employment exchanges and 49 coaching-cum-guidance centres for Scheduled Castes, Scheduled Tribes, backward classes and physically handicaps. An outlay of Rs. 125.00 lakh including an outlay of Rs. 35.00 lakh for hills has been approved for employment services for the Seventh Plan. For 1985-86, an outlay of

Rs.20.00 lakh including an outlay of Rs.5.00 lakh for the hill was approved. With this outlay, the following schemes were proposed :

(1) Three coaching-cum-guidance centres for Scheduled Castes, Scheduled Tribes and backward class applicants. Two were established in the Hill and one in the Plain

(2) Two Employment Market Information Units in the hill

(3) Construction of two Employment Exchange buildings at Etawah and Faizabad

Rs.11.71 lakh was spent on the implementation of the aforesaid schemes.

16.0.13. An outlay of Rs.43.43 lakh including an outlay of Rs.10.30 lakh for hills was approved in 1986-87. Against this outlay, Rs.30.47 lakh were spent on the implementation of the following schemes :

(1) Establishment of the Minorities, coaching-cum-guidance centre, Monitoring and inspection cell at the Directorate

(2) Construction of the employment exchange buildings at Hardoi, Basti, Kanpur and Dehradun

(3) Computerisation of employment exchange, Kanpur

(4) Supply of Equipments to the employment exchanges

16.0.14. For 1987-88 an outlay of Rs.67.23 lakh was approved including an outlay of Rs.6.00 lakh for the hills. A sum of Rs.57.64 lakh has been spent during the year. Apart from the ongoing schemes, following new schemes have been implemented :

(1) Computerisation of the employment exchange, Lucknow

(2) Construction of the employment Exchange buildings at Varanasi and Mirzapur

(3) Establishment of Coaching-cum-guidance centre for the S.C., S.T. and Backward Class applicants at Mathura, Meerut and Bijnore

(4) Establishment of the University Employment Information and guidance bureau at Bareilly.

16.0.15. An outlay of Rs.66.73 lakh including an outlay Rs.10.00 lakh for hills was approved for 1988-89. Apart from ongoing schemes, it is proposed to implement the following new schemes also :

(1) Computerisation of Employment Exchange, Agra, Allahabad, Gorakhpur and strengthening of the Directorate

(2) Establishment of the Coaching-cum-guidance centre for Scheduled Castes, Scheduled Tribes and Backward Class applicants at Hamirpur, Jaunpur and Shahjahanpur

(3) Supply of vehicle to District Employment Exchange, Sultanpur

(4) Construction of Employment Exchange Building at Jhansi.

16.0.16. An outlay of Rs.66.89 lakh has been approved for Employment Service for plan 1989-90, which includes Rs.10.00 lakh for hills. Besides, ongoing schemes, the following new schemes are proposed to be taken up during this year :

(1) Establishment of town employment exchange at Naugarh, Basti.

(2) Establishment of mobile employment exchange at Basti.

(3) Construction of building for coaching-cum-guidance centre, Gorakhpur.

(4) Computerisation of university employment information and guidance bureau, Roorkee.

#### TRAINING

16.0.17. The objectives of craftsman training is to provide skilled workers in different disciplines and industries, to train unemployed youth for self-employment and bring qualitative improvement in industrial products by way of training craftsmen in a planned way. To achieve these objectives following programmes are being taken up :

(1) opening of new I.T.Is. at block and tahsil level

(2) removing shortfall in equipments

(3) replacing old and outdated equipments of training by modern machines and equipments

(4) providing more and more facilities for training of women

(5) providing training facilities for physically handicapped

(6) opening of the trades on the basis of the new demands

(7) establishing Entrance Examination Council for monitoring and exercising better control over the programmes.

16.0.18. For implementing these programmes/schemes an outlay of Rs.2600.00 lakh has been approved for Seventh plan. The outlay and expenditure are given in the following table :

TABLE 2—*Out lay and Expenditure*  
(Rs. in lakh)

Region	Out lay 1985—90	Actual expen- diture 1985—88	Antici- pated expen- diture 1988-89	Proposed outlay 1989-90
(1)	(2)	(3)	(4)	(5)
Plains	1100.00	881.91	782.50	764.64
Hills	1500.00	534.31	250.00	725.00
Total	2600.00	1416.22	1032.50	1089.64

From the above table, it is evident that during first three years of the plan, Rs.1416.22 lakh was spent. It is anticipated that during 1988-89 Rs.1032.50 lakh will be spent. For 1989-90, an outlay of Rs.1,089.64 lakh has been provided, with this, anticipated expenditure at the end of the plan is Rs.3538.36 lakh.

16.0.19. Efforts are being made to improve the standard of training so that trainees should be well-equipped to meet the requirement of the existing as well as coming up new industries and technical trades. It is necessary to provide buildings for ITIs, besides staff and equipment as per norms prescribed by National Council and Government of India. Training facilities will also be extended, only in those areas where there is need of

new ITIs. The physical achievement in respect of opening new ITIs, to increase in-take capacity and building. Construction works carried out during the plan period and proposed for 1989-90 has been described in subsequent paras.

16.0.20. Under the scheme of opening of new ITIs, 116 ITIs including 14 ITIs, of the Government were established/opened out of which 4 were for girls. Similarly 64 branch ITIs including 51 for girls were opened up to the end of 1987-88. The intake capacity which was 37714 in 1984-85 has gone up to 48830 during this period. During 1988-89, it is proposed to open 13 ITIs including one girl's ITI at Kashipur. The intake capacity will also increase from 48830 to 50623. In 1989-90, no new ITI is proposed to be opened, but efforts will be made to equip the ITIs, already opened. During 1988-89 and 1989-90 an outlay of Rs.1.50 crore and Rs.2.00 crore has been provided for replacement of outdated and obsolete tools and machines as a state share.

16.0.21. Under the apprenticeship programme, against a target of 25,000 training places located up to 1987, 20,500 have already been located. It is anticipated that the target of Seventh Plan will be achieved by the end of 1989-90. Similarly the target of 22,000 trainees will be achieved by the end of Seventh Plan, as 19,254 have already been trained up to 1987-88.

16.0.22. The construction of ITI buildings has also been taken up during Seventh Plan for ITIs which do not have their own buildings. The position of construction work is given below :

Item	Total	Plains	Hills
1. Nos. of institutions, (as on 31-3-88).	180	136	44
2. Institutions having their own buildings	72	57	15
3. Construction work in progress (as on 1-4-88)	14	8	6
4. Completion anticipated phase one	9	5	4
5 Land required	90	69	21



16.0.23. Efforts will be made that construction of the remaining five buildings is completed during 1989-90. No new construction work will be taken up during this period. It is also proposed in 1989-90 to start advanced training institute for women and to set up a project management unit to monitor the World Bank assisted scheme.

#### LABOUR CO-OPERATIVES

16.0.24. Under the Government of

India scheme weaker labour co-operatives will get Rs.10,000 for implementation of their activities, Rs.20,000 for working capital and Rs.5,000 (lumpsum) as marginal subsidy on a matching basis by state government. Atleast one society is to be selected in each division. It is proposed to have 50 members each in 500 societies in 1989-90. An outlay of Rs.11.30 lakh is proposed under this scheme in 1989-90 for these societies.

## CHAPTER XVII

### SOCIAL SECURITY AND WELFARE AND NUTRITION

#### 17.1. SOCIAL SECURITY AND WELFARE

##### SOCIAL WELFARE

The development of human resource is an essential factor of economic development. A variety of Social Welfare Programmes have been therefore taken up as a part of the plan. These programmes are mainly directed towards of vulnerable sections like children, women and handicappeds. The programmes have gained importance in the last three decades of planned development. Along with government machinery a number of voluntary organisation are also engaged in these programmes.

17.1.2. The Seventh Plan aims at enabling targetted sections of the society to realize their full potential for growth and to meet some of the vital needs of the most deprived and vulnerable members of the society. It is in this context that programmes for welfare of children are being given highest priority. Basic minimum child care services are being extended to the most vulnerable groups, i.e. 0-6 years of age, specially the age-group 0-3 years in order to reduce high

incidence of child mortality. Similarly, for the welfare of women, much greater emphasis is being laid on generation of skilled and unskilled employment for them through proper education and vocational training. For socio-economic rehabilitation, physically handicappeds are being encouraged to pursue education and vocational training through scholarship and other promotional aid in order to draw them closer to the normal stream of life. Participation of non-official organisations is being encouraged, with a view to ensure that rural population who qualify for assistance receive full benefits of welfare schemes.

17.1.3. An outlay of Rs.2,088.00 lakh has been approved for Seventh Plan for these welfare programmes, against which an expenditure of Rs.3,543.54 lakh has been incurred during the first three years (1985-88) of the plan. An outlay of Rs.1,344.00 lakh has been approved for 1988-89 and the proposed outlay for 1989-90 is Rs.1,508.98 lakh. The details of the financial outlays/expenditure are given in the following table 1 :

TABLE 1—Outlays and Expenditure

Programme	(Rupees in lakh)						
	Seventh Plan 1985-90 Approved outlay	1985-86 Actual expenditure	1986-87 Actual expenditure	1987-88 Actual expenditure	1988-99 Approved outlay	Anticipated expenditure	1989-90 Proposed outlay
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>A - SOCIAL WELFARE</b>							
1. Direction and Administration	61.49	..	..	..	3.30	3.30	1.51
2. Welfare of Handicapped	451.68	173.04	180.64	187.45	212.89	212.89	223.01
3. Child Welfare	162.94	51.13	52.92	66.64	77.94	77.94	98.81

TABLE 1—(Concl'd.)

(Rupees in lakh)

Programme	Seventh Plan 1985-90 Approved outlay	1985-86 Actual expenditure	1986-87 Actual expenditure	1987-88 Actual expenditure	1988-89		1989-90 Proposed outlay
	(1)	(2)	(3)	(4)	Approved Outlay	Anticipated expenditure	(8)
4. Women Welfare ..	1067.44	794.32	856.80	842.17	873.05	873.05	951.89
5. Welfare of aged infirm and destitute	21.95	6.48	6.61	7.14	7.55	7.55	8.67
6. Prohibition ..	..	1.00	4.00	5.00	..	6.00	10.00
7. Correctional Services	32.50	3.30	4.89	85.54	57.32	57.32	88.14
8. Assistance to Volun- tary Organisations	27.00	10.12	9.24	14.48	14.35	14.35	14.35
9. Assistance to Public Sector and Other Undertakings	..	..	..	21.00	1.00	1.00	2.00
10. Other Programmes ..	63.00	..	8.38	0.21	0.60	0.60	0.60
Sub-Total, A ..	1888.00	1039.39	1123.48	1229.63	1248.00	1254.00	1398.98
B -SAINIK KALYAN ..	200.00	32.83	71.21	47.00	96.00	96.00	110.00
Total (A+B) -Social Security and Welfare	2088.00	1072.22	1194.69	1276.63	1344.00	1350.00	1508.98

17.1.4. *Welfare of Handicapped*—The main thrust in programmes for welfare of handicapped is on development of functional skill among handicappeds by providing vocational training to deaf, dumb, blind, physically handicappeds and mentally retarded persons through school/workshops. Under this programme, 19 schools/workshops/units were established by the end of Sixth Plan and about 1,475 handicapped persons are being benefited every year, through these units. Against Seventh Plan target of providing prosthetic aid to 5,050 handicapped persons, 4,499 beneficiaries are anticipated to be benefited during first four years of the plan. The target for 1989-90 is to benefit 1,346 persons. About 22,500 destitute physically handicapped persons are being benefitted every year by giving them

grant-in-aid for their maintenance. Besides, under the programme of providing scholarships to the handicapped students and children of handicapped persons up to class VIII, about 14,507 are expected to be benefitted during the first four years, against the Seventh Plan target of 11,015 beneficiaries. The target for 1989-90 is to benefit 5,680 such persons.

17.1.5. *Child Welfare* — The major programme in this area is Integrated Child Development Services (ICDS) which seeks to provide solid foundation for development of human resource by extending different services like supplementary nutrition, health education, health check up and non-formal education to children below 6 years of age and pregnant and nursing mothers in most backward rural

and urban slum areas of the State. By the end of 1987-88, 200 ICDS Projects have been established, out of which 192 projects are 100 per cent centrally sponsored and the rest 8 projects are under State Sector. It is expected that during 1988-89, 80 new projects will be sanctioned by Government of India. Another 56 projects are targeted for opening in 1989-90. A number of Shishu Shalas/Bal Baries are also being established in sweeper colonies and slum areas to provide primary education as well as health care to children of sweepers.

17.1.6. *Women Welfare*—The objective of the programmes taken up for women welfare is to provide such essential services for women as are not available to them through other development programmes. Under these programmes, training-cum-production centres with sheltered workshops were established in government protective homes to provide vocational training to destitute women, so that they get some gainful employment and become self-reliant. Five training-cum-production centres each at Varanasi, Lucknow, Pithoragarh, Rai Bareli and Sultanpur are providing vocational training to the destitute women. The capacity of each centre is 100 including 50 residential and 50 non-residential. It is four new training-cum-production centres with sheltered workshops are proposed to be established in 1988-89 at Jhansi, Allahabad, Gorakhpur and Agra. These centres will be strengthened in 1989-90.

17.1.7. To provide cheap, safe and well furnished accommodation facilities to working women who are employed and have no residential facility at their place of the employment, five working women hostels each with a capacity of 50 women are being maintained. For the rehabilitation of destitute women, sewing machines are provided so that they can have a source of earning for their family. About 942 sewing machines are expected to be distributed during the first four years of the Seventh Plan. The target for 1989-90 is 300 sewing machines. Besides, financial assistance is also provided to destitute widows so that they get

some relief for maintaining their families. Under this programme about 1.12 lakh destitute widows are being benefited every year. For welfare of old and infirm women, two homes each at Mathura and Haridwar are proposed to be established in 1989-90.

17.1.8. *Welfare of Aged, Infirm and Destitute* — Grant-in-aid is provided for rehabilitation of inmates discharged from various departmental institutions. Besides, grant-in-aid is also provided for cremation of burial of paupers.

17.1.9. *Prohibition* — The consumption of narcotics, alcoholic drinks and addictive drugs, which are deleterious to physical and mental health, is on increase, particularly among younger age-groups. The intemperate use of these addictives has brought in its wake a variety of undesirable consequences, and even economic ruin to many poor families. These would have to be discouraged with sustained propaganda and community education through mass media, particularly television and films. Intensive efforts would be initiated for preventing brewing and drinking of illicit liquor. An outlay of Rs.10.00 lakh is proposed for 1989-90 and it is proposed to take up following two schemes for this purpose :

Schemes	Outlay 1989-90 (Rs. in lakh)
1. Strengthening of publicity for awareness against alcoholic drinks	5.00
2. Establishment of guidance centre at regional level for improvement of victims of drug abuse	5.00
Total ..	10.00

17.1.10. *Correctional Services*—The main programme in this area is implementation of Juvenile Justice Act, 1986 for Control of Juvenile Social Mal-adjustment. The Juvenile Justice Act, 1986 has been enacted by the Parliament to provide for care protection, treatment, development and rehabilitation of neglected or delinquent juveniles and for

adjudication of certain matters relating to delinquent juveniles. The act envisages a comprehensive approach towards justice for children in situation of abuse and exploitation in social mal-adjustment. The Act lays emphasis on the establishment of juvenile homes and special homes to provide suitable facilities for accommodation, maintenance, education, vocational training for development of the character and the ability of the juveniles. Emphasis has also been laid in this Act on the establishment of after care organisations for taking care of juveniles discharged from juvenile homes.

17.1.11. For effective implementation of the Act, an outlay of Rs.57.82 lakh has been proposed for 1989-90. With this outlay, it is proposed to take up establishment of Juvenile Welfare Boards at district level and Additional Juvenile Courts, creation of additional services and upgradation of existing institutions and the establishment of regional correctional training institute at Allahabad.

17.1.12. *Mahila Kalyan Nigam* — A decision has been taken in 1987-88 to establish Mahila Kalyan Nigam Limited at Lucknow, with an authorised capital of Rs.5.00 crores in order to promote entrepreneurship among women by identification of trade and industries. The corporation aims at providing proper guidance, training, as well as financial assistance to women who are interested in self-employment. For the establishment of this corporation, an expenditure of Rs.21.00 lakh has been incurred in 1987-88. An outlay of Rs.1.00 lakh is approved for 1988-89 and the proposed outlay for 1989-90 is Rs.2.00 lakh.

17.1.13. *Assistance to Voluntary Organisation*—In order to encourage Social Welfare activities through voluntary organisations, grant-in-aid is provided to organisations engaged in welfare of children, Shishushalas, maintenance of destitute children, rehabilitation and training of destitute women welfare of mentally and physically handicapped. An outlay of Rs.14.35 lakh has been proposed for 1989-90.

## SAINIK KALYAN

17.1.14. Ex-servicemen who normally retire after 18-20 years of service in defence forces often need relief and rehabilitation. At the time of their retirement, ex-servicemen have to face problems in maintaining their families. To sustain their families, they are required to take up some employment. The job-seeking ex-servicemen are provided guidance by Zila Sainik Kalyan and Punarvas Offices at district level. The office buildings of these offices are very old and need reconstruction as well as repairs. The schemes taken up under Sainik Kalyan are mostly for construction repair of old buildings. The construction of sainik rest houses, sainik sarais and sainik marketing shops is also being taken up. An outlay of Rs.200.00 lakh has been approved for the Seventh Plan against which an expenditure of Rs.151.04 lakh has been incurred during first three years. An outlay of Rs.96.00 lakh is approved for 1988-89 and the proposed outlay for 1989-90 is Rs.110.00 lakh.

17.1.15. To train ex-servicemen in self-employment by providing them vocational training through existing industrial training institutes, a scheme known as 'Preparing Ex-servicemen for Self Employment (PEXSEM)' was started in 1983-84. About 646 ex-servicemen are expected to be trained during the first four years of the Seventh Plan. The target of 1989-90 is to train 200 ex-servicemen.

17.1.16. In order to encourage ex-servicemen to establish industrial units and to provide them technical guidance in preparing viable projects as well as some economic assistance for these purposes, a decision was taken in 1987 to establish 'U.P. Ex-servicemen Welfare and Development Corporation' with an authorised capital of Rs.5.00 crore. For the establishment of the corporation, an outlay of Rs.1.25 lakh is approved for 1988-89. The proposed outlay for 1989-90 is Rs.20.00 lakh.

## 17.2. NUTRITION

17.2.1. Some sections of the population in the State always suffer from under nutrition and mal-nutrition. Protein-energy malnutrition has been identified as the major nutritional problem, among children, pregnant women and nursing mothers who have poor reserves of Vitamin 'A' which leads to xerophthalmia. Infants with low birth weight generally have poor store of Vitamin 'A'. Iron deficiency anaemia among women of all age-groups, and particularly those in the reproductive age group, is also a major problem. Besides, the prevailing high mortality rates among infants are also associated with mal-nutrition. The worst victims of the problems of mal-nutrition and under-nutrition are children in the age group 0-6 years, pregnant women and nursing mothers among land-less agricultural labourers, rural artisans, living in drought prone areas, remote tribal areas and urban slums.

17.2.2. To combat this problem, various steps have been taken since the in-

ception of the Plans. But an integrated approach was adopted up in 1975-76 with the establishment of "Integrated Child Development Services (ICDS)" projects in three development blocks viz. Shankargarh (Allahabad) Jawa (Aligarh), Dalmau (Rae-Bareilly) of the State. By the end of 1987-88, 200 ICDS projects have been established through which about 14.62 lakh children/women are getting nutritious food material.

17.2.3. The Seventh Plan as well as annual plan 1989-90 aim at augmenting availability of nutritious material for meeting the requirements of children, pregnant women and nursing mothers. For nutrition, an outlay of Rs. 4,470.00 lakh has been provided in the Seventh Plan, against which an expenditure of Rs. 3,095.79 lakh has been incurred during 1985-88. An outlay of Rs. 1,755.00 lakh is approved for 1988-89. The outlay for 1989-90 is Rs. 2162.07 lakh. The details regarding outlay and expenditure are given in table-2.

TABLE 2 --Outlays/Expenditure--Nutrition

Department	(Rupees in lakh)						
	Seventh Plan 1985-90 Approved outlay	1985-86 Actual expenditure	1986-87 Actual expenditure	1987-88 Actual expenditure	1988-89 Approved outlay	Anticipated expenditure	1989-90 Proposed outlay]
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Social Welfare Department	4450.00	875.27*	884.33	1233.17**	1750.00	1575.00	2157.07
2. Rural Development Department	..	92.00*	..	..	..	..	..
3. Education Department	20.00	1.02	5.00	5.00	5.00	5.00	5.00
Total, Nutrition	4470.00	968.29	889.33	1238.17	1755.00	1580.00	2162.07

\*Including special central assistance for drought relief.

\*\*Including Rs. 339.95 lakh as special central assistance for drought relief.

17.2.4. The target of Seventh Plan is to cover about 26.92 lakh beneficiaries by

the end of 1989-90. The progress achieved during first three years and the targets for

1988-89 and 1989-90 are given in the following table-3.

TABLE 3 --Targets/Achievements --Nutrition

Department	Seventh Plan 1985-90 target	1985-86 Achieve- ment	1986-87 Achieve- ment	1987-88 Achieve- ment	1988-89		Proposed target 1989-90
					Target	Antici- pated achieve- ment	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>I --Social Welfare Department</b>							
(i) ICDS Projects (No. Cum.)	336	176	200	200	280	280	336
(ii) Beneficiaries (Thousand Number)	2688	910	1244	1462	2240	1705	2243
<b>II --Education Department</b>							
Beneficiaries (Thousand Number)	4.4	2.2	3.5	3.5	3.5	3.5	3.5

## CHAPTER XVIII GENERAL SERVICES

### 18.1 JAILS

Most of jail buildings are very old and renovation or re-construction of these buildings is essential. Due to increase in the number of criminals, the capacity of jails is also short of requirements. At several tehsil headquarters, magistrates have been posted to dispose of criminal cases. The Agra Central Jail which is under construction, is expected to be completed during 1988-89. An outlay of Rs. 80.00 lakh including Rs. 30.00 lakh for hills has been provided in Seventh Plan for buildings of Jail Department.

The total expenditure during 1985-88 has been Rs. 254.26 lakh including Rs. 10.08 lakh for hills. An expenditure of Rs. 148.41 lakh including Rs. 10.00 lakh for hills is anticipated during 1988-89. An outlay of Rs. 145.00 lakh including Rs. 20.00 lakh for hills is proposed for 1989-90 and the target is to re-construct two factory barracks at Central Jail Bareilly, 10 type IV quarters, 5 barracks in different jails and to take up extension of the office of Inspector General prisons at headquarter.

### 18.2. STATIONERY AND PRINTING

#### GOVERNMENT PRESS

Printing and Stationery Department is a service department which deals with printing and supply of stationery, forms, publications, gazette etc. to various departments of the State Government.

18.2.2 The activities in the Government Departments in past few years increased manifold and as such the load of printing and supply of stationery also increased. The existing Government Presses at Allahabad, Lucknow, and Roorkee (Saharanpur) were unable to keep pace with ever increasing demand of stationery. Therefore a programme of establishing one printing press each at Varanasi & Rampur and expansion of Government Photo Litho Press at Roorkee and branch press, Hazaratganj, Lucknow was taken up in 1974-75. The spill over works of these projects were planned to be completed by the end of the Seventh Plan. However, owing to the limitation of the resources some of these works may spill over to the Eighth Plan. The total cost of installation/expansion works were estimated originally at Rs. 7.00 crore. But according to latest estimates this cost is likely to rise to Rs. 13.16 crore. The expansion of government branch press Hazaratganj, Lucknow has however, been completed.

18.2.3. Most of the machines installed at Government Press, Lucknow,

Allahabad and Roorkee are more than 25 years old and worn out and obsolete. This coupled with non-availability of spare parts has led to under-utilization of installed capacity of these machines. The work of modernisation and renovation at an estimated cost of Rs. 11.50 cr. being carried out as per recommendation of the expert committee appointed by the State Government is likely to be completed by the end of Eighth Plan.

18.2.4. A Mini Government Press installed in the compound of the High Court at Allahabad has also started functioning since 1987-88.

18.2.5. The Government of Uttar Pradesh has decided to install a Security Press at an estimated cost of Rs. 5.60 cr. in the campus of Government Press, Aishbagh, Lucknow to print 250 crore multicoloured tickets of U.P. State Roadways Corporation in the first stage and then gradually take up work of printing lottery tickets and cheques too. The Government has appointed a high power committee to take action on the construction of buildings and selection of modern machines for this Press.

18.2.6. In order to meet the requirement of printing and stationery sector, an outlay of Rs. 1053.00 lakh was approved for Seventh Plan against which a sum



of Rs. 340.72 lakh has been provided during the first three year (1985-88), and Rs. 153.00 lakh provided for 1988-89 is expected to be utilized fully.

18.2.7. An outlay of Rs. 370.00 lakh has been proposed for 1989-90 including Rs. 200.00 lakh for the security press.

#### PRINTING OF GOVERNMENT MANUALS AND BOOKS

18.2.8. Bhasha (Prakashan) Vibhag has been carrying out the work of compilation, updating and publications of Government manuals, hand books, financial hand-books, gazette etc. The following are the main activities of the department.

18.2.9. *Departmental Manuals, Hand-book and Government Orders*—The work of publishing up-dated manuals, hand-books, rules and regulations of various government departments is undertaken by Bhasha Prakashan Vibhag. The department has formulated a plan to publish 72 books covering different departmental manuals, hand books etc. In last 3 years, this department has published, revised and up dated editions of 35 important books like Revenue Court Manual, Uttar Pradesh Police Dress Regulation, Rashtriya Granth Soochi, Estate Department, Civil Defence, etc.

18.2.10. *Collection of Sub-ordinate Legislation*—According to the recommendations of the Delegated Legislative Committee of Uttar Pradesh Assembly, the collection of all statutory rules and regulations is being published department-wise in 46 volumes. So far, 15 volumes have been printed and the work is in progress in respect of the remaining volumes.

18.2.11. *Hindi and Urdu parts of Indian National Bibliography*—Hindi and Urdu parts of Indian National Bibliography are being published in collaboration with Central Reference Library, Government of India under the title "Rashtriya Granth Soochi" and "Quami Kitabiyat Shoube Urdu". Recently two volumes each of the above reference books of national importance have been published.

18.2.12. *Translation in Hindi of different manuals etc.* — The work of translation of different departmental manuals and hand books etc. in Hindi is going on. This will enable the easy availability of the up-dated editions of these manuals etc. in Hindi.

18.2.13. During the Seventh Plan Bhasha (Prakashan) Vibhag has spent Rs. 2.76 lakh in 1986-87 and Rs. 1.25 lakh in 1987-88. An outlay of Rs. 19.00 lakh has been provided during 1988-89 which is likely to be utilised fully.

### 18.3. PUBLIC WORKS

The increase in responsibilities of work loads of different government departments leads inevitably to their expansion. New offices and other functional buildings have to be constructed to improve efficiency of the departments at different levels. Since Fifth Five-Year Plan, funds have been made available for construction of non-residential buildings of various departments from state plan resources. Under this scheme buildings of Police, Judicial, Revenue, Estate, Public Works Department, Finance (Sale Tax), Finance (Stamp and Registration), Excise and Karmik Departments are constructed.

18.3.2. An outlay of Rs. 10,239.00 lakh including Rs. 574.00 lakh for hills has been provided in Seventh Plan for construction of office and other functional buildings, such as P.A.C. barracks, etc. An expenditure of Rs. 5067.64 lakh including Rs. 200.58 lakh for hills has been incurred during 1985-88. Expenditure of Rs. 1711.92 lakh including Rs. 80.00 lakh for hills is anticipated in 1988-89. The outlay for 1989-90 is Rs. 2040.37 lakh including Rs. 105.00 lakh for hills.

18.3.3. *Police Department*—In view of the difficult nature of duties and responsibilities of the police force, construc-

tion of office and other functional buildings such as Police Stations, Police outposts, Fire Stations, P. A. C. barracks, Police Officers Radio complexes etc. has become necessary. The growing responsibilities of Police Department in maintaining law and order require construction of office and other building. By the end of Sixth Plan, 307 non-residential buildings had been constructed. An Outlay of Rs. 4210.00 lakh including Rs. 82.00 lakh for hills has been provided in Seventh Plan. The programmes undertaken were construction of buildings for 50 Police Stations, 20 Out-posts, 8 Fire Stations, 3 P. A. C. Bns., 5 Police Radio complexes, 3 Police Hospitals, 3 Maternity wards, one Teleprinter hall, one DIG and five IG Zones Offices-cum-residences, one godown for Central Stores, Kanpur, one Gymnasium and extension of Police Officers mess.

18.3.4. Subsequently, construction of buildings of two training centers (Police training and F.S. training) at Unnao and one Police Bhawan at Lucknow was also undertaken. On the basis of spill-over works of Sixth Five Year Plan and originally proposed new works a total number of 213 non-residential, and barracks for 4914 men are targeted for completion during Seventh Plan.

18.3.5. In 1985-86, 22 buildings were constructed and an expenditure of Rs. 524.03 lakh was incurred. During 1986-87, 36 buildings and in 1987-88, 28 buildings were constructed and the total expenditure of Rs. 1650.41 lakh including Rs. 3.53 lakh for hills has been incurred. Construction of 50 buildings will be completed during 1988-89 with an expenditure of Rs. 485.00 lakh including Rs. 15.00 lakh for hills. An Outlay of Rs. 920.00 lakh including Rs. 20.00 lakh for hills is proposed for 1989-90 and the target is to construct 80 non-residential buildings.

18.3.6. *Judicial Department*—There has been abnormal increase in criminal as well as civil cases during the last decade. From 1970 to 1981 the institution of magisterial cases has gone up by about three times and that of session cases even more than three times. Creation of large

number of courts to keep pace with the growing volume of litigation is necessary. It is also necessary to augment the strength of various courts. This has resulted into requirement for the construction of new court rooms and allied offices. Some of the existing courts are very old and need renovation.

18.3.7. This fact was also brought out in the joint conference of Hon'ble Chief Ministers and Chief Justices held on August 31, 1985 and September 1, 1985 and the immediate need of creation various categories of new courts to cope with galloping speed of increasing court cases was strongly felt.

18.3.8. The total number of courts at present is 1495. Standard Court rooms existing (after demolition of old buildings at Allahabad, Kanpur, and Bareilly) before 1975 were about 350 Sanctions for construction of 700 court rooms with allied buildings and also for Advocates chambers at Allahabad and Lucknow have been issued in the period from 1976-77 to 1987-88. There is thus need for 445 more Court rooms.

18.3.9. According to progress reported up to March, 1988, out of 700 court rooms sanctioned upto 1987-88, only 424 Court rooms were completed. The rest Court rooms are under various stages of construction.

18.3.10. The works of construction of multistoreyed, court complexes in Allahabad, Bareilly, Kanpur, Ghaziabad, Sitapur, Raebareli and Lucknow and multistoreyed Advocate Chambers and State Law officers offices complex at High Court, Lucknow are in progress. The buildings at Kanpur and Bareilly are being constructed after demolishing delapidated old court building. An Outlay of Rs. 215.00 lakh including Rs. 15.00 lakh for hills is proposed for 1989-90 for these works.

18.3.11. *Revenue Department*—Most of the collectorate and tehsil buildings are very old and require to renovation. With induction of more staff, additional space for various types of offices is also required.

Buildings are also required for maintaining land revenue records properly. An expenditure of Rs.232.13 lakh including Rs.10.13 lakh for hills has been incurred during 1985-88 and expenditure of Rs.151.00 lakh including Rs.30.00 lakh for hills is anticipated during 1988-89. An outlay of Rs.212.37 lakh including Rs.35.00 lakh for hills is proposed for 1989-90 and the target is to construct 18 buildings of various types.

18.3.12. *Estate Department*—The Estate Department provides office accommodation at Lucknow and guest houses at Lucknow, Delhi and Calcutta. Keeping in view additional requirement of secretariat, Vidhan Parishad and Vidhan Sabha at Lucknow, a multistoryed building known as 'Bapu Bhawan' is under construction after demolishing the old Royal Hotel building at an estimated cost of Rs.11.00 crore. To accommodate the offices of other heads of departments another multistoryed building known as 'Indira Bhawan' is also under construction at an estimated cost of Rs.10.15 crore.

18.3.13. An outlay of Rs.5723.00 lakh including Rs.286.00 lakh for hills has been provided for this Department in Seventh Plan. During first three years 1985-88 an amount of Rs.1057.73 lakh has been spent on the construction of Indira Bhawan, third state guest house at Delhi, V.V.I.P. Guest house at Lucknow, purchase of land for third state guest house at Lucknow and on demolishing old royal hotel buildings in place of which Bapu Bhawan is being constructed. An expenditure of Rs.505.60 lakh is anticipated during 1988-89. An outlay of Rs.518.00 lakh has been provided for 1989-90.

18.3.14. *Public Works Department*—The Public Works Department undertakes construction of office buildings, functional buildings and guest houses of different departments. With an expenditure of Rs.397.33 lakh including Rs.172.85 lakh for hills, construction of 76 buildings has been done during the period 1985-88 and an expenditure of Rs.110.00 lakh including Rs.30.00 lakh for hills is anticipated during 1988-89. For 1989-90 an outlay

of Rs.115.00 lakh including Rs.35.00 lakh for hills has been proposed for addition/alteration or construction of zonal offices buildings at Jhansi, Faizabad, Agra and Gorakhpur alongwith construction of a community hall at Lucknow, Circle office at Jalaun, and Pratapgarh and construction of dormitories attached to inspection houses at Agra, Allahabad, Kanpur, Varanasi, Meerut, Bareilly, Gorakhpur and Faizabad has been proposed.

18.3.15. *Karmik Department*—The Karmik Department caters to needs of the State Public Service Commission, Administration Academy, Nainital and the Institute of Management development U. P. An outlay of Rs.220.00 lakh has been provided in Seventh Plan. During 1985-88 the total expenditure has been Rs.212.48 lakh. An expenditure of Rs.50.00 lakh is anticipated during 1988-89. The outlay for 1989-90 is Rs.10.00 lakh, which will be spent on construction of examination hall of Public Service Commission.

18.3.16. *Finance (Stamp and Registration) Department*—An outlay of Rs.50.00 lakh has been provided in Seventh Plan for buildings of the Department. During 1985-88 an expenditure for Rs.22.00 lakh has been incurred. Expenditure of Rs.12.00 lakh is anticipated during 1988-89. An outlay of Rs.15.00 lakh is proposed for 1989-90 which is proposed to be utilized on the construction of office building at Lucknow.

18.3.17. *Excise Department*—Most of the offices of this department are in rented buildings. An outlay of Rs.100.00 lakh has been provided in Seventh Plan for construction of some of these buildings. An expenditure of Rs.14.29 lakh has been incurred during 1985-86 on the construction of Excise office building at Varanasi. The work is, however, still in progress. An expenditure of Rs.19.02 lakh is anticipated during 1988-89. An outlay of Rs.15.00 lakh has been proposed for 1989-90 and the programme is to take up construction of office building of the Department at Lucknow.

