



**PRE-BUDGET  
ECONOMIC REVIEW  
OF  
MANIPUR  
1988-89**



NIEPA DC



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**Directorate of Economics & Statistics  
GOVERNMENT OF MANIPUR  
IMPHAL**

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## FOREWORD

The "Pre-Budget Economic Review of Manipur, 1988-89", which is the second in the series, is an attempt to present the latest economic situation of the State with special reference to the different plan schemes/programmes which are being implemented through the successive Five Year Plans for the betterment of the socio-economic conditions of the people in the State. It is not possible to present the background materials and statistical tables in the publication as it was prepared, printed and published within a period of about 18 days only.

During the extremely short time at our disposal, it was not possible to obtain detailed reports from the departments concerned and hence, the Review was based on the published Budget and Plan documents and other reports like Annual Administration Reports as on 31-12-1988.

It is hoped that with the active co-operation of the Departments concerned, it will be possible for the Directorate to improve the quality and contents of the Review in its future issues. I also thank the officers and staff of this Directorate who were directly or indirectly concerned with the preparation of this Review and also the entire staff of the Printing Press Unit who had to work overtime for completing the printing work within an extremely short period of about 15 days only.

Suggestion for improvement in its future issues are welcome.

Imphal  
the 1st March, 1989

N. AMUREI SINGH  
Director

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## 1.1 GENERAL APPRAISAL

In the north eastern corner of India bordering Burma lies the picturesque land of Manipur, a State of exquisite natural beauty and splendour, which, Mrs. St. Clair Grimwood described as a "pretty place, more beautiful than many of the show places of the world". The State has a salubrious climate and is famous for her colourful ~~laces~~ ~~laces~~ and handloom & handicraft products. It is almost rectangular in shape with a precious little valley in the centre encircled by mountain ranges on all sides. This valley, which is also the "rice bowl" of the State has an area of about 1850 sq.km, constituting only about 8 per cent of the total State's area, but about 63 per cent of the State's population is concentrated in it. Consequently, the valley is one of the most thickly populated areas in the country with a density of 415 persons per sq.km. and the hills one of the most sparsely populated with a density of 24 persons per sq.km. against the all-India average of 216 persons per sq.km. according to the 1981 Population Census.

Agriculture and Allied Activities is the single largest source of livelihood of the majority of rural masses and is the mainstay of the State's economy. In spite of erratic rainfalls, production of foodgrains mainly rice, was satisfactory during the years 1984-85 and 1985-86. But in 1986-87, production of rice went down sharply from an estimated 3.33 lakhs tonnes in 1985-86 to a mere 2.42 lakhs tonnes in 1986-87 on account of a severe drought in the early part of the season and a devastating flood in October, 1986 that destroyed the standing crops of paddy. However, despite floods inundating paddy fields with standing crops in various parts of the Manipur valley, production of rice rose to 3.13 lakhs tonnes and 3.20 lakhs tonnes respectively in 1987-88 and 1988-89.

For the first time in Manipur, the State Govt. introduced the Crop Insurance Scheme on rice in the valley districts during Kharif, 1987. The Directorate of Economics & Statistics had to conduct crop cutting experiments on a much larger scale so as to obtain reliable estimates of yield rates at the block level. Since yield rates at the block level are not very much different from district-level yield rates, the insured farmers whose crops had been damaged could not get compensation under the scheme. To obviate this difficulty, it is proposed to reduce the size of the unit area to a VLW's circle in the next crop season so that the farmers could have a better chance of being compensated for their loss in case of crop failure.

Despite its importance, this sector suffers from a weak data base. The system of compiling crop statistics by plot to plot enumeration by the revenue agency has not been introduced, and as a result, there are conflicting estimates of agricultural statistics data produced by various agencies, like agriculture, statistics, etc. It is hoped that a concerted effort should be made by the concerned departments, like Agriculture, Revenue and Statistics to build up a strong data base for Agriculture & Allied Activities for which a number of central schemes are available.

With the commissioning of the Loktak Hydro Electric Power Project in 1984 and a considerable improvement in the power distribution system, the State's per capita consumption of electricity rose from a mere 1.83 KWH in 1965-66 to an estimated 46.94 KWH in 1986-87. By the end of Sixth Five Year Plan period, 602 villages constituting about 30 per cent of the total number of villages have been electrified. By the end of December, 1988, another 372 villages have been electrified. In other words, 974 villages which include 449 scheduled tribe and 13 scheduled caste villages, constituting about 48 per cent of the total number of villages in the State, have been electrified by the end of December, 1988.

At the end of the Seventh Five Year Plan period, it is anticipated that about two-thirds of the State's total of 2,035 villages will be electrified.

The State is striving hard towards industrialisation. The Spinning Mill at Lohitang Khunou, the Khandsari Sugar Factory at Khargabok, the Electronics Industry EPD the Manipur Cycle Corporation at the Takyel Industrial Complex and the Mechanised Dye House at Iroishemba are already on stream. A trial run of the Cement Factory at Hundung was made in October, 1987. Construction works of several other projects like, Manipur Sugar Mill and Distillery Plant, Starch and Glucose Factory, Bamboo Chipping Plant, Mechanised Brick Manufacturing Unit, etc. are also in good progress.

A "Quick" estimate of the per capita income of Manipur at constant (1970-71) prices for 1987-88 is Rs. 605/- as against Rs. 596/- of the preceding year. The slight increase, is mainly due to the increase in crop production during the year. There will be a faster growth rate during 1988-89.

Almost all essential consumer goods except rice are imported from the rest of the country involving a heavy cost on road transport since the State has neither railways nor waterways. Prices of essential commodities shot up at frequent intervals as the supply is subject to disruption due to landslides in hilly tracks of NH-39 and NH-53, the only two life-lines of the State. However, the State-level Price Fixation Committee, of which the representatives of the Manipur Chamber of Commerce and the Manipur Consumers' Protection Society are also members, fix prices of essential commodities from time to time thus keeping a check on any undue price rise.

The 12-monthly moving average of the consumer price index number for urban non-manual employees of Imphal Town, with 1971 as the base year, rose from 290 in 1986 to 375 in 1987 and 383 in June, 1988. The sharp rise may be attributed to an abnormal rise in prices of several food items, such as, rice, pulses, edible oils, fish, meat, milk and milk products etc.

The problem of growing unemployment as reflected in the Employment Exchange data still persists. The State Government had taken up a number of schemes like NREP, RIEGP, TRYSEM and various other self employment schemes to tackle this problem.

## 1.2 Population :

The Population of Manipur as on the 1st March, 1981 was 14.21 lakhs according to 1981 Population Census. The estimated population as on 1st March, 1986 & 1991 are respectively 16.37 lakhs and 18.87 lakhs. Population Statistics and a few other parameters in respect of the seven north-eastern States and all-India are given in the following table :

Table No. 1 : Population Statistics ( 1981 census )

Sl. No.	State/Country	Population in lakhs	Decadal Growth rate (%) (1971-81)	Population Density (persons per sq km)	Sex Ratio (Females per 1000 males)	Literacy Rate(%)	Urban population (as % of total population)
1	2	3	4	5	6	7	8
1.	Arunachal Pradesh	6.32	35.15	8	862	NA	6.56
2.	Assam	198.97	36.05	254	901	NA	10.29
3.	Manipur	14.21	32.46	64	971	41.35	26.42
4.	Meghalaya	13.36	32.04	60	954	34.08	18.07
5.	Mizoram	4.94	48.55	23	919	NA	24.67
6.	Nagaland	7.75	50.05	47	863	42.57	15.52
7.	Tripura	20.53	31.92	196	946	42.12	10.99
	All-India	6851.85	25.00	216	934	36.20	23.31

The literacy percentage of Manipur according to the 1981 Census is 41.35 as against the all-India average of 36.20. The percentage of urban population to total population in Manipur is 26.42 as against the all-India average of 23.31. Another table showing area and population of Manipur by districts is given below :

Table No. 2 : Area and population of Manipur by districts, 1981

Sl. No.	Region/Districts	Area in sq. km.	Population (in '000)	Population Density per sq. km.
1	2	3	4	5
	A. Valley	2,238	929	415
1.	Imphal	1,201*	556	463
2.	Bishnupur	530	141	266
3.	Thoubal	507*	232	457
	B Hills	20,089	492	24
4.	Senapati	3,271	155	48
5.	Churachandpur	4,570	135	29
6.	Ukhrul	4,544	83	18
7.	Tamenglong	4,391	62	14
8.	Chandel	3,313	57	17
	Total Manipur :	22,327	1,421	64

\* - Provisional



The growth rate of population in Manipur is very high during the last three decades and factors other than natural accretion to population might have contributed to the high growth rate. In the districts of Senapati, Churachandpur, Tamenglong and Chandel, the growth rates are much higher than the State average bearing evidence to the possible influx of population into these districts.

#### Sex Ratio :

Although the decrease of sex ratio seems to be an all-India phenomenon, the extent of decrease in almost all the north-eastern states is comparatively higher. The percentage decrease in sex ratio during the period 1901-1981 is 6.4 per cent in Manipur, 8.0 per cent in Meghalaya, 11.3 per cent in Nagaland, 8.2 per cent in Tripura and only about 2 per cent in Assam against the all-India average decrease of 4 per cent only.

#### Urbanisation :

The degree of urbanisation in Manipur is higher than the all-India average. About 84 per cent of urban population is concentrated in the Imphal District alone and another 32 per cent in the other two valley districts of Bishnupur and Thoubal. Imphal, the capital city, accounts for about 41.7 per cent of the total urban population in the State.

The estimated population of Manipur as on the 1st March, 1991 and 2001 are respectively 18.27 lakhs and 22.74 lakhs. A table showing year wise estimated population as on 1st March and 1st October upto the year 2001 is given below :

**Table No. 3 : Projected population of Manipur from 1970-2001 as on 1st March & 1st October**

Year	Population (lakh)		Year	Population (lakh)	
	as on			as on	
	1st March	1st October		1st March	1st October
1	2	3	1	2	3
1970	10.36	10.55	1986	16.17	16.41
1971	10.69	10.89	1987	16.55	16.82
1972	11.03	11.23	1988	17.00	17.23
1973	11.37	11.57	1989	17.42	17.64
1974	11.71	11.92	1990	17.84	18.06
1975	12.06	12.27	1991	18.27	18.48
1976	12.41	12.63	1992	18.70	18.91
1977	12.77	12.99	1993	19.14	19.34
1978	13.13	13.35	1994	19.58	19.77
1979	13.49	13.72	1995	20.02	20.20
1980	13.85	14.08	1996	20.47	20.64
1981	14.20	14.44	1997	20.92	21.08
1982	14.50	14.83	1998	21.37	21.52
1983	14.98	15.21	1999	21.83	21.96
1984	15.37	15.61	2000	22.28	22.40
1985	15.77	16.01	2001	22.74	22.84

**Language :**

Only 2.31 per cent of the total population of the State speak the schedule VIII languages while the remaining 97.69 per cent other languages which are not included in the schedule VIII to the Constitution of India. These are presented below :

**Table No. 4 : Percentage Distribution of 1981 household population by languages**

Sl. No.	State/District	Speakers of schedule VIII languages	Speakers of other languages
1	2	3	4
	MANIPUR	2.31	97.69
1.	Senapati	0.84	99.16
2.	Tamenglong	0.44	99.56
3.	Churachandpur	2.30	97.70
4.	Chandel	5.36	94.64
5.	Imphal	2.63	97.37
6.	Bishnupur		
7.	Thoubal		
8.	Ukhrul	3.05	96.95

**1.3 State Domestic Product :**

The quick estimates of net State Domestic Product of Manipur at current prices for the year 1987-88 is Rs. 460.22 crores as against Rs. 411.63 crores for 1986-87 recording an increase of 11.80 per cent over the preceding year. The per capita State income of Manipur at current prices is worked out to be Rs. 2736 for 1987-88 as against Rs. 2508 for the preceding year. The per capita national income at current prices worked out to be Rs. 2975 in 1986-87 as against Rs. 2,721 for the preceding year.

At constant (1970-71) prices, the State Domestic Product of Manipur increased from Rs. 97.95 crores in 1986-87 to Rs. 101.74 crores in 1987-88 thereby recording an increase of 3.87 per cent over the preceding year. The per capita State income at constant (1970-71) prices is Rs. 604.89 in the year 1987-88 as against Rs. 596.88 in 1986-87 recording

an increase of 1.34 per cent. The corresponding all-India average per capita National income are Rs. 798/- in 1985-86 and Rs. 775/- in 1984-85 recording an increase of about 2.9 per cent.

A table showing yearwise estimates of per Capita Income of Manipur at current and constant (1970-71) prices together with the corresponding all-India figures is given below;

**Table No. 5 ; Per Capita State Income and the National Income at current and constant (1970-71) prices**

Year	Per capita Income at Constant (1970-71) prices (Rs.)		Per capita Income at current prices (Rs.)	
	Manipur	All-India	Manipur	All-India
1	2	3	4	5
1970-71	390.0	633.0	390.0	633.0
1971-72	381.4	626.9	457.1	660.0
1972-73	392.4	603.4	566.4	711.0
1973-74	461.9	621.3	710.7	870.0
1974-75	493.4	617.0	801.7	1004.0
1975-76	510.2	663.5	830.3	1024.0
1976-77	501.0	652.1	832.7	1079.0
1977-78	538.8	694.7	936.3	1194.0
1978-79	507.9	717.0	947.0	1255.0
1979-80P	500.1	664.7	1165.9	1399.0
1980-81P	505.5	698.3	1381.8	1564.0
1981-82P	525.4	719.5	1566.8	1741.0
1982-83P	942.6	721.0	1636.7	1860.0
1983-84P	564.8	763.8	1967.4	2186.0
1984-85P	573.8	774.6	2214.2	2355.0
1985-86P	597.1	797.7	2383.5	2721.0
1986-87P	596.9	NA	2508.5	2975.0
1987-88Q	604.9	NA	2736.1	NA

P - Provisional Estimates

Q - Quick Estimates

NA - Not available

Table No. 6 : 1.4 UNION BUDGET, 1988-89 AT A GLANCE

( Rs. in crores )				
	1986-87	1987-88 (BE)	1987-88 (RE)	1988-89 (BE)
1	2	3	4	5
<b>REVENUE</b>				
Receipts	32898	36688	38122	42798
Expenditure	40674	43430	46619	52640
Deficit	7776	6742	8497	9842
<b>CAPITAL</b>				
Receipts	18529	20566	21959	23278
Expenditure	19014	19512	19542	20920
<b>TOTAL</b>				
Receipts	51427	57254	60081	66076
Expenditure	59688	62942	66161	73560
Deficit	8261	5688	6080	7484
Increase in net RBI credit to Centre*	7091	**5688	6230	**7484

\* Including other variations in RBI's credit to Centre

\*\* Not independently estimated.

## 2- AGRICULTURE & ALLIED SERVICES

### 2.1 AGRICULTURE :

Agriculture is the largest sector of economic activity in Manipur State. It provides not only food and raw materials but also employment to a very large proportion of the population. According to 1981 population census, this sector, viz, agriculture and allied services provides direct employment to about 69 per cent of total working population of the State. Out of the total geographical area of 22.3 lakh hectares, an area of about 2.1 lakh hectares is under cultivation which is cultivated mostly by small and marginal farmers.

The State Domestic Product (SDP) which is commonly known as 'State Income' is the most convenient indicator for giving an idea about the structure of economy of a State. A study of the sectoral contributions of the S.D.P. of Manipur shows that the contribution of the agriculture sector is predominant contributing about 53 per cent of the total SDP in 1987-88 as against 52 per cent in 1986-87. Agricultural economy in the State is so important that the estimates of S.D.P. fluctuates from year to year according to the success or failure of crops which again depends almost entirely on the capricious rainfalls. Thus from the viewpoint of employment and income, agriculture plays a very crucial role in the State's economy.

#### 2.1.1 Agricultural Development Programmes :

Since food occupies the first place in the hierarchical needs of man, the major thrust under the agriculture sector during the different Five Year Plans has been on increasing production by way of various measures, such as, improving the productivity of the crops by adoption of modern technology, improved agricultural practices, systematic and timely availability of main inputs, viz seeds, fertilizers and pesticides, soil and water conservation measures, increase in area under irrigation with implementation of management technology in water use, increase in area under hybrid/high yielding varieties, etc., raising the economic status of the weaker sections of the farming community by providing credit support, assuring remunerative prices to farmers for their produce and educating the farmers by way of training through the Training and Visit System (T & V) and farmers' training centres.

In spite of the progress made during the different plan periods, still the task before the State of Manipur is to (i) increase the production of foodgrains to feed the growing population, (ii) increase the production of commercial crops for development.

of Industries and (iii) provide greater employment opportunities particularly in rural areas. With a view to make the State self-sufficient in foodgrains, the Department of Agriculture implemented 34 schemes in 1988-89; 24 schemes under Crop Husbandry, 8 schemes under Research and Education and 2 schemes under Agricultural Marketing, Cold Storage & Warehousing. In addition, 9 Centrally sponsored schemes and 3 N.E.C. Schemes are also implemented.

### 2.1.2 Foodgrains :

The staple food of a region is more often determined by the predominant food crop which is grown in that region. Thus, rice is the staple food of the State and is grown both in the hills and the plains. However, cultivation in Manipur is almost entirely mono-crop with rice accounting for about 90 per cent of foodgrains production and about 80 per cent of the total cropped area. As per results of the 38th Round of NSS, the shares of expenditure on foodgrains to total consumer expenditure in the rural and urban areas were 48 per cent and 47 per cent respectively. Again, out of the total consumption of foodgrains, the consumption of rice accounts for 94 per cent in rural areas and 91 per cent in urban areas of the State.

Dietary patterns are governed by availability of food, population size, systems of distribution, economic factors and food habits. On an average, about 60 per cent of the total calorie requirement in the country is supplied by the cereals. The following table shows the requirement of foodgrains for Manipur State during the 7th Five Year Plan period as per Annual Plan 1986-87, Review and outline Vol.-I.

Table No. 7 : Estimated requirement of foodgrains during the 7th Plan period

Year	Population (in lakhs)	Foodgrains (in '000 tonnes)		
		Cereals	Pulses	Total
1	2	3	4	5
1985-86	16.37	343.77	12.28	356.05
1986-87	16.84	353.64	12.63	366.27
1987-88	17.33	363.93	13.00	376.93
1988-89	17.83	374.43	13.37	387.80
1989-90	18.34	385.14	13.76	398.90

Note : Per Capita annual consumption rate of foodgrains, Cereals—210 kgs; Pulses—7.5 kgs.

The efforts made by the Department of Agriculture for increasing the production of foodgrains in the State are reflected in its plan documents. The physical targets and achievements made during the last three years may be seen in the table given below :

Table No. 8: Physical Targets and Achievements made for Foodgrains

Item	Unit	1986-87		1987-88		1988-89	
		Target	Achievement	Target	Achievement	Target	Achievement (Anticipated)
1	2	3	4	5	6	7	8
1. Rice	'000 tonnes	385.00	289.00	405.00	375.00	400.00	415.00
2. Other							
Cereals	"	34.50	34.50	36.00	36.00	39.00	40.00
3. Pulses	"	10.00	13.80	12.00	15.00	16.00	16.00
<b>Total Foodgrains</b>		<b>429.50</b>	<b>337.30</b>	<b>453.00</b>	<b>426.00</b>	<b>455.00</b>	<b>471.00</b>

Production of foodgrains and other agricultural crops is affected by factors, like erratic rainfall, flood, sunshine, temperature, hailstorm, etc. The State of Manipur faced flood and at the same time drought during 1986-87 and 1987-88 and hence target could not be achieved. On account of favourable monsoon during 1988-89 the target of production may be achieved. The total rainfall during the year 1988 in Manipur varied from 1301.4 mm. at Wangbal to 3093.6 mm. at Tinsong as against the normal rainfall of 2003.8 mm. of the year. The details of actual rainfall at the important centres of Manipur during 1988 are given in the following table :

Table No. 9: Monthly Rainfalls at Important Centres of Manipur, 1988 (In mm).

Name of Rain gauge Station	Name of Rain gauge Station												
	January	February	March	April	May	June	July	August	September	October	November	December	Total
1. Imphal (IFC) NA	46.2	58.8	84.3	291.8	280.9	280.9	198.2	95.4	116.8	34.0	0.0	1487.3	
2. Wangbal	6.2	45.7	54.5	44.1	220.1	120.5	307.6	256.3	82.5	138.1	22.4	3.4	1301.4
3. Tinsong	NA	63.4	103.2	154.0	547.6	414.6	605.6	534.4	294.2	317.2	58.2	1.8	3093.6
4. Thanlon	NA	50.2	78.3	131.2	499.9	270.1	398.6	494.1	300.4	273.4	33.5	NA	2524.7
Normal Rainfall*	15.5	26.2	80.8	159.0	254.3	435.1	329.9	290.0	201.1	176.1	29.5	6.3	2003.8

NA - Not Available.

\* Statistical Abstract of India, 1986.

Source: Directorate of Agriculture, Manipur.

Apart from the estimates made by the Department of Agriculture, estimates of production of cereal crops are made by the Directorate of Economics and Statistics by conducting Land Utilisation Surveys and Crop Cutting Experiments. The area under and production of cereal crops as thrown up by the surveys mentioned above are given below for the period from 1984-85 to 1988-89.

**Table No. 10 : Estimated area under and production of Cereal crops for the period from 1984-85 to 1988-89**

Year	Rice			Maize		
	Area (in '000 hect.)	Yield rate (kg./hect.)	Production (in '000 tonnes)	Area (in '000 hect.)	Yield rate (kg./hect.)	Production (in '000 tonnes)
1	2	3	4	5	6	7
1984-85	167.41	1989	332.99	5.44	2241	12.19
1985-86	164.40	2020	332.53	5.74	2549	14.63
1986-87	166.14	1468	242.47	7.52	2177	16.37
1987-88	165.76	1887	312.76	3.32	3105	10.31
1988-89	167.06	1914	319.72	5.96	2044	12.18

### 2.1.3 High Yielding Varieties Programmes :

Though the High Yielding Varieties Programme (HYV) has been introduced in the country since 1965-66, the spread of HYVs in the State of Manipur has been very slow except for paddy crop. In particular, the programme of introducing HYVs and also improved varieties has not been very effective in stepping up the total production mainly because of the fact that application of fertilizers and other inputs were below the required doses and more than 60 per cent of the area was rain-fed. The high yielding varieties require heavy doses of fertilizers and timely application of insecticides and pesticides.

According to the Crop Estimation Survey conducted by the Directorate of Economics and Statistics, the estimated areas under HYVs and improved varieties of paddy were 26,550 hectares and 21,030 hectares respectively during 1987-88 as against 17,450 and 29,030 hectares in 1986-87. The area under HYVs and improved varieties of paddy constitutes about 29 per cent of the total area under paddy in 1987-88 as against 28 per cent in 1986-87. The adoption of High Yielding and Improved Varieties of paddy in the hill districts continued to be negligible.



Amongst the valley districts, Thoubal has got the highest percentage of area under high yielding and improved varieties of paddy which accounts for about 60 per cent and 61 per cent respectively of the total area under paddy in the State and the Thoubal district respectively. With the irrigation potentials created under Major and Minor irrigation projects, double cropping (with introduction of first crop of paddy) is being expanded more successfully in the valley districts of Manipur.

#### 2.1.4 Application of Fertilizers :

The chemical fertilizers play an important role in increasing agricultural production particularly when applied to the High Yielding and Improved Varieties which are responsive to recommended doses of fertilizers. There has been significant increase in the consumption of fertilizers as can be seen from the table given below :

**Table No. 11 : Consumption of fertilizers in the State during the Kharif season**

(in '000 tonnes)						
Year	Urea	DAP	MOP	M. Phos.	SSP	Total
1	2	3	4	5	6	7
1985-86	7.38	1.47	0.14	0.16	—	9.15
1986-87	8.25	2.15	0.25	0.10	0.07	10.82
1987-88 (P)	8.86	2.58	0.18	0.39	0.19	12.15
1988-89 (P)	8.98	3.54	0.27	0.05	0.35	13.19

(P)— Provisional.

Source : Annual Administration Report on Agriculture 1987-88, Department of Agriculture.

#### 2.1.5 Non-Food Crops :

For achieving industrial prosperity, particularly in agro-based industries in the State, development of commercial crops, like cotton, oilseeds, sugar-cane, etc. is very essential.

The estimated areas under three important commercial crops are given below :

**Table No. 12 : Estimated area under important commercial crops**

(in '000 hectares)								
Crop/Year	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
1	2	3	4	5	6	7	8	9
1. Cotton	0.31	0.59	0.64	0.54	0.47	0.51	0.45	0.48
2. Oilseeds	5.59	4.09	4.13	3.51	4.13	5.30	3.90	4.13
3. Sugarcane	2.25	2.25	2.30	2.30	2.30	2.28	2.35	2.31

### 2.1.6 Irrigation Facilities :

Increasing the acreage under irrigation is crucial to a rapid growth in agricultural production. Therefore, the various programmes undertaken for providing irrigation facilities gave salutary effects. According to the results of the 31st round of NSS (1976-77) and the Crop Estimation Survey (1986-87), there was a growth of about 83 per cent in the net area irrigated during the period from 1976-77 to 1987-88. The net area irrigated in 1987-88 worked out to be 63.79 thousand hectares out of a total area of 166 thousand hectares under paddy cultivation.

In other words, only 38 per cent of the total area under paddy was irrigated in 1987-88. District-wise irrigated area under cereal crops in 1987-88 as per results of the Crop Estimation Survey may be seen in the table given below :

Table No. 13 *District-wise irrigated area under cereal crops in 1987-88*  
(in '000 hectares)

District	Irrigated area under			Total area under		
	Rice	Maize	Total (rice & maize)	Rice	Maize	Total (rice & maize)
1	2	3	4	5	6	7
1. Senapati	9.04	0.02	9.06	15.81	2.71	18.52
2. Tamenglong	2.45	—	2.45	8.78	—	8.78
3. Churachandpur	3.60	—	3.60	14.56	0.56	15.12
4. Chandel	0.52	—	0.52	6.89	0.17	7.06
5. Ukhrul	9.35	—	9.35	14.27	0.12	15.51
6. Imphal	16.09	—	16.09	50.96	—	50.96
7. Bishnupur	11.02	—	11.02	19.88	—	19.88
8. Thoubal	11.72	—	11.72	34.61	—	34.61
Total :	63.79	0.02	63.81	165.76	4.68	170.44

### 2.1.7 Cropping Pattern :

The study of cropping pattern is of great significance for preparing a rational and balanced plan for cultivation of such crops which would give maximum return with minimum inputs to meet the requirements of food for the people and raw materials for industry in the State. There are various factors which influence the cropping pattern, such as, availability of irrigation facilities, inter-crop relationship, change in agricultural technology, facilities in transportation and establishment of agro-based industries.

The changing cropping pattern is indicated by changes in area under different crops over time. The area under cereals, pulses, oilseeds, cotton, sugar-cane and other miscellaneous crops for different years are given below :

Table No. 14 : *Cropping Pattern in the State*

( Area in '000 hectares )

Year/Crop	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
1	2	3	4	5	6	7	8	9
1. Cereals	198.46 (84.87)	173.89 (82.50)	163.77 (80.29)	165.30 (81.95)	172.85 (82.89)	170.34 (81.73)	172.66 (82.33)	170.44 (82.16)
2. Pulses	4.62 (1.96)	6.85 (3.25)	6.24 (3.08)	6.76 (3.35)	5.88 (2.82)	6.56 (3.16)	6.52 (3.11)	6.28 (3.03)
3. Oilseeds	5.59 (2.39)	4.09 (1.94)	4.13 (2.03)	3.51 (1.74)	4.13 (1.98)	5.30 (2.54)	3.90 (1.86)	4.13 (1.99)
4. Sugar-cane	2.25 (0.96)	2.25 (1.07)	2.30 (1.13)	2.30 (1.15)	2.30 (1.10)	2.28 (1.09)	2.35 (1.12)	2.31 (1.11)
5. Cotton	0.31 (0.13)	0.59 (0.28)	0.64 (0.31)	0.54 (0.27)	0.47 (0.22)	0.57 (0.27)	0.45 (0.21)	0.48 (0.23)
6. Other Misc. crops	22.61 (9.69)	23.10 (10.96)	26.54 (13.16)	23.29 (11.54)	22.91 (10.99)	23.37 (11.21)	23.84 (11.37)	23.81 (11.48)
Total :	233.84 (100)	210.78 (100)	203.97 (100)	201.70 (100)	208.54 (100)	208.42 (100)	209.72 (100)	207.45 (100)

Note :— Figures in brackets denote the percentage area under the crop to total cropped area of the respective years.

## 2.1 HORTICULTURE :

Horticulture, in simple language, is the cultivation of fruit crops, vegetables and plantation crops. The Department of Horticulture, Manipur implemented 28 Plan Schemes during the year 1988-89 for development of horticultural crops in the State. The main objectives of the various schemes are as follows :

1. To increase production of fruits and vegetables.
2. Production and distribution of planting materials to increase the area under fruits and vegetables.
3. Training of farmers to adopt developed method of plantation and maintenance of gardens and
4. Creation of marketing facilities.

The State of Manipur is gifted with various kinds of ecological conditions for raising different kinds of fruits and vegetables. Growing of fruits and vegetables on small plots of land provides additional income to the farmers undertaking crop husbandry enterprises. Another advantage of growing fruits is that these can be grown on uneven and undulating lands. In this way, it gives an additional benefit as forests cover such lands which are liable to run off and erosion.

The financial position of horticultural development Programmes during the 7th Five Year Plan Period may be seen from the table given below :

Table No : 15 *Outlay and Expenditure during the 7th Plan*  
(Rs. in lakhs)

Particulars	7th Plan	1985-86	1986-87	1987-88	1988-89	
	Agreed Outlay (1985-90)	(Actual Expen- diture)	(Actual Expen- diture)	(Actual Expen- diture)	Approved Outlay	Anticipated Expen- diture
1	2	3	4	5	6	7
1. Direction and Administration	193.00	36.34	39.68	21.86	38.00	38.00
2. Horticulture farms	137.95	21.13	26.12	27.50	37.00	37.00
3. Extension	110.80	14.73	16.18	21.50	30.00	30.00
4. Training	11.25	1.25	1.50	1.50	2.00	2.00
5. Marketing	30.00	2.52	3.28	2.40	7.00	7.00
<b>Total :</b>	<b>483.00</b>	<b>75.97</b>	<b>86.76</b>	<b>74.76</b>	<b>114.00</b>	<b>114.00</b>

From the above table, it is seen that 15.73, 17.96 and 15.48 per cent of the total 7th Plan outlay was spent in 1985-86, 1986-87 and 1987-88 respectively. A sum of Rs. 114.00 lakhs constituting about 23.60 per cent of the 7th Plan outlay is expected to be spent in 1988-89.

At present, reliable estimates of the total acreage of the various fruits and vegetables are not available for the State. However, a rough idea can be had from the table given below. These estimates are based on the data collected in the Crop Estimation Surveys, conducted by the Directorate of Economics and Statistics, Manipur.

Table No. 16 : Area under some Fruits and Vegetables in Manipur during the period from 1980-81 to 1987-88

( in '000 hectares )

Crop/Year	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
1	2	3	4	5	6	7	8	9
1. Pineapple	1.33	0.92	0.92	0.76	2.14	1.76	0.88	0.85
2. Orange	1.73	1.73	2.14	2.22	0.61	1.24	1.66	1.29
3. Lemon	0.03	0.48	—	—	—	—	—	0.49
4. Papaya	0.37	0.19	0.24	0.24	0.08	0.24	0.19	0.23
5. Arum	3.88	3.83	4.15	2.72	4.07	2.03	3.25	2.71
6. Banana	2.07	2.20	3.78	3.09	2.64	2.76	2.94	2.84
7. Bean	NA	0.37	1.60	0.65	1.40	0.52	0.42	0.70
8. Cabbage	1.01	1.81	2.95	2.43	3.59	4.71	2.63	3.86
9. Cauliflower	0.31	0.13	1.80	0.85	0.54	0.16	0.59	0.30
10. Pea	1.74	1.41	4.46	3.06	3.83	3.64	5.82	5.26
11. Potato	2.00	2.02	1.37	1.55	1.56	1.70	1.74	1.99

Orange and pineapple are major fruits of the State. In order to improve the existing orchards, the orange rejuvenation programme and pineapple package programme were conducted by the Department of Horticulture. Under these programmes, 50 numbers of package programme on pineapple demonstration were conducted and 100 hectares of area were covered for rejuvenation of orange orchards in 1988-89.

Under the marketing programme, the Department is procuring fruits from the growers and after processing them in the departmentally run factory is selling them in the market. During 1988-89, the Department is expected to produce about 250 tonnes of processed products like pineapple slices, fruit squashes, jam, jellies etc. Under the Vegetable Development Programme, the department keeps a target for distribution of 3 tonnes of vegetable seeds of improved varieties to the farmers during 1988-89.

### 2.3 SOIL AND WATER CONSERVATION :

The most important natural resources that we possess are the soil and water resources. Unless measures for management and conservation of soil and water resources are ~~enacted~~ on the basis of the best technologies available, these resources might get rapidly depleted threatening the very survival of man and animal. The programme of soil and water conservation is therefore implemented all over the country for ensuring proper management, maintenance and conservation of the vital resources of soil and water.

In Manipur the soil and water conservation programme is being carried out by two departments viz, Horticulture and Forests. At present, greater stress is given to bench terracing in hill areas. The schemes to be implemented during the 7th Plan Period for soil and water conservation are given below for both of the departments.

Table No 17 : Development schemes, Outlay and Expenditure for Soil and Water Conservation during the 7th Plan  
(Rs. in lakhs)

Scheme	7th Plan	1985-86	1986-87	1987-88	1988-89	
	(1985-90) Agreed Outlay	Actual Exp.	Actual Exp.	Actual Exp.	Approved Outlay	Anticipated Expenditure
1	2	3	4	5	6	7
<b>A - HORTICULTURE</b>						
(i) Direction & Adm.	190.00	24.78	29.35	24.91	40.00	40.00
(ii) Soil Survey and Testing	25.00	5.54	6.30	5.25	7.00	7.00
(iii) Control of Shifting Cultivation	448.00	75.31	71.00	41.75	80.00	80.00
(iv) Pilot Project for water harvesting	12.00	2.00	2.50	3.00	5.00	5.00
Sub-total [(i) to (iv)]	675.00	107.63	109.15	74.91	132.00	132.00
<b>B - FORESTS</b>						
(i) Afforestation	290.00	37.21	48.42	59.73	62.00	62.00
(ii) Rehabilitation of Jhumias	90.00	3.60	6.47	9.67	25.50	25.50
(iii) Soil Survey Unit	5.00	2.00	—	0.44	0.50	0.50
Sub-total [(i) to (iii)]	385.00	42.81	54.89	69.84	88.00	88.00
<b>Grand total (A + B)</b>	<b>1060.00</b>	<b>150.44</b>	<b>164.04</b>	<b>144.75</b>	<b>220.00</b>	<b>220.00</b>

It is evident from the above table that more emphasis is given to the control of shifting cultivation and rehabilitation of Jhumias. Out of the total outlay of the 7th plan period, about 42.26 per cent and 8.49 per cent were earmarked for

control of shifting cultivation and rehabilitation of Jhumias. The expenditure incurred for control of shifting cultivation during the first 3 (three) years of the 7th five year plan were Rs. 75.31 lakhs, Rs. 71.00 lakhs and 41.75 lakhs respectively. A further sum of Rs. 80.00 lakhs is expected to be spent in 1988-89. For rehabilitation of Jhumias, the amount spent in 1985-86, 1986-87 and 1987-88 were Rs. 3.60 lakhs, 6.47 lakhs and 9.67 lakhs respectively. A sum of Rs. 25.50 lakhs is expected to be spent in 1988-89 for rehabilitation of Jhumias.

Soil erosion is a constant menace in hilly terrains of Manipur. One of the main causes of soil erosion is the practice of shifting cultivation. Shifting cultivation which is known as Jhum cultivation is practised in the hill slopes. This method of cultivation is widely practised not only in Manipur but also in the hill areas of the North Eastern region. It is highly land extensive and labour intensive with small capital investment and is considered to be destructive because, large areas under forests are burnt every year for preparation of Jhum fields and thereby causing not only erosion of soil but also ecological disturbance.

According to the results of a special survey conducted in the 31st Round of the National Sample Survey programme (July 76 — June 77) in the North Eastern Region, the percentage of households engaged in Jhum cultivation in Manipur either wholly or with permanent cultivation comes out to be 84.39 per cent of the total cultivator households in the five hill districts of the State. The average size of land per household under Jhum cultivation was worked out to be only 0.99 hectares. The average yield rate of paddy under Jhum cultivation was 1213 kg./hect. as against the State average of 2659 kg/hect. in 1976-77. The percentage of villages adopting measures for preventing soil erosion by the method of terracing, contour bunding etc. was only 12.50.

Under the control of shifting cultivation programme, the Jhumia families are being provided with terraced land for settled cultivation. During 1987-88, 500 Jhumia families were provided with 1,000 hectares of terraced land at the rate of 2 hectares per family for settled cultivation. Further, the Jhumia families were given assistance for plantation.

A central scheme for control of shifting cultivation has also been implemented in 1987-88. The cost of the scheme is Rs. 878 lakhs for five years. The outlay for 1987-88 is Rs. 175 lakhs. The scheme will provide terraced land for settled cultivation to 3,000 Jhumia families.

One N.E.C. scheme of Luwangleima Watershed Management Project has also been implemented in the State during 1987-88, with assistance from the N.E.C. The total cost of the scheme is Rs. 150.50 lakhs which will be shared by the N.E.C. and the State Govt. on 50:50 basis. The amount spent during the year 1987-88 in implementing the scheme was Rs. 12.98 lakhs and the outlay for 1988-89 is Rs. 19.00 lakhs. The objective of the scheme is to bring integrated development of the areas within the Luwangleima Watershed.

## 2.4 VETERINARY & ANIMAL HUSBANDRY :

Animal husbandry has a very significant role to play in the economy as well as public health programmes of a State like Manipur which is predominantly rural. The main beneficiaries of various animal husbandry programmes are the small and marginal farmers. In view of this, new technological inputs into various activities in the animal husbandry sector are ideally suited for bringing about a redistribution of income among different sections of rural population leading to removal of poverty. This will also lead to the generation of gainful employment opportunities.

The primary objective of the animal husbandry development activities is to augment production of animal based products like milk, meat, eggs, wools, hide and skins, etc. In order to ensure a steady increase of production of these commodities, the Department of Veterinary & Animal Husbandry has come forward to provide supportive measures like facilities for animal health ; upgrading of livestock through cross-breeding with improved breeds of livestock both indigenous and exotic ; adequate provision of green fodder and feeds ; and effective extension services.

The budgetary position of the department during the first three years of the 7th plan are indicated below to give an idea of the programmed developmental activities.

Table No. 18 : *Budgetary Position of the Veterinary And Animal Husbandry Department for the period from 1986-87 to 1988-89*

( Rs. in lakhs )

Particulars	Actual 1986-87	Revised Estimates 1987-88			Budget Estimates 1988-89		
		Hill	Valley	Total	Hill	Valley	Total
	2	3	4	5	6	7	8
1. State Plan		27.39	82.11	109.50	42.53	96.97	139.50
2. Centrally sponsored, central plan, sub-plan schemes and NCDC sponsored schemes		0.18	35.65	35.83	0.18	35.65	35.83
3. N.E.C. schemes		29.70	53.50	83.20	12.40	16.75	29.15
4. Non-Plan		109.31	231.47	340.78	114.89	242.14	357.03
<b>Total:</b>	<b>488.43</b>	<b>166.58</b>	<b>402.73</b>	<b>569.31</b>	<b>170.00</b>	<b>391.51</b>	<b>561.51</b>

### 2.4.1 Livestock Wealth :

The main categories of livestock in Manipur are cattle, buffalo, sheep, goat, dog and pigs. However, the bulk of livestock population consists of the first two



and the last but one categories. The following table furnishes the data on livestock population according to the main categories as recorded in the livestock census 1972, 1977, 1984 and 1987.

Table No. 19 : *Categoriwise Livestock and Poultry Population of Manipur State*

Category of Livestock	1972		1977		1984		1987		Percentage increase/decrease in the decade 1977 to 1987
	No. ('000)	P. c. to total live-stock	No. ('000)	P. c. to total live-stock	No. ('000)	P. c. to total live-stock	No. ('000)	P. c. to total live-stock	
1	2	3	4	5	6	7	8	9	10
1. Cattle	305	56.58	533	60.70	747	48.32	770	51.06	(+)44.47
2. Buffalo	61	11.31	94	10.71	138	8.92	141	9.35	(+)50.00
3. Sheep	2	0.37	7	0.80	14	0.91	16	1.06	(+)128.57
4. Goat	16	2.97	34	3.87	42	2.72	44	2.92	(+)29.41
5. Horses/Ponies	1	0.19	1	0.11	1	0.06	1	0.07	-
6. Pigs	144	26.72	176	20.05	368	23.80	383	25.40	(+)117.61
7. Other livestock	10	1.86	33	3.76	236*	15.27	153	10.14	(+)363.64
<b>Total Livestock :</b>	<b>539</b>	<b>100.00</b>	<b>878</b>	<b>100.00</b>	<b>1546</b>	<b>100.00</b>	<b>1508</b>	<b>100.00</b>	<b>(+)71.75</b>
<b>Total Poultry :</b>	<b>1008</b>	<b>-</b>	<b>2745</b>	<b>-</b>	<b>2861</b>	<b>-</b>	<b>3021</b>	<b>-</b>	<b>(+)10.05</b>

\*Excluding Mithun

The total livestock population of Manipur according to the 14th quinquennial livestock census, conducted during 1987 was 15.08 lakhs. According to this census, the major categories of livestock in the State include cattle (7.70 lakhs), buffaloes (1.41 lakhs) and pigs (3.83 lakhs). Cattle constitutes 51.06 per cent, buffaloes 9.35 per cent and pigs 25.40 per cent of the total livestock in 1987. An increase of 71.75 per cent was recorded in total livestock population during the ten years period from 1977 to 1987. In this decade, there was an increase of 44.46 per cent of Cattle population, 50 per cent of buffaloes population and 117.61 per cent of pig population.

As per result of livestock census 1987, the total poultry population of the State was 30.21 lakhs as against 28.61 lakhs in 1984. The increase in poultry population during the decade (1977-1987) accounts for 10.05 per cent.

### 3.4.2 Development Programmes :

The development programmes implemented by the Veterinary and Animal Husbandry Department during the year 1988-89 include (i) animal health and disease control, (ii) cattle development, (iii) piggery development, (iv) goat development, (v) poultry

development, (vi) fodder and feed development, (vii) dairy development and (viii) veterinary education. Apart from the State Development Programme, 6 Centrally Sponsored Schemes are also implemented during the year under report. The schemes are (a) Special Livestock Production (b) Rinderpest eradication scheme (c) Control of foot and mouth disease (d) Sample Survey for estimation of milk, meat and wool, (e) Systematic control of Livestock disease and (f) Animal's disease surveillance. Over and above this, S.N.E.C. schemes viz. (i) Regional buffalo breeding project, (ii) Regional poultry development project (iii) Regional composite Livestock farm and (iv) Regional pig breeding centre are also being implemented.

#### 2.4.3 Animal Health and Disease Control :

To keep livestock and poultry healthy and also to protect them from a number of highly epidemic diseases, the department has formed a net-work of veterinary services such as Hospitals, Dispensaries and Veterinary Aid Centers throughout the State for treatment and control of diseases. By the end of December, 1987, there were 49 Veterinary Hospitals, 93 Veterinary Dispensaries, 29 Veterinary Aid Centres, 3 Check Posts, 1 State level Disease Investigation Laboratory and 2 State Level Mobile Veterinary Clinics. The extent of work done by these institutions as on 31st January 1989 is given below :

Table No. 20 : Achievements made under Animal Health and Disease Control Programme, (as on 31.1.89)

Sl. No.	Item	No.
1	2	3
1.	Cattle treated	3,68,000
2.	Total Vaccination performed	96,031
2.1	Vaccination performed against Rinderpest	15,571
2.2	Vaccination performed against other diseases	80,460
3.	Number of birds vaccinated	3,15,200
4.	Major operations performed	198
5.	Minor operations performed	2,278

Source : Veterinary & Animal Husbandry Deptt.

Under Animal Health Programme, a strong initiative has been taken up to control zoonotic diseases like rabies, Japanese Encephalitis, salmonellosis etc. which may cause serious health hazards to the public.

#### 2.4.4 Cattle Development :

The proportion of cattle of indigenous breed is quite considerable accounting for 91.50 per cent of the total cattle population and 46.71 per cent of the total livestock of the State. Emphasis was therefore given to two important schemes, viz. Intensive Cattle Development Project and Frozen Semen Scheme.

#### 2.4.5. Intensive Cattle Development Projects ( I. C. D. P. ) :

The object of the project is to upgrade the indigenous breed of cattle mainly for increasing milk production and for improving draught capacity of the indigenous bullock by introducing exotic germplasm through mass cross-breeding programme. Jersey breed is found to be most suitable for milk production in the State and Red Sindhi is used for the dual purpose of milk production and work. There were 4 Regional Artificial Insemination Centres, one Main Semen Collection Centre at Imphal & 91 (nintyone) I.C.D.P. sub-centres in the State. During 1988-89, 8840 animals were inseminated.

#### 2.4.6. Frozen Semen scheme :

With a view to further boosting the work of cross breeding steps are taken up to introduce frozen semen technique in the State. Under this scheme, advance technology will be used in processing and preservation of semen to carry out effective artificial insemination with wider scope. As a part of the programme, one Liquid Nitrogen Plant has recently been procured. During the 7th plan period, installation of one Liquid Nitrogen Plant each at Kakching and Kangpokpi and establishment of six semen depots are also targeted.

#### 2.4.7. Piggery Development :

Pig-rearing is such an occupation that a farmer can earn easy cash within a short period. With the efforts of the department, now farmers have gained interests in rearing exotic types of pigs like Yorkshire, Landrace, Berkshire etc. which are much more productive.

There are 3 piggery farms for production of improved piglets at Torburg of Churachandpur district, Tarungpokpi of Bishnupur district and Senapati. One central pig breeding centre is being opened at Kautruk and 3 more district farms will also be opened shortly. Special attention has been given in the tribal inhabited areas as piggery plays an important role in the economic development of the tribals.

Out of the agreed outlay of Rs. 47.00 lakhs of the 7th plan period, Rs. 8.55 lakhs were spent in 1987-88 under piggery development programme and another amount of Rs. 13.75 lakhs is anticipated to be spent in 1988-89.

#### 2.4.8 Poultry Development :

Poultry rearing provides avenues for self-employment to both the educated and the uneducated persons. The potential of the poultry farming for augmenting the income has been recognised by the National Commission on Agriculture. However the results of

The 30th round of NSS (1975-76) indicate that poultry farming has not been taken up as business proposition by most of the households and therefore it has made little impact on the entrepreneurial activities either in the rural or the urban sector of Manipur State. Some of the findings of the 30th round of NSS are given below:

**Table No. 2 : Some important characteristics of the household poultry enterprises in Manipur as compared to those of All-India according to Central Sample results of the 30th round of NSS**

Item	Rural		Urban	
	Manipur	All-India	Manipur	All-India
1	2	3	4	5
1. Percentage of poultry enterprise households to all households	1.62	0.91	0.97	0.10
2. Percentage of households having poultry as principal occupation to all poultry enterprise households	Nil	5.63	2.86	11.53
3. Average value of assets (in Rs.) per enterprise households	95.00	432.00	203.00	1640.00
4. Average number of fowls per enterprise households	26.56	47.77	35.98	93.99
5. Average number of ducks per enterprise households	1.08	4.11	4.33	3.28
6. Average number of hen eggs produced per enterprise households	4.60	52.80	14.56	198.96
7. Average number of duck eggs produced per enterprise households	0.34	6.02	Nil	1.85
8. Average Expenditure (in Rs.) on poultry feed per month per enterprise households	17.24	65.03	26.21	205.47

It is evident from the above table that poultry enterprise was not pursued as principal occupation in the recent past in Manipur. It was rather at a nominal scale of operation.

The Department of Veterinary and Animal Husbandry Services, Manipur has made considerable efforts for upgrading the local and unproductive varieties of poultry. During 1988-89, one State Level Poultry Farm at Mantripukhri and 3 District Level Poultry Farms

have been working for producing improved chickens and making them available to the farmers. One Broiler Chicken Production-cum-Demonstration Sub-station was also established at Perompat Hospital under the aegis of N. E. C. The sub-station was started with 500 parent stocks but subsequently it had been increased to 1500. The Duck Farm at Ihangachingjin had also started rearing Khaki Campbell ducks for producing cross-breed ducklings for distribution to farmers. The capacity of the farm will be increased to 2000 during the 7th plan period.

#### 2.4.9 Fodder & Feed Development :

At present, there are two Fodder Farms of Veterinary Department, Manipur, one at Lampbel and other at Ngaikhong. Besides production of about 15 M.T. of fodder seedling during the year 1988-89; treatment of paddy straw for increasing digestibility and nutrient content was also taken up at these farms. 2845 kgs. of certified fodder seeds were distributed to the farmers during the current year under Fodder mini-kit Programme. As in the previous year, the campaign "Grow more Fodder" was also successfully carried out during the year 1988-89.

The Feed Mixing Plant at Perompat not only produces enough balanced feed for the Government farms but also for the beneficiaries under various livestock and poultry schemes. One Feed Analytical Laboratory is also attached with this plant for analysis of different feed ingredients for production of qualitatively balanced ration for livestock and poultry.

#### 2.4.10 Dairy Development :

The average number of milch animals per household in Manipur State was worked out to be 0.27 as against the all-India average of 0.66 according to the survey results of the 30th round (1975-76) of NSS. Average daily milk yield of the State per animal in milk was estimated to be 1.37 litres as against the all-India average of 1.72 litres. Again, the average daily milk yield per animal in milk in the hill areas was found to be 1.22 litres as against 1.47 litres in the plain areas of the State. The quantity of milk consumed in fluid form in the State in 1988-89 was estimated to be 37,303 tonnes.

The objective of the Dairy Development Scheme is to increase the State's milk production through the active participation of the farmers. The Veterinary and Animal Husbandry Department had taken up a number of schemes for increasing milk production. Out of the agreed outlay of Rs. 80.00 lakhs, a sum of Rs. 21.00 lakhs was spent during 1987-88 and another sum of Rs. 30.00 lakhs is expected to be spent during 1988-89.

Milk Plant at Porompat, under the Imphal Milk Supply Scheme, is procuring about 1,000 litres of milk daily for processing and distribution to the consumers. 12 milk booths have been opened at various points of the city for distribution of milk to the consumers of Imphal city. Two milk chilling plants have been commissioned under the Rural Dairy Scheme. These are located at Kangpokpi and Moirang. Two more chilling plants will be opened at Sekmaiijin and Litan. After full operation of these plants, the milk flow at Imphal will be increased considerably.

For further development of dairy, steps are taken up for implementation of two projects viz. (i) Operation Flood III Project which will be financed by the World Bank & EEC through the National Dairy Development Board and (ii) Integrated Dairy Development Project which will be financed by NABARD.

#### 2.4.11 Veterinary Education :

Under this programme, the department has sponsored a number of candidates for fresh and in-service training at the institutions outside the State in different disciplines of veterinary, animal husbandry and dairying. During the year 1988-89, 18 fresh candidates were sent for undergoing B. V. Sc. & A. H. and B. Sc. (DT) courses and 7 in-service candidates for undergoing M. V. Sc. and Ph. D. The department is also imparting Veterinary Field Assistants Training to candidates having aptitude for livestock farming. During the year under report, the department selected more than 100 fresh candidates for undergoing VFA Training at Porompat, Imphal. After completion of the training, they will be able to take up self-employment schemes in livestock and poultry keeping. Further a training on livestock and poultry rearing was imparted to 160 farmers during the year.

## 2.5 FORESTS

Manipur is one of the richest States in India so far as its flora and fauna are concerned. Forests cover an area of 15,134 sq. km. which forms 67.87 per cent of the total geographical area of the State. Forestry and logging sector contributes Rs. 610.53 lakhs to the State's Domestic Product at current prices in 1987-88 (Q) as against Rs. 496.83 lakhs in 1985-86. Its contribution to the State's revenue is Rs. 74.00 lakhs (RE.) in 1987-88 as against Rs. 67.43 lakhs in 1985-86 and Rs. 73.71 lakhs in 1986-87.

In spite of its smallness in size, the State's vegetation is rich and varied in character. This is because of the different climatic conditions found in the State and its peculiar physiography. The forest area of the State falls into four distinct zones, viz. (1) Burma border forests, (2) Ukhrul pine forests, (3) forests overlooking the valley and (4) Barak Drainage forests. The Burma border forests lie along the Indo-Burma border. The Kabaw Valley marks the eastern boundary of these forests. The Ukhrul pine forests are scattered almost all over the hills of Ukhrul district. The forests overlooking the valley are scattered all over the hills surrounding the valley area. The Barak Drainage forests are situated in the hills of the west of the valley area, along the coast of the Barak river and its tributaries, viz. Jiri, Tuivai, Leimatak and Makru.

Some of the most commonly found trees in these forests are noted below:

*Albizzia* Spp (Khok), *Artocarpus Hirsuta* (Heirukokthong), *Aquilaria Agallocha* (Agor), *Salmulia Malaburica* (Tera), *Eugenia Praecox* (Seleima), *Castanopsis* Spp (Sahi), *Mesua Ferrea* (Uthau), *Mangifera Indica* (Heinou), *Phoebe Hainesia* (Uningthou), *Albizzia lebbek* (Uyil) and *Shima Wallichii* (Usoi). The terms in the brackets are local (Manipuri) names.

Area under forests includes all lands classed as forests under any legal enactment dealing with forests or administered as forests whether State owned or private and whether wooded or maintained as potential forests land. The area of crops raised in the forests and grazing lands or area open for grazing within the forests are generally included under the forests area. The following table shows the classification of area under forests in Manipur.

Table No. 22 : Classification of area under Forests as on 1-1-1989

Classification by	Area in sq. km.	Percentage to total forest area
1	2	3
<b>A - OWNERSHIP</b>		
(i) State Forest Department	15,154	100.0
(ii) Others	Nil	—
(iii) Total :	15,154	100.00
<b>B - LEGAL STATUS</b>		
(i) Reserved forests	1,377	9.09
(ii) Protected forests	4,171	27.52
(iii) Unclassed forests	9,606	63.39
(iv) Total :	15,154	100.00
<b>C - COMPOSITION</b>		
(i) Coniferous forests	2,442	16.11
(ii) Non-coniferous (broad leaved) forests	9,444	62.32
(iii) Pure bamboo brakes	3,268	21.57
(iv) Total :	15,154	100.00
<b>D - FUNCTION</b>		
(i) Production forests	3,415	22.54
(ii) Under exploitation forests	4,118	27.17
(iii) Potentially exploitable forests	7,621	50.29
(iv) Total :	15,154	100.00
<b>E - VEGETATION</b>		
(i) Wet temperate forests	1,451	9.57
(ii) Pine forests	2,443	16.12
(iii) Wet hill forests	6,590	43.49
(iv) Semi-evergreen forests	645	4.26
(v) Teak gurjan forests	611	4.03
(vi) Bamboo brakes	3,268	21.57
(vii) Grassy blanks	146	0.96
(viii) Total :	15,154	100.00



It is observed from the above table that the whole of the forest area in Manipur is under the ownership of State Forest Department. According to legal status, 63.39 per cent of the total forest area falls under the category of "Unclassed Forests." By composition, the forests in Manipur are mostly of non-coniferous type constituting about 62.32 per cent of the total forest area. From functional classification, it is seen that about fifty per cent of the total forest area is "Potentially Exploitable Forests."

### 2.5.1 Forest Production :

Extraction of forest products necessitates conservation, protection and generation of the forest wealth. The extraction during 1986-87 was 51.0 thousand cubic metres with 4.6 thousand cubic metres of timber, 35.1 thousand cubic metres of firewood and 17.3 thousand cubic metres of roundwood. The out-turn and value of major and minor forest products are shown in the following table :

**Table No. 23 :** *Out-turn and Value of major and minor forest products for period from 1980-81 to 1986-87*  
(Quantity in '000 cubic metres and value in '000 rupees)

Item	Quantity	1980-81	1982-83	1983-84	1984-85	1985-86	1986-87
	Value				(P)	(P)	(P)
1	2	3	4	5	6	7	8
1. Timber	Quantity	4.0	3.4	7.8	8.7	5.7	4.6
	Value	227.3	864.5	1481.9	2764.3	1158.1	777.6
2. Fuel	Quantity	58.6	43.0	78.6	54.9	56.9	35.1
	Value	261.2	502.2	507.5	377.4	661.8	504.4
3. Round wood	Quantity	10.3	17.3	21.1	12.3	16.2	11.3
	Value	747.7	1311.4	1524.1	1350.0	2390.7	3105.4
A - Total Major Products (1+2+3)	Quantity	72.9	63.7	107.5	75.9	78.8	51.0
	Value	1236.2	2677.9	3513.5	4491.7	4210.6	4387.4
4. Bamboo & cane	Value	144.3	123.7	88.9*	43.4*	155.9*	324.5
5. Grass other than fodder	"	6.8	15.9	—	—	—	—
6. Incense & perfume	"	16.4	—	—	—	—	—
7. Others	"	1452.4	1948.4	1938.9	1906.6	2160.0	1780.4
B - Total Minor Products (4+5+6+7)	"	1664.9	2088.0	2027.8	1950.0	2315.9	2104.9
Grand Total (A+B)	"	2901.1	4765.3	5541.3	6441.7	6526.5	6492.3

\* Bamboo only ;

(P) - Provisional.

Source : Chief Conservator of Forests,  
Government of Manipur.

## 2.5.2 Development Programmes :

During the year 1988-89, the Department implemented altogether 24 development schemes. The financial position of the development programmes during the 7th Five Year Plan period are given below :

Table No. 24.: *Outlay and Expenditure during the 7th Plan period*  
(Rs. in lakhs)

Particulars	7th Plan	1985-86	1986-87	1987-88	1988-89	
	(1985-90) Agreed Outlay	Actual Expen- diture	Actual Expen- diture	Actual Expen- diture	Approved Outlay	Anti- cipated Expen- diture
1	2	3	4	5	6	7
1. Direction & Administration	95.00	16.31	17.61	14.90	18.50	18.50
2. Research & Training	55.00	5.87	7.61	7.04	11.40	11.40
3. Forest Conservation & Development	90.00	4.09	5.71	7.97	18.55	18.55
4. Survey of forest resources	16.00	1.09	1.63	1.70	3.00	3.00
5. Plantation schemes including social forestry	720.00	85.37	105.98	135.84	225.85	225.85
6. Forest production utilisation	145.00	13.85	15.70	15.38	26.80	26.80
7. Communication & Building	85.00	15.57	13.67	14.85	23.00	23.00
8. Publicity & Extension	30.00	1.27	1.50	3.30	4.50	4.50
9. Statistics & Planning	15.00	1.12	0.60	0.93	1.90	1.90
10. Environmental forestry and wildlife	190.00	20.13	19.92	24.01	37.50	37.50
<b>Total :</b>	<b>1441.00</b>	<b>164.67</b>	<b>189.93</b>	<b>225.92</b>	<b>371.00</b>	<b>371.00</b>

From the above table it is evident that more emphasis has been given to the plantation schemes during the 7th Plan period. About 50 per cent of the agreed plan outlay was earmarked for plantation schemes. Out of the agreed outlay of Rs. 1441.00 lakhs of the 7th Plan period, Rs. 164.67 lakhs, Rs. 189.93 lakhs and Rs. 225.92 lakhs were spent in 1985-86, 1986-87 and 1987-88 respectively. A sum of Rs. 371.00 lakhs is expected to be spent in 1988-89.

## 2.6 FISHERIES :

Fish is the main food item of the majority of the people in the State, particularly the Meiteis who are mainly concentrated in the valley. Fishing industry contributes about 2 per cent of the total State Domestic Product of the State. The State has no marine fisheries. Although there is a large potential for developing inland fishing, the total requirement of fish far exceeds its indigenous production and therefore large quantities of fish are being imported from outside the State every year.

The growth of fish production during the plan period is shown in the table given below :

Table No. 25 : Growth of fish production in Manipur

Year	Fish seed Farm (No.)	Production of fish (in tonnes)	Estimated Consumption requirement (in tonnes)
1	2	3	4
1960-61	4	511	4,100
1965-66	4	1,260	4,800
1974-75	7	1,500	6,400
1977-78	9	2,250	7,000
1980-81	9	3,250	7,600
1981-82	9	3,450	7,700
1982-83	14	4,000	7,900
1983-84	14	4,500	8,100
1984-85	14	5,000	8,400
1985-86	14	5,500	8,600
1986-87	14	6,000	8,800
1987-88	14	6,500	9,000
1988-89	14	7,000	9,200

Note : Figures in col. 3 are crude estimates of fish production prepared by the Directorate of Fisheries whereas those in col. 4 are based on the consumption estimates obtained from the 32nd Round of the NSS.

Efforts were made during the Fourth Five Year Plan period to increase fish production by taking up, inter alia, schemes for production and distribution of fish fingerlings to interested pisciculturists; establishment of commercial fish farm under Govt. Carp culture in Cages in running water was also experimented and the Waithon Fishery Farm was opened.

During the fifth five year plan period (1974-78) efforts were made to increase production of fish, particularly in the private sector. During the period, a sum of Rs. 86.31 lakhs was spent and the level of fish production reached 2,250 tonnes in (1977-78).

During the 6th Five Year Plan period (1980-85), ambitious programmes were taken up with a provision of Rs. 250 lakhs. A number of Fish Seed Farms were set up and a number of fingerlings were also distributed. By the end of the 6th Five Year Plan, the level of production reached 5,000 tonnes as against the estimated consumption of about 8,400 tonnes. The production for 1987-88 was 6,500 tonnes as against the estimated consumption requirement of 9,000 tonnes. In order to make up this big gap, 15 fisheries schemes were taken up during the 6th Five Year Plan period while 23 fisheries schemes were also taken up during the 7th plan period to motivate the people to take up fish culture by giving them technical guidance and financial assistance and supplying improved varieties of fish seeds, imparting fishery training etc. Action was taken to reclaim swampy areas and to develop natural fisheries through Co-operatives. The NEC also sanctioned some schemes. Under the centrally sponsored schemes, three FFDA's were taken up in Imphal, Bishnupur and Churachandpur Districts.

The total water area in Manipur is estimated at one lakh hectares of which 20,000 hectares were surveyed. During the 7th Plan period, it is proposed to cover another 40,000 hectares of water area under survey and to put an additional 20,000 hectares of water area under fish culture. The targeted fish seed production of 20 millions during 1985-86 and 22 millions during 1986-87 was achieved. The requirement of fish seed by the end of the 7th Plan is estimated at 50 millions fish fry and 50 millions fish fingerlings. During 1987-88, 26.0 millions of fish seed have been produced from the public and private sectors against the target of 25.00 millions. During 1988-89, 24 millions of fish seeds had already been produced by the end of September 1988 and it is targeted to produce 30 millions during 1988-89. As usual, financial assistance in cash or kind will be given to enable interested pisciculturists to develop their ponds/farms. By the end of the 6th Plan, the total number of beneficiaries was 3,700. During 1987-88, another 761 fish farmers were benefited under the programme. So far, more than 15,000 hectares of water area have been brought under fish culture.

Upto the end of sixth Plan period, stress was given to Indian Major Carps and exotic carps for introduction in the pisciculturable waters. During the 7th Plan, popular indigenous species will be propagated and developed. Action has already been taken in the case of Pengba (Rohtee SP) which is successfully bred in the confined water for propagation and culture purposes. The N.E.C. has also approved a scheme on the production of this particular species, viz. "Pengba" and another scheme for opening of Regional Carp Seed Farm during 1986-87. Seeds of "Pengba" have been successfully propagated and made available to the fish farmers at the Government approved rates during 1987-88 and also seeds of eel (Ngapurum) has been successfully propagated at Fisheries Research Centre at Khundrakpam.

Fishing from natural stock which is known as capture fisheries has so far been left untouched during the 6th Plan period. There are 405 recognised natural fisheries out of which only 113 are worth the name. The remaining 292 are more or less defunct for want of proper care. These natural fisheries will be taken up for development during the 7th plan for production of more table-fish and more revenue. 24 such natural fisheries have been diverted from the Revenue Department to the Fisheries Department and necessary action for developing the same fisheries through pisciculture Co-op. Societies on long term lease basis for ten years under NABARD and NCDC programmes has been taken up. Some of the remaining fisheries will be divested for pisciculture development during 1987-88. Fish Farmers/Fishermen, Fishermen Co-op. Societies etc. are given loans and grants tied up with NABARD and NCDC programmes. The NABARD has released a sum of Rs. 2.06 crores for financing fishery schemes for 1987-88 and 1988-89. 881 fish farmers, fishermen have been selected and recommended to the Government for release of 10% margin money of the scheme amounting to Rs. 12.00 lakhs during 1987-88.

During 1986-87, the Fishery Department implemented 23 schemes. Under Fishery Extension scheme, (i) demonstration ponds were constructed at Wathou and Takmu areas (ii) fish-farmers were assisted technically at field level and (iii) survey of water areas and techno-economic survey of fishermen were also taken up. The Research unit at Khundrakpam took up the study on the cultural possibility of a few local indigenous species, like "Pengba" (Rohtee SP), "Ngakra" (Carassius auratus), Ngaton, Ngsprung, etc. Under the scheme of Development of Reservoir and Canal Fisheries, Khoupum reservoirs in the Tamenglong District, Kutikhong in Jiribam Sub-Division, Irrigation canals, rivers, etc. were stocked with improved varieties of advanced fingerlings. Fish fingerlings of improved varieties were also made available at the Government approved rates. A Mobile Hypophysation unit started functioning and department extended materials and technical help in the induced breeding of fish to 30 private fish farms during 1988-89 under the F.I.D.A. programme, culture of giant fresh water prawn was started at Patchao, Jiribam during 1987-88. During 1988-89, under the N.E.C. scheme, 13 in-service candidates have been deputed to undergo fisheries training at different institutions of Central Institution of Fisheries Education, Bombay.

Under the scheme of "Preservation and Development of Natural Fisheries", 150 hectares of aquatic weed infested areas were cleared at Wathou and Takmu areas during 1987-88. Registration of Fisheries Development Corporation was also made. The Fish Farmers' Development Agencies at Imphal, Bishnupur and Churachandpur are continuing to function for giving financial and technical assistance to fish farmers. Under the Fish Seed Bank Scheme, fish seeds are made available on credit basis to the piscicultural organisations and individual fish farmers etc. for stocking in their ponds and farms. So far 617 Piscicultural organisations (Nupi Ngayok Marup) have been

organised to utilise all fallow home stead ponds. A cold water fish farm at Molhol Sanapati District is being constructed during 1988-89 for development of cold water fisheries in the State. Fish-cum-Sigheda and Fish-cum-Makhana was taken up at Takmu. Construction of ponds of producing indigenous fish seed at Waithou was completed. Under the establishment of Fishery Estate, 74 ponds of 1 hect. unit have been completed and small schemes were implemented at Waithou as a fisheries complex. One departmental fish stall is functioning on monthly basis at which table fish are made available at Govt. approved rates.

Fisheries education which is very much essential for the fishermen/pisciculturists in particular and the people in general is imparted through extension programme as well as Inland Fisheries Operative Training Unit at Lamphelpat which is the only institute of its kind in the N.E. Region. During 1988-89 in-service training of 10 months' duration was given to 61 candidates.

The scheduled tribes and scheduled castes population numbering 3,87,977 and 17,753 respectively (according to 1981 census) are provided proper facilities for taking up pisciculture to enable them to cross the poverty line. Cage culture which is already successfully experimented at Loktak Lake will also be popularised to a greater extent so that the people, particularly the educated and the uneducated unemployed as well as under-employed section of the population of the State may be self-employed through fish-culture. Fish-cum-poultry, Fish-cum-Duckery, Fish-cum-paddy and Fish-cum Horticulture have been taken up at different district fish farms. Production of Larvaecidal fish has been started under the establishment of Public Health Fish Farm.

Under the Group Insurance Scheme, 372 fishermen have so far been insured and another 300 fishermen are being insured during 1988-89

The approved outlay for the 7th plan (1985-90) is Rs. 465.00 lakhs. Out of which a sum of Rs. 81.56 lakhs, Rs.99.58 lakhs and Rs. 99.59 lakhs were spent during 1985-86, 1986-87 and 1987-88 respectively. A sum of Re. 1.73 lakhs has so far been collected as revenue during 1988-89 as against Rs. 1.19 lakhs in 1987-88. The anticipated expenditure for 1988-89 is Rs. 105 lakhs.

## 3—INDUSTRY AND MINING

### 3.1 INDUSTRIES :

Although Manipur continues to be one of the industrially backward States in the country to-day, because of its chronic infrastructural constraints, the Government of Manipur has been making persistent efforts for a rapid industrialisation of the State. Before the beginning of the Five Year Plans, there was hardly any industry except handloom weaving. Of the total investments of Rs. 102.56 lakhs, Rs. 593.93 lakhs and Rs. 1281.38 lakhs in the first three Five Year Plans, only Rs. 0.68 lakhs, Rs. 10.08 lakhs and Rs. 35.28 lakhs respectively were spent for the development of industries. The share of industries in these plans represented 0.66 per cent, 2.02 per cent and 2.75 per cent respectively. A concerted effort was made for the development of industries in Manipur towards the beginning of the Fourth Five Year Plan. The plan investment for "Industry" during the 4th, 5th and 6th Plan Periods accounted for 6.94 per cent, 7.13 per cent and 5.56 per cent respectively of the total plan investments. The plan allotment for the Seventh Five Year Plan amounts to 5.60 per cent. The new industries worth mentioning are a Khandsari Sugar Factory set up during the 4th plan period and a Spinning Mill set up during the 5th Plan period. The projects taken up during the year 1986-87 under Large and Medium Industries are Manipur Sugar Mill and Distillery Plant, expansion of Manipur Spinning Mill, Starch and Glucose Factory, Manipur Electronics, Bamboo-Chipping Plant and Mechanised Brick Manufacturing Unit. The Manipur Cycle Corporation and the State Financial Industrial Development Corporation Ltd. were also started with the State patronage. Other important Projects which are in process of finalisation are Vansupati Ghee Manufacturing, Acrylic yarn Manufacturing unit, Drug Formulation unit, Mechanised Dye-House, Ginger-De-Hydration plant, Central Institute of Plastic Engineering & tools (CIPET). A 50 TPD cement project at Handung was commissioned during 1986-87, and the project is expected to go into trial production shortly. The highlight of the activities of some of the industries in Manipur are as follows :

#### 3.1.1 Khandsari Sugar Factory :

The Khandsari Sugar Factory at Khangabok was started in the year 1973 with an installed crushing capacity of 60 tonnes per day. The actual cane received by the Factory during the year 1986-87 was 10,000 quintals against 4,200 quintals in 1985-86. The sugar Factory collected a revenue of Rs. 13.44 lakhs till the end of March 1987 as sale proceeds. 600 quintals of sugar was produced during 1986-87 against 288

quintals during 1985-86. The procurement price of sugarcane has been revised from Rs. 16.00 per quintal to Rs. 19.50 at Factory gate and Rs. 18.00 per quintal at the procurement centres at Kalching Lamkhai of Thoubat District, Yumnam Khunou and Kwakta of Bishnupur District. The expected production during the year 1987-88 is 1,200 quintals of Sugar. 100 acres of land have been brought under sugarcane during the year, 1987-88.

### 3.1.2 Manipur Spinning Mills Corporation Ltd.

The Manipur Spinning Mills Corporation Ltd. started commercial production from 1st April, 1985 with 13,392 spindles capacity. The project cost according to the updated project report is Rs 11.75 crores. The number of spindles at full capacity will be 25,488. The installed capacity by the end of 1986-87 was 16,416 spindles. The mill produced 4.85 lakh kgs. of yarn with sales turn over of Rs. 1.19 crore in 1986-87 against 2.78 lakh kgs. of yarn produced during 1985-86 with sale turn over Rs. 95.84 lakhs showing an increase of 72.5 per cent in production and 4.3 per cent in sale proceeds over the previous year.

The Corporation purchased, 1,886 bales of different varieties of Cotton amounting to Rs. 64.75 lakhs during the year 1987-88. The mill is running 3 shifts with 26 working days in a month. The mill produced 57,836 kgs. of yarn during the period April-December 1987 and Mill sales turn over amounting to Rs. 75,133,90/-. The erection of separate 11 kv line of 7.5 km. length from Laimakhong to Spinning Mill at Lontangkhumou was completed by June 1987. Moreover, Corporation has two captive generator of 144 kv capacity each to supplement the power requirement during the load shedding.

The Corporation will be extending its activity into the area of Acrylic Yarn production for which Project Report has been prepared by the NIDC. It will be set up with an installed capacity of 2,400 spindles and production capacity of 6,000 tonnes per annum.

Marketing of the products are being carried out through Manipur Handloom and Handicrafts Development Corporation, Manipur Development Society, District Industries Centres, Apex Co-operative Societies Ltd, besides local trader/yarn merchants and industrial weavers.

### 3.1.3 Manipur Electronics Development Corporation Ltd. (MANITRON) :

The Manipur Electronics which was formerly a production unit of electronic goods under MANIDCO came into existence as a full fledged Corporation from the 1st July 1987. So far, the unit has taken up production of various electronic goods, such as



2-band Radio sets, 51 cm black and white TV sets & 51 cm colour TV sets. The production range has been expanded further in the 36 cm black and white (portable) TV sets and 51 cm colour TV (Economy model) in collaboration with Electronics Trade and Development Technology. 30 sets of 51 cm colour TV (Economy model) have already been marketed under "SANGAL ET & I" Brand name. The Planning Commission has approved an outlay of Rs. 3.00 crores for development of electronics during the Seventh Five year Plan. The Electronics Corporation sets on for rapid development of electronics in the State and will also create avenues for employment of a large number of highly skilled engineers and technicians in the State.

An estimated turn over for the current year is Rs. 1.5 crores. The corporation is also executing a project for installation and maintenance of Community Viewing sets for Doordarshan in the N.E. region for duration of 5 years from 1989 to 1994 which will provide direct employment to 20 persons including 2 (two) Engineers and 10 Technicians. The corporation is also planning to set up a unit for the equipment and paging service in the Joint sector with M/S Usha Rectifier Ltd. with an estimated cost of Rs. 3 crores. The First Phase of the Unit which is expected to be commissioned during the year 1989-90 for manufacture of Duplex Communication sets (For use of DOI, Police, Railways, Defence, etc.) About 100 persons will get employment when it is fully established. 20 acres of land is being allotted at Luwangangbam by the State Government for establishment of the electronic complex and Government of India has also already agreed in principle to the setting up of this complex.

### 3.1.4 Manipur Sugar Mills Ltd. Kabowakbung :

The project was incorporated on 29.4.87. The estimated cost of the project is Rs. 11.80 crores, out of which the contribution of the State Government towards share capital will be Rs. 5.50 crores. The project will provide direct employment to about 580 persons and indirect employment to more than 10,000 persons. Further, the unit will contribute to the establishment of a distillery plant in the State. During the period 1988-89 (April-Dec. 1988), a sum of Rs. 33.00 lakhs was released to the Corporation for implementation of the project. Rs. 605.00 lakhs has been sanctioned by IDBI, but the fund will be released after getting 50% of the State share capital.

### 3.1.5 Cement Project, Hundung :

The 50 tonnes-per-day Cement Project at Hundung is in the process of implementation. The trial run has already been made in October, 1987. The Project costing Rs. 3.40 crores is sponsored by the North Eastern Council which will bear a share of Rs. 2.06 crores. The Manipur Cement Ltd. has been incorporated on 10.5.88 to manage the Cement Plant at Hundung, Ukhrul district,

### 3.1.6 Manipur Cycle Corporation :

The Manipur Cycle Corporation was incorporated as a Public Limited Company on 28th June, 1985 with an authorised capital of Rs. 100 crores with the objective of taking up assembling and manufacturing of low priced bicycle in the interest of the common people of the State. The company assembled 1,187 bicycles in collaboration with the Cycle Corporation of India Ltd. during 1986-87 and a sum of Rs. 4.00 lakhs was received as sales proceeds. The corporation is likely to produce 100 bicycle per working day and 30,000 bicycles annually under the brand name, "Sangai". During April to Dec. 1988 the corporation manufactured 30 numbers of bicycles. After completion, the project shall generate direct employment to 100 persons and indirect employment to 1,000 persons.

### 3.1.7 Bamboo Chipping Plant :

The Bamboo Chipping Plant will be started under the overall supervision of Manipur Industrial Development Corporation Ltd. and M/S Hindustan Paper Corporation Ltd. Calcutta as turn-key consultant. The plant is located at Kadamtala, Jiribam. The Planning Commission has approved an outlay of Rs. 1.2 crores for the project during the Seventh Five Year Plan. A Transformer of 63 KVA was installed at factory site. Major machinery has already started arriving at the project site. The project shall provide direct employment to 60 persons and 2,000 persons indirectly.

### 3.1.8 Mechanised Dye House :

A Mechanised Dye House which is a project under the Central Sector Scheme of the Ministry of Textiles with a project cost of Rs. 74.00 lakhs was set up and commissioned on 29-6-87 by the Manipur Handloom & Handicrafts Development Corporation Ltd. The installed capacity is 220 MT dyed/bleached/mercerised yarn per annum ( 733kg. of yarn i.e. 163 bundles per day ) in single shift. Soon the corporation will be in a position to cater to the needs of the neighbouring States also. This Mechanised Dye House at Iroisemba is the second of its kind in the whole of North Eastern Region.

### 3.1.9 Hill Area Handloom Development Project :

The Hill Area Handloom Development Project for the development of individual weavers in the hill areas was sanctioned by the Government of India during the last part of 1986-87. It is the second project in the country after the one in Uttar Pradesh. The cost of the project is Rs. 2.12 crores. Implementation of the programme was entrusted to the Manipur Handloom & Handicrafts Development Corporation Ltd. A sum of Rs. 10.00 lakhs was sanctioned as Central Share and Rs. 2.00 lakhs

as State Share during 1986-87 for implementation of the project. Rs. 8.00 lakhs has been sanctioned during this year 1988-89 ( April to December 1988 ) as State Share and another Rs. 14.00 lakhs is being sanctioned by the State during the year as State matching share. The Central Government may sanction Rs. 22.00 lakhs during the year as their share. Already, 5 training cum demonstration centres have been opened one each at Hill district headquarters of Manipur viz., Senapati, Ukhrul, Chandel, Churachandpur & Tamenglong.

### 3.1.10 Starch & Glucose Factory :

The Starch & Glucose Factory will be set up at Nilakuthi, Imphal District with an installed capacity of 60 tonnes per day. The raw material will be maize which is produced abundantly in Manipur. The project cost is likely to be Rs. 8.50 crores. The Government is looking for a suitable entrepreneur of taking up the project either in private sector or in joint sector. The project when completed will provide direct employment to about 298 persons and indirect employment to about 1500 persons.

Other important projects which are likely to come up soon are Mechanised Brick Manufacturing Plant, Ginger De-hydration Plant, Centre for Electronics Design & Technology (CEDT), Industrial Growth Centres, etc. The Vanaspati Ghee Project and the Drug formulation unit are being set up at Nilakuthi. An extension centre of Central Institute of Plastic Engineering and Technology (CIPET) has already been opened at Imphal.

### 3.1.11. 20-Point Programme :

Progress in implementing 20-Point programme in industrial sector has been commendable. Against the annual target of setting up of 700 Small Scale Industrial Units, 515 units were established during April to December, 1988 (1988-89). The annual production value of the units are estimated at Rs. 723.27 lakhs against the annual production target of Rs. 400.00 lakhs. The investment on those units are Rs 512.47 lakhs and 2830 persons are employed in these industrial units.

The fact that the Government of Manipur through its persistent efforts has been able to create a climate conducive to the development of the industry in the State, the fact can be seen from the number of modern units set up by local entrepreneurs.

A picture of the Industrial growth of Manipur may be seen from the table given below :

Table No. 26 : Industrial Growth of Manipur

Sl. No.	Period	No. of Industrial units	Capital Investment (Rs. in lakhs)	Employment (nos.)
1	2	3	4	5
1.	31-3-81	758	296.91	4219
2.	31-3-82	1124	406.80	6692
3.	31-3-83	1410	485.07	8274
4.	31-3-84	1789	670.49	10169
5.	31-3-85	2163	853.46	11668
6.	31-3-86	3317	1418.03	16132
7.	31-3-87	4208	1853.94	20553
8.	31-3-88	4098	1317.08	20658

### 3.2 GEOLOGY & MINING :

The main functions and responsibilities of the Geology & Mining Division are Mineral Exploration and Mineral Administration. The Seventh Plan provision (1985-90) is Rs. 60.00 lakhs. The total expenditures during 1985-86 and 1986-87, were Rs. 9.99 lakhs and Rs. 7.80 lakhs respectively. A sum of Rs. 4.99 lakhs was spent out of the annual plan outlay of Rs. 17.00 lakhs during the year (ending Dec. '88)

#### 3.2.1 Mineral Resources :

Because of its geographical situation in a strategically most sensitive area coupled with lack of adequate communication facilities, poor accessibility etc., the geological structure of Manipur is not thoroughly surveyed. However the Geological Survey of India has undertaken systematic surveys in the three districts of the State viz., Ukhrul, Churachandpur and Chandel and discovered considerable quantities of some valuable mineral deposits like limestone, copper, lignite, nichel, chromite, cobalt, asbestos, clay, salt, etc. The Geological field investigation during the year is aimed at the exploration of serpentinite and idocrase discovered earlier in Kwatha, Khudengthabl area of Chandel District and considered potential for setting up of carving, slab/tilea cutting and polishing industries. A project profile for exploration of these minerals/rocks has been prepared by the Mineral Exploration Corporation Ltd. and submitted to the North Eastern Council for approval and financial sanction of Rs. 40.00 lakhs.

{Some of the important mineral resources are given below }

### 3.2.2 Limestone

Limestone is mainly available in different parts of the Ukhrul District viz., Ukhrul areas, Hundung, Mata, Khanggoi, Lambui, Sokpao and Kasom. It is also available between 32/4 and 32/6 milestone on Imphal Moreh Road east of Pallel, Toupokpi, Chakpikarong etc. The limestone found in Manipur contains less than 1 per cent of magnesia and therefore is suitable for manufacture of cement. Only in Ukhrul areas, the total deposit of limestone has been estimated at 3.79 million tonnes at a depth of 105 metres. Another, reserves of 0.26 million tonnes at Khanggoi and 1.88 million tonnes at Hundung are estimated. The available quantity of limestone can easily sustain a cement plant of modest capacity of 300 tonnes a day for about 45 years.

### 3.2.3 Asbestos :

In the Chandel District, thin uneconomic veins of antigorite and chrysotile asbestos are found from the massive serpentinite rocks near Moreh viz., Nepali Basti and Kwatha. A small quantity of asbestos is also available in the eastern part of the Ukhrul District.

### 3.2.4 Chromite :

Two small deposits of chromite have been located near Sirhi hills containing partly metallurgical grade I and hinted the possibility of large deposits in future. Besides, small quantity of chromite is also available near the Nepali Basti of Chandel District covering an area of about 90 sq. km. and maximum thickness of 0.3 m.

### 3.2.5 Copper :

The G.S.I. has found the availability of copper in the Chandel District, Nickel bearing copper sulphate, chalcovite, chalcocite and metallic are occurred at Nungua and Kongal Thana. A Small quantity of copper is also available at Ningthi, Kwatha and Humine.

### 3.2.6 Nickel :

Nickel associated with the serpentinite rock has been located at Nampah and kwatha areas. The G.S.I. in their geochemical and other methods has found metallic nickel dispersed in the soil in fairly high concentration with the percentage of nickel varying upto 0.9. Soil samples from the Moreh area containing weathered serpentinite rock also shows the availability of nickel varying from 4.24 to 0.9 per cent.

### 3.2.7 Lignite :

The G.S.I. has reported deposits of lignite in Kangvai village in Turmaloc valley of Churechandpur District. The total quantity of lignite has been estimated at 12,262 m. tonnes and this can be used in the manufacture of cement in the cement plant proposed at Ukhrul.

### 3.3 SERICULTURE :

Sericulture industry has been in practice in Manipur for quite some time past exploiting her own indigenous flora and fauna in a traditional way. However, by the end of the Fourth Five Year Plan period, only three branches of sericulture, viz., Mulberry, Muga and Eri were developed in some pockets, namely Khurukbul, Leimaram, Phayeng, Thongjao etc. in a limited way. Sericulture was then just a small section in the Directorate of Industries, Manipur. In view of the already existing infrastructures viz., unique climate and prevailing topographical conditions with indigenous silkworm races and food plants, availability of skilled weavers and sericulturists in the State, the Government started laying greater emphasis on the development of Sericulture. The activities of both the mulberry and non-mulberry sectors have been mentioned and streamlined so as to have satisfactory progress. Altogether 99 Govt. Sericulture Centres continued to function in Manipur.

#### 3.3.1 Oak Tasar Sector :

2 Districts viz., Senapati & Ukhrul have been selected as Oak Tasar Seed Zone for maintenance of parent stocks to produce quality seeds. During the year 1987-88, about 1.81 lakh Tasar DFLS were distributed and about 38 lakhs cocoons valued at Rs. 3.79 lakhs were produced. 28 Oak Tasar Extension centres and 42 Oak Tasar grainage centres were continued in both hill & valley areas of Manipur. During the year 1988-89 (April-Dec. '88) about 1.07 lakhs of Oak Tasar DFLS have been distributed and also produced 18,00,000 Oak Tasar cocoons are valued at of Rs. 2.16 lakhs.

#### 3.3.2 Mulberry Development Sector :

4 (four) villages including 2 Scheduled Caste villages have been selected as Mulberry Seed Growers for the production of high yielding varieties of bivoltine silkworm races. These villages are exclusively meant for production of seed cocoons and declared as Seed Zone. Very recently, 15 (fifteen) Farms have also been identified in different districts of Manipur for establishing half-acre Mulberry demonstration plots with the assistance of Central Silk Board at the rate of Rs. 5,000/- per plot. During the year 1987-88, 4.17 lakhs DFLS of Mulberry Silkworm have been distributed to 2,150 private rearers and about 1.50 lakh kg. of cocoons valued at Rs. 37.61 lakhs were harvested. During the year 1988-89, 4 (four) Mulberry farms have been established. So far 1,500 hectares of land have been brought under plantation. During the year 1988-89 (ending Dec. '88), 4,26,000 DFLS of mulberry silkworm eggs have been distributed to the private farms and 1,52,000 kgs. of Mulberry cocoons valued at Rs 60,80,000 were produced in the State.

### 3.3.3 Eri Development Sector :

10 (ten) villages have been selected as seed zone for Eri including 3 villages in Jiribam Sub-division. During the year 1987-88 (upto Dec. 1987), 3.68 lakhs DFIS have been distributed and about 1.28 lakh kg. of cocoons valued at Rs. 32.05 lakhs have been harvested. 5 Eri grainage centres have been organised and 400 hectares of land on the river banks of Imphal and Barak rivers have been covered under Castor plantation. During the year 1988-89 (ending Dec. '88) 3,60,000 DFIS of Eri Silkworms have been distributed and 1,27,000 kgs. of Eri cocoons valued at Rs. 50,80,000 were produced.

### 3.3.4 Silk Production and Sale :

During the year 1987-88, about 431 kgs. of Silk yarn have been produced from the Government factory. 393 kgs. of silk yarn have been sold out for a value of about Rs. 0.93 lakh. During the year 1988-89 (upto December 1988), the Govt. Silk Reeling and Spinning Factory, Takyelpat could produce 6,675.12 kgs. of different types of yarn, valued at Rs. 1,77,341.86 and so far Silk worth of Rs. 29,482.60 were sold for silk weaving.

An expenditure amounting to Rs. 38.47 lakhs till the end of December 1988 has been incurred against the approved allocation of Rs. 85.00 lakhs for the implementation of the following 10 (ten) continuing schemes viz., (i) Training Programme (ii) Tasar Seed Organisation (iii) Tasar Extension Centre (iv) Silk Reeling/Spinning Factory (v) District/Block Organisation (vi) Mulberry Development Programme (vii) Central Administration Set up (viii) Grant to Sericulturists (ix) Mulberry Seed Organisation & (x) Eri Development Programme. During the year 1988-89, 1 Tasar Extension Centre at Senapati District has been upgraded as Tasar Seed grainage and started functioning, 4 Mulberry farms were established and 7 (seven) Technical Service Centres were opened during the year 1988-89.

## 4-WATER AND POWER DEVELOPMENT

### 4.1 POWER :

Power is the base of all economic developments. In the past, the State faced the problems of acute shortage of power. With the commissioning of Loktak Hydro Electric Project, sufficient power is available for the State. Moreover, the State is endowed with a rich hydro-power potential estimated at 0.865 million KW at 60 per cent load factor which constitutes 2.1 per cent of the country's potential (excluding Bhakra complex). Proper exploitation of this rich resources will go a long way in enhancing progress and welfare of the people. Keeping this in view, under NEFC schemes, investigation of Tuivai (60 MW), Loktak Down stream (90 MW) and Irang (90 MW) have been completed and investigation of Barak (90 MW) is in progress. The scheme reports of Loktak Down stream Hydel Project at an estimated cost of Rs. 167.84 crores has been prepared and submitted to C.W.C and C.E.A for approval. The scheme reports of Irang and Tuivai Hydel schemes are under preparation and expected to submit during 1988-89 and that of Barak during 1989-90 for approval. Approval for investigations of Maklang (75 MW), Sanalok (90 MW) and Transmission and distribution have also been accorded by the N.E.C.

Although sufficient power is available from the Loktak Hydro Electric Project, expected benefits have not yet reached the consumers because of the shortage of transmission and distribution systems. Maximum emphasis is, therefore, given to it. Again, the transmission and distribution losses in the State has been reduced to 27.6% by the end of 1987-88, which was of the order of 60% at the end of 1984-85, 47% at the end of 1985-86 and 37% at the end of 1986-87. The target is to bring it down to 22% by the end of 1988-89.

#### 4.1.1 Power Generation :

##### 4.1.1.1 Hydel :

The mini/micro hydel projects are suitable for remote areas where the sub-transmission system is hard to reach. The State Government started taking up such projects in the recent past. Commercial operation of Lokchao Micro Hydel Project (2×0.2 MW) has been started during 1987-88. Construction of 3 projects, viz. Booning Micro Hydel Project (2×0.5 MW), Gelnel Micro Hydel Project (2×0.2 MW) and Leimakhong Stage III Micro Hydel Project (2×0.5 MW) are in progress. Over



and above these, construction of Maklang (0.8 MW), Khujalok (0.4 MW) and Tufpaki (1.5 MW) are in progress. The projects of Gelnel and Leimakhong stage (II) are expected to be commissioned during 1988-89 and 1989-90 respectively. Moreover, construction of Khuga (1.5 MW) and Singda (0.6 MW) will be taken up shortly. Total installed capacity of hydel generating sets in operation as on 31-3-88 is 2.8 MW only.

#### 4.1.1.2 Diesel :

As on 31-12-88, the total installed capacity of diesel generating sets in operation was 7667 MW. However, effective capacity was around 5 MW only. Augmentation of diesel power houses of District and Sub-Divisional Headquarters by shifting D.G. sets from Imphal/Leimakhong power houses are in progress. In order to meet the emergency demand of Imphal Town area and other important installations during interruptions in Grid Supply, two standby diesel generating sets of 1 MW capacity each will be installed at Imphal power house during 1988-89.

#### 4.1.2 Rural Electrification :

Out of 2,035 (1981 Census) inhabited villages, 974 representing 47.86% have been electrified so far by the end of December, 1988. Out of these 974 villages, 449 villages are Scheduled Tribe villages and 13 villages are Scheduled Caste villages.

Table No. 27 : Budgetary position of Electricity Department for the period from 1986-87 to 1988-89

Particulars	Actual 1988-89	Revised estimates 1987-88			Budget estimates 1988-89		
		Hill	Valley	Total	Hill	Valley	Total
		3	4	5	6	7	8
1. State Plan	—	412.00	388.00	800.00	657.50	365.50	1,023.00
2. Centrally sponsored, central plan, sub-plan schemes and NCDC sponsored schemes	—	12.44	—	12.44	1.00	—	1.00
3. N.E.C. schemes	—	75.40	—	75.40	78.00	—	78.00
4. Non-Plan	—	1,142.00	785.80	1,927.80	994.21	814.09	1,808.30
Total :	2,825.74	1,641.84	1,173.80	2,815.64	1,730.71	1,179.59	2,910.30

#### 4.1.3 Revenue Collection :

Collection of revenue mainly from the sale of power during 1988-89 (upto 31-12-88) was Rs. 545.60 lakhs against the annual target of Rs. 1,128.87 lakhs. The following table shows the progress of power sector in Manipur.

Table No. 28 : Electricity Generated and Consumed

Year	Installed capacity (kw)	Electricity generated (lakh kwh)	Electricity consumed (lakh kwh)	Per capita consumption of electricity (kwh)
1	2	3	4	5
1955-56	165	5.13	4.19	0.62
1960-61	731	14.91	10.69	1.36
1964-66	1,332	33.00	16.91	1.83
1973-76	9,390	149.50	111.00	9.00
1976-77	10,330	172.20	101.30	7.98
1977-78	10,410	165.10	59.31	4.54
1978-79	14,847	206.15	61.34	4.57
1979-80	19,372	311.40	121.82	8.83
1980-81	20,779	253.85	108.91	7.68
1981-82	22,630	182.58	133.02	9.12
1982-83	22,787	119.53	197.24*	13.16
1983-84	22,770	96.12	192.77	12.54
1984-85	24,270	63.77	407.45	25.84
1985-86	18,302	33.14	540.14 (P)	33.40 (P)
1986-87	16,789	21.47	778.27 (P)	46.94 (P)
1987-88	15,389	18.60	1008.70	59.34

\* Includes consumption out of power purchased from Assam.  
(P) — Provisional.

## 4.2 IRRIGATION AND FLOOD CONTROL :

### 4.2.1 Major and Medium Irrigation :

Manipur's economy is predominantly agricultural with 68 per cent of rural working force. More than 50% of the State Domestic Product is generated from agriculture sector. Assured water supply for irrigation is of utmost importance. Unfortunately, the State did not have any Major and Medium Irrigation Project up to 1972-73 and agriculture was solely dependent on the capricious rainfall. Possibilities of harnessing the water resources of Manipur basin have been assessed and it is roughly estimated that the total irrigation potential would be about 1,62,000 hectares.

Major & Medium Irrigation was started only from the 4th Plan period onwards. The State has so far taken up 7 projects under the Major & Medium Irrigation Programme, most of which are now in the advanced stage of construction. Out of the 7 projects now under execution, 3 are Multipurpose, one is Major and the remaining 3 are Medium Irrigation projects. These are— Singda Multipurpose,

Thoubal Multipurpose and Khuga Multipurpose Projects, Loktak Lift Irrigation, Khoupum Dam, Imphal Barrage and Sekmai Barrage Projects. The 7 projects on completion, will give an ultimate annual irrigation benefit of 1,01,440 hectares with water supply and power components of 19 m.g.d. and 9 MW respectively. Besides these 7 on-going projects, another Medium Irrigation Project on Iril river at Dolalthabti having an ultimate annual irrigation benefit of 7,900 hectares is expected to be taken up soon.

Moreover, there are 16 other projects under investigation. The State Irrigation & Flood Control Department has also investigated a Medium Irrigation Project on Jiri river under N.E.C. programme at Jiribam which will benefit about 5,000 hectares in Manipur and Assam.

As already stated above, Major and Medium Irrigation Projects in Manipur were started only from the 4th Plan onwards. Expenditure so far incurred from 4th to 6th Plan was Rs. 64.94 crores. Approved Outlay for the 7th Plan is Rs. 60 crores. Expenditure incurred during the 1st three years of the 7th Plan (1985-86 to 1987-88) is Rs. 38.56 crores. Outlay for 1988-89 is Rs. 16.30 crores. Annual irrigation potential created by the end of 1987-88 is 56,600 hectares and utilisation was to the extent of 37,764 hectares. Targeted potential by the end of 1988-89 will be 59,300 hectares.

Table No. 29 : Details of Irrigation Projects in Manipur

Name of Project	Ultimate potential (hect.)	Potential created (hect.)	Estimated cost (Rs. in crores)	Expen-	Expected	Component	
				diture upto 1987-88 (Rs. in crores)	expen- diture upto 1988-89 (Rs. in crores)	Water supply (m.g.d)	Power (MW)
1	2	3	4	5	6	7	8
1. Loktak Lift Irrigation Project (Major)	40,000	38,000	38.21	27.47	28.67	×	×
2. Singda Dam Project (Multipurpose)	4,000	Nil	19.89	16.05	20.67	4	×
3. Thoubal Multipurpose Project	26,540	4,000	95.00	28.61	42.03	10	7.5
4. Imphal Barrage Project (Medium)	6,400	6,400	6.64	6.38	6.88	×	×
5. Sekmai Barrage Project (Medium)	8,500	8,500	8.73	8.40	9.00	×	×
6. Khoupum Dam Project (Medium)	1,000	1,000	3.06	3.05	3.05	×	×
7. Khuga Project (Multipurpose)	15,000	Nil	34.00	10.85	14.85	5	1.5
Total :	1,01,440	57,900	195.53	100.81	125.15	19	9.0

From the above statement, it is found that the cost of creation of irrigation potential per hectare is about Rs. 19,000.

#### 4.2.2 Minor Irrigation :

It is estimated that total irrigation potential to be created by Minor Irrigation is 1,00,000 hectares by surface water resources and 5,000 hectares by ground water. In addition to this, about 50,000 hectares of land in hill areas can be brought under terraced cultivation. Thus, the estimated irrigation potential to be created for the State is about 1,55,000 hectares from both Surface and Ground Water Resources.

Possibility for exploitation of Ground Water and its scope of development in Manipur State was studied by the Central Ground Water Board (CGWB). Preliminary hydrological surveys in the State of Manipur has been carried out by the CGWB in almost all the entire valley of the State. Upto 1986-87, the CGWB has bored exploratory tube wells in 20 sites in the valley areas of Manipur, out of which 10 tube wells became viable with average yield of 3000 g. p. h. This gives a new hope for the programme of irrigation by Ground Water.

During 1988-89, a total of 99 Surface Flow schemes are under execution including 20 spill over schemes from the last year. Out of 99 schemes, 66 are in the hills and 33 are in the valley districts. On completion of these schemes, additional potential of 3,283 hectares would be created.

Under R I I, 21 schemes are under execution during 1988-89 with a provision of Rs. 46.00 lakhs. The physical target proposed to be created is an additional area of 600 hectares.

#### 4.2.3 Flood Control :

The river systems in the valley are so inadequate to meet the vagaries of nature, such as, flood and drought. Whenever there is continuous rainfall for 3 or 4 days, the valley is exposed to flood and on the other hand, when there is drought the rivers are so inadequate to meet the demands of water for drinking as well as for irrigation purposes.

In the State, major flood control work were taken up only after the disastrous flood of the 1966 which damaged about 50,000 hectares. The total length of river system in Manipur requiring embankment is about 650 kms. and the estimated total area under flood protection comes upto 16,000 hectares. The State Government started formulation of river-wise flood control projects as a long term measure. Besides the projects, the State Government has been executing essential flood control measures, like, construction of new embankments, strengthening the existing ones, construction and improvement of drainage channels, construction of sluices, etc.

Merakhong Flood Control Project having an estimated cost of Rs. 1.16 crores has been sanctioned by the Planning Commission and is now in progress. Another Flood Control Project on Wangjing river costing Rs. 1.18 crores has also been concurred by the planning commission after due clearance by Central Water Commission. The Flood Control Project Report on Nambul river has also been completed and is being placed soon before the State T.A.C. for approval. Riverwise Flood Control Project for other major rivers such as Imphal, Iril, Thoubal, etc. are also under preparation and being taken up in a phased manner.

Expenditure under Flood Control during the Plan period is as indicated below :

		( Rs. in lakhs )
Pre-Sixth Plan Period	—	470.00
Sixth Plan period	—	442.55
1985-86	—	115.10
1986-87	—	113.48
1987-88	—	140.00

The 7th Plan Outlay is Rs. 500.00 lakhs. The approved outlay for 1988-89 is Rs. 160.00 lakhs.

Table No. 30 : Cumulative physical achievement up to the end of 1987-88 and the target for 1988-89

Item	Unit	Achievement up to the end of 1987-88	Target for 1988-89
1. Embankment			
(a) New Construction	Km.	284	18
(b) Improvement	"	431.50	20
2. Drainage Channel			
(a) New Construction	"	35	7
(b) Improvement	"	158	23
3. Sluice Culvert			
(a) New Construction	No.	134	5
(b) Area coverage	Hect.	26,122	3,500

#### **4.2.4 Command Area Development Programme**

With the objective of utilising the potential created by the Irrigation projects to the fullest extent, the Command Area Development Authority (CADA) was established in Manipur during 1982-83. It is a Centrally Sponsored Scheme and the pattern of its financing is on the basis of 50:50 between the Centre and State.

The Command Area Development Programme is carried out in the State in the selected areas of LLI Project and Sekmai Barrage having Culturable Command Areas (CCA) of 24,000 hectares and 5,000 hectares respectively. As per recommendation of the working group on CAD, this programme will be extended to Imphal Barrage command having CCA of 4,000 hectares from 1989-90, the terminal year of the 7th plan period. Till the end of 1987-88 the area covered under field channels are 17,650 hectares against its total CCA of 29,000 hectares. The cumulative expenditure incurred upto 31-3-88 was Rs. 246.73 lakhs only out of the total 7th plan outlay of Rs. 600.00 lakhs (Central+State). The anticipated expenditure for 1988-89 is Rs. 118.20 lakhs (Central+State).

## 5—CO-OPERATION AND RURAL DEVELOPMENT

### 5.1 CO-OPERATION :

With the starting of the economic planning through the Five Year Plan, the need for Co-operative movement has been increasingly felt. It plays a pivotal role in implementing the National Policy of economic development by introducing the system of democratic decentralisation and shifting the emphasis from heavy industries to small scale and medium industries, from capital intensive to labour intensive and from mechanised industries to small scale and cottage industries. It thus tries to involve the maximum participation of the general masses in the National Economic main-stream.

The State has witnessed a gradual increase in the number of societies as well as their membership; but the number of members of the years 1983-84, 1984-85, and 1985-86 was less than that for 1982-83. The number of societies for 1950-51, the beginning of the First Five Year Plan was 350 which increased to 362 in 1955-56, 629 in 1960-61, 1,101 in 1965-66, 2,439 in 1974-75, 2,839 in 1979-80, 3,271 in 1984-85, 3,398 in 1985-86, 3,634 in 1986-87, and 3667 in 1987-88. The corresponding membership in lakhs are 0.21, 0.22, 0.38, 0.75, 1.63, 2.68, 2.99, 3.02, 3.57, and 3.60 respectively. The table below shows the growth of co-operative societies along with their membership, share capital and working capital.

Table No. 31: *Growth of Co-operative Societies in Manipur*

Year	No. of societies	Membership in lakhs	Share capital (Rs. in crores)	Owned capital (Rs. in crores)	Working capital (Rs. in crores)
1	2	3	4	5	6
1950-51	350	0.21	0.42	0.45	0.51
1955-56	362	0.22	0.05	NA	0.01
1960-61	629	0.38	0.19	0.35	0.62
1965-66	1,101	0.75	0.41	NA	1.15
1974-75	2,439	1.63	0.46	NA	2.73
1979-80	2,839	2.68	2.33	NA	9.33
1980-81	2,921	2.94	7.90	8.06	9.50
1981-82	2,959	2.97	10.03	8.08	9.52
1982-83	3,034	3.05	10.10	13.04	15.25
1983-84	3,053	2.86	2.90	6.03	14.74
1984-85	3,271	2.99	9.23	6.06	18.22
1985-86	3,398	3.02	8.50	8.08	18.33
1986-87	3,634	3.57	3.50	NA	15.00
1987-88	3,667	3.60	NA	NA	15.09

From the above table, it is observed that there has been a sharp decline in share capital and owned capital since 1983-84.

During the Fourth Five Year Plan, emphasis was given on extension and strengthening of the Co-operative structure mainly in the agricultural credit and consumer sectors. During the Fifth Five Year Plan, apart from continuing the schemes of the Fourth Five Year Plan, special consideration was given on strengthening the Co-operative movement and a sum of Rs. 84.69 lakhs was spent.

The Sixth Five Year Plan laid considerable stress to (1) build-up Co-operatives, (2) augment Co-operative Institutions, (3) consolidate, re-organise, expand and intensify various types of Co-operative Institutions, (4) safeguard the working section of the community specially the tribals and the Scheduled castes and (5) extent maximum efforts for attainment of basic credit. As against an outlay of Rs. 200.00 lakhs including Rs. 20.00 lakhs separately allocated for the investment in Agricultural Financial Institutions, the actual expenditure was Rs. 209.30 lakhs, used for development of Co-operative organisations in various sections such as credit, non-credit and banking institutions. In the allied agriculture sectors, the department has extended financial assistance for development of such sectors from either state plan or other central agencies at the national level, like, N.C.D.C., NABARD, etc.

The approved outlay for the Seventh Five Year Plan period (1985-90) is Rs. 320.00 lakhs. The expenditure for 1985-86, 1986-87 and 1987-88 were Rs. 50.00 lakhs, Rs. 61.00 lakhs and 79.38 lakhs respectively while the anticipated expenditure for 1988-89 and approved outlay for 1989-90 are respectively Rs. 101.00 lakh and Rs. 146.75 lakhs. The Co-operative Department had re-organised 663 Small-Size, Multipurpose Co-operative Societies into 97 Gram Panchayat-Level Multipurpose Co-operative Societies (GPLMCS) in the valley and 53 Large-Size Agricultural Multipurpose Co-operative Societies (LAMPS) in the hills. It has to extend financial assistance in the form of share capital contribution, marginal subsidy, special bad-debt reserve fund and the agricultural credit stabilisation fund. Further, as a policy of the Govt. of India and the Reserve Bank of India, these societies are to construct office-cum-godown of 100 M.T. capacity in the rural areas to be completed during the 7th Plan period (1985-90). A sum of Rs. 20 lakhs is separately allocated for investment in Agricultural Financial Institutions during the 7th plan. In the field of Agriculture, a number of schemes regarding strengthening of share capital structures of the Bank/PACS which are the backbone of the rural credit in the State were undertaken.

For development and procurement and marketing of agricultural produce, including forest and minor forest produce, it is necessary to strengthen the Manipur Co-operative Marketing Societies in the State Level as well as all supply and marketing societies in the five hill districts. There are now 13 Primary Marketing Co-operative Societies



and one Manipur Apex Marketing Co-operative Society in the State. Besides, 7 District Supply & Marketing Co-operative Societies classified as Marketing and Consumer Societies are also functioning in the State. It is also proposed to strengthen the Manipur State Co-operative Consumers' Federation at the state level for dealing with all the essential commodities. There are 157 Consumer Co-operatives Societies in the State for the distribution of Consumer articles. Besides, the GPLMPCS and LAMPS have also taken up Consumer business and distribute Consumer Goods. The Manipur State Co-operative Consumers' Federation Ltd. was brought under the "Rehabilitation" Programme in 1986-87 under the Centrally Sponsored Schemes with financial assistance of Rs. 21.65 lakhs. A Mobile Shop Scheme was also taken up.

In the field of industrial sector, the Primary Weavers' Co-operative Societies have to be strengthened. In order to co-ordinate and assess all 669 primary weavers' co-operative societies, the Department has to strengthen the Manipur State Handloom Weavers' Co-operative Society.

For the development of the tribals and other weaker sections, the Manipur Tribal Development Corporation was constituted in order to help all the LAMPS in the hill districts. In addition, Co-operatives of various sectors like poultry, dairy, housing etc. are also to be taken care of.

A number of Primary Housing Co-operative Societies were organised both in the hill and the valley areas to meet the housing requirement of the general public. The Manipur State Apex Co-operative Housing Society Ltd. was set up in the year 1983-84 with 34 Primary Societies as its members. The paidup share capital and the working capital are respectively Rs. 24.00 lakhs and Rs. 100.00 lakhs. A loan of Rs. 75.00 lakhs has been obtained from the LIC, Bombay.

The Manipur State Co-operative Union is the Chief-Apex-Level-Non-Official Co-operative Organisation which has been taking the responsibilities for imparting Co-operative Education to the various categories of Co-operative Personnel as well as for production and development of the Co-operative Movement in Manipur. There is a separate Women's Wing for exclusively taking up the Programme for Woman Co-operative Societies.

The Manipur Co-operative Training Institute which was transferred from the Co-operative Department to the Union with effect from the 1st August, 1982 has completed the 38th Junior Basic Training Course in Co-operation and taken up the Management Course of Industrial Co-operatives and Consumers Co-operative Societies also. The Union celebrated the 34th All India Co-operative Week at various places in Manipur. The Union has also opened one Co-operative Education Field Project at Churachandpur. A State Level Women Convention was also organised March, 1988.

Integrated Co-operative Development Project under NCDC is taken up for Bishnupur district during 1988-89 with a sanction of Rs. 201.89 lakhs to formulate and implement co-operative programmes for utilisation of natural resources, manpower and skill available locally for the economic benefit of the farmers, artisans and labourers of the district. A similar project is being taken up for Thoubal district and for the other districts the projects will be taken up one after another.

With a view to re-activate the Agricultural credit societies the Department has deputed Inspectors as Managing Directors of all the Primary Agricultural Credit Societies (PACS) to enable them take up business in essential commodities and distribution of chemical fertilizers. The Manipur State Co-operative Bank which was once not in a position to issue loans now starts giving short-term loans with the assistance of State Government and Co-operative Department. Other Primary Co-operative banks, like, the Imphal Urban Co-operative Bank Ltd., Manipur Women's Co-operative Bank Ltd., etc. that look after the credit needs of the small enterprises, small traders and other weaker sections are also to be encouraged.

The marketing societies are taking up distribution of certified seeds and fertilizers. The Manipur State Co-operative Consumers' Federation has to expand their business and also take up distribution of essential commodities through Mobile Fair Price Shops in Ukhrul and Churachandpur Districts on experimental basis. Weaving societies and other societies like Processing, Fishing, Tribal Development Corporation etc. are also to be encouraged. Sufficient provision to meet the Agricultural Credit Stabilisation Fund, Special Bad Debt Reserve Fund, etc. has also to be kept.

## 5.2 RURAL DEVELOPMENT AND PANCHAYATI RAJ :

### 5.2.1 Integrated Rural Development Programme

A number of Rural Development Programmes have been launched by the Government of India since the 2nd October 1952 for amelioration of rural poverty and upliftment of the living standard of the rural poor in the entire country. Integrated Rural Development Programme (IRDP) has been implemented in 1976-77 for the first time in 20-selected blocks in the country and then in some specified blocks in 1978-79. It was extended to all the blocks of the country from the 2nd October 1980. The programme aims to assist families below the poverty line in rural areas to cross the line (Rs. 6,400/- being the income ceiling per family) by providing income generating assets including working capital through package of assistance comprising subsidy and institutional credit. The target group of the programme consists of small farmers, marginal farmers, agricultural labourers, rural artisans etc. whose annual family income is Rs. 4,800/-.

The IRDP in the State was taken up in 1978-79 in 10 out of the 26 blocks. Upto 1980, only 15 blocks were covered by the IRDP and since then its coverage has been extended to all the blocks of the State. The schemes were implemented with 50% share from the Centre. With the creation of two new districts in the valley areas viz. Thoubal and Bishnupur Districts by tri-furcating the erstwhile Central District, two more DRDA's of Thoubal and Bishaapur Districts having two blocks each have also been established for implementation for the scheme and hence there are 8 DRDA's in the State. Four more blocks viz. Moirang in the Bishnupur District, Kakching in the Thoubal District, Imphal East-II in the Imphal District and Paomata in the Senapati District were opened and the total number of blocks increased to 30 in the State. The continuance of this programme is necessary during the 7th Five Year Plan for improving the economic status and social standard of the rural people.

During the Sixth Plan Period the actual achievement was 32,602 beneficiaries. In view of the inter state variations and disparities in the incidence of poverty, the financial allocations and fixation of targets for assisting the families in the Seventh Plan will be on the basis of the incidence of poverty in the State as given by the results of the 30th round of NSS. The outlay approved for the Seventh Plan is Rs. 700.00 lakhs of which a sum of Rs. 135.00 lakhs, Rs. 146.52 lakhs and Rs. 164.21 lakhs was spent being the 50% State share during 1985-86, 1986-87 and 1987-88 respectively. The anticipated expenditure for 1988-89 was Rs. 70.00 lakhs while the proposed outlay for 1989-90 is Rs. 150.00 lakhs. The physical target for the 7th Plan Period is to benefit 87,000 beneficiaries. The achievements, for the years 1985-86, 1986-87 and 1987-88 were respectively 7,637, 13,444 and 6,556 beneficiaries.

The main problems, faced by the implementing agencies are lack of credit facilities in the remote hill blocks where banks are not operating, shortage of technical hands, non-availability of inputs in time, late release of central share. The schemes proposed to be taken up under I.R.D.P. for 1988-89 are Agriculture and Soil Conservation, Animal Husbandry, Fishing, Industry, TRYSEM etc.

### 5.2.2 National Rural Employment Programme (N.R.E.P.)

The National Rural Employment Programme (N.R.E.P.) which had replaced the Food for Work Programme in October, 1981 was fully financed by the Central Government till 31-3-81. During the Sixth Five Year Plan, (with effect from 1-4-81), the programme has been implemented through the District Rural Development Agencies in this State as Centrally Sponsored Scheme on 50:50 sharing basis between the Centre and the State.

During the 6th Five Year Plan period (1980-85), a total provision of Rs. 67.00 lakhs being the State share was made available. Central share which was released by the Government of India till 31-3-85 was Rs. 6.78 lakhs only. The Government of India also allocated Rs. 25 lakhs under NREP. The main problems in the implementation of NREP schemes were lack of technical hands, late release of fund, non-availability of inputs in time etc. The schemes to be taken up during 1988-89 are Communication, Minor Irrigation, Soil & Water Conservation, Housing, Social Forestry, Water Supply & Sanitation etc. The approved outlay for the 7th Five Year Plan period, the actual expenditures of 1985-86, 1986-87 and 1987-88 and the anticipated expenditure for 1988-89 are respectively Rs. 250.00 lakhs, Rs. 49.41 lakhs, Rs. 54.38 lakhs, Rs. 104.44 lakhs and Rs. 120.00 lakhs. The physical target for 1988-89 is 4,10,000 man-days, while the achievements for 1986-87, 1987-88 and the anticipated achievement for 1988-89 are respectively 5,86,790 man-days, 5,98,237 man-days and 4,10,000 man-days.

### 5.2.3 Integrated Rural Energy Programme (IREP)

The approved outlay for the 7th plan (1985-90), the actual expenditure for 1986-87, 1987-88 and the anticipated expenditure for 1988-89 are respectively Rs. 35.00 lakhs, Rs. 0.85 lakhs, Rs. 10.00 lakhs and Rs. 10.00 lakhs to implement the schemes, like, smokeless chullah, gohar gas plant, solar energy, etc. The scheme is now implemented in the Kamjong T.D. Block in Ukhrul District and Wangoi C.D. Block in Imphal District.

#### 5.2.4 Land Reforms :

Since 1975-76, three schemes viz. (i) Extension of Survey and Settlement in the hill areas of Manipur, (ii) Land Ceiling and (iii) Compensation are implemented. The first scheme was implemented in the five hill districts while the last two were in the three valley districts. The physical target for the Sixth Five Year Plan period (1980-85) was 12,500 hectares; but the achievement was 3,206 hectares only. The shortfall in achieving the target was due to the non-extension of Manipur Land Revenue and Land Reforms Act, 1960 in the hill areas.

Since the first year (1985-86) of the Seventh Five Year Plan period, four schemes viz. (i) Extension of Survey and Settlement in the hill areas, (ii) Re-survey operation/ updating of land records in the valley areas with implementation of Land Ceiling Laws; (iii) Establishment of Survey and Settlement Training Institute and (iv) Financial assistance to the allottees of ceiling surplus land and Government waste lands have been implemented. The total area surveyed during 1985-86 was 387.40 hectares as against the target of 2,500 hectares in the 7th plan period (1985-90). The physical achievements for 1986-87 and 1987-88 were 404.00 hectares and 514.50 hectares. The anticipated achievement for 1988-89 and target for 1989-90 are respectively 600 hectares and 694.10 hectares.

The scheme of Re-Survey Operation/Updating of Land Records in the valley district is continued with the implementation of Land Ceiling Laws under point No. 4 of the 20-Point Programme. The target for taking up re-survey during the 7th plan period is 1,81,927 hectares. During 1985-86, 250.85 acres were acquired and distributed to the landless persons. Under the third scheme, necessary steps had been taken up for construction of building and ground improvement for the Institute.

All the schemes except the last one are being continued during 1988-89. The total outlay for the Seventh Five Year Plan (1985-90) is Rs 150.00 lakhs while the actual expenditure for 1985-86, 1986-87, 1987-88 and anticipated expenditure for 1988-89 are respectively Rs. 25.14 lakhs, Rs. 29.93 lakhs, Rs. 25.23 lakhs and Rs. 34.24 lakhs.

#### 5.2.5 Rural Development and Panchayats :

The Panchayati Raj Institutions were set up in this State in order to develop more authority, power and responsibility to the people by entrusting them with the development programmes pertaining to socio-economic and cultural upliftment of rural masses. Emphasis was given on the creation of remunerative assets which could create sources of income in the form of pisciculture, horticulture, poultry farming and bee-keeping and strengthening of these institutions by providing training to their

functionaries, However, these schemes could not be implemented successfully due to shortage of fund. During the 5th Five Year Plan period a sum of Rs. 19.01 lakhs was spent and the total for 6th Plan (1980-85) was Rs. 46.50 lakhs.

There are, at present, 165 Gram Panchayats, 9 Panchayat Samities and 42 Naya Panchayats in all the 9 Development Blocks within 3 valley districts of Imphal, Thoubal and Bishnupur. The State Government is also considering to set up Zila Parishad to have the three-tier-Panchayati Raj in the State. The outlay for the 7th Five Year Plan period is Rs. 141.93 lakhs. The actual expenditure for 1985-86, 1986-87 and 1987-88 were respectively Rs. 13.00 lakhs, Rs. 21.05 lakhs Rs. 22.01 lakhs whereas the anticipated expenditure for 1988-89 is Rs. 40.00 lakhs.

### 5.3 COMMUNITY DEVELOPMENT

In order to bring about an all round development in the rural areas where disease, ignorance and poverty prevails the Community Development Programme was first launched in the State on the 2nd October, 1952 with the opening of the first community development block in Thoubal Sub-Division with its headquarters at Athokpam. 2 C. D. Blocks during the 2nd Five Year Plan period and 4 in the third Plan period were opened. There are at present 30 blocks in the State, 9 in the valley and 21 in the hills. The outlay for the 6th Five Year Plan was Rs. 45.15 lakhs. }

The continuance of the implementation of the C. D. Programme is also necessary during the 7th Five Year Plan to improved the social and economic standard of the rural people of the State. The C. D. programme stressed for the development of rural areas in the field of (i) Agriculture, (ii) Education, (iii) Land reclamation and Irrigation, (iv) Animal Husbandry, (v) Health and Sanitation, (vi) Industries, (vii) Communication etc. An outlay of Rs. 231.00 lakhs is provided for implementation of the C. D. programme during the 7th Five Year Plan period (1985-90). The actual expenditure for 1985-86 and 1986-87 are respectively Rs. 13.00 lakhs and Rs. 20.00 lakhs. The actual expenditure for 1987-88 and the anticipated expenditure for 1988-89 are respectively Rs. 75.00 lakhs and Rs. 80.00 lakhs. Four more blocks viz. Paomata in the Senapati District, Kakching in the Thoubal District, Moirang in the Bishnupur District and the Imphal East II in the Imphal District are also opened.

## 6—TRANSPORT AND COMMUNICATIONS

Transport and Communication system constitutes one of the most important infrastructural facilities for supplying productive activities and distribution system. A well developed transport and communication system plays a vital role in ensuring sustained economic growth. Development activities of this sector generated large employment opportunities. Modes of transport facilities available in Manipur are roads and airways.

### 6.1 ROADS AND BRIDGES:

A system of good roads is a precondition for economic development. Roads are the main arteries and veins through which the stream of economic development activities flow. Geographically, Manipur State is land-locked and is isolated from the neighbouring states by hill ranges on all sides. So far, it is not connected by railways. 90 per cent of the State's area are hilly where facilities for mechanised transport are considered inadequate. The State's urban area is only about 0.67 per cent of the total geographical area according to 1981 Census and it is essential that the villages should be connected with towns, particularly with the State and district headquarters so as to give incentives for greater production and better marketing.

As estimated by the Transport Research Division, Ministry of Shipping & Transport Govt. of India, the length of roads of the State was 39.6 Kms. per 100 sq. kms. of area as against the all-India average of 48.8 kms. in 1978-79. But the road length per 100 sq. km. as on 31-3-1987 of the State of Manipur was only 19.72 kms. The Manipur Public Works Department is responsible for construction and maintenance of roads including National Highways and North Eastern Council roads. However, there are some roads under Border Roads Organisation, Rural Development Department, Local Bodies, Forest Department, Irrigation & Flood Control Department etc. for which reliable and upto date information are not available at present. The following table gives the length of PWD roads by types for the period from 1961 to 1987.

Table No. 32 : *PWD Roads by Types In Manipur,* (in Kms.)

Classification of Road	As on 31st March								
	1961	1971	1981	1982	1983	1984	1985	1986	1987
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. National Highways	216	209	434	434	434	434	434	434	434
2. State Highways	850	1141*	510	520	524	527	527	542	547
3. Major District Roads	336	499	611	614	620	624	624	624	624
4. Other District Roads	7	750	309	319	332	340	340	383	405
5. Inter-Village Roads	296	NA	1864	1933	1986	2068	2205	2311	2395
<b>Total :</b>	<b>1705</b>	<b>2599</b>	<b>3728*</b>	<b>3890</b>	<b>3896</b>	<b>3993</b>	<b>4130</b>	<b>4294</b>	<b>4405</b>
Surfaced	588	834	NA	2060	2137	2201	2138	2589	2811
Unsurfaced	1117	1765	NA	1760	1759	1792	1792	1705	1571

\*Includes inter-village roads      NA Not available      Source : P. W. D, Manipur.

It is observed from the above table that the length of P'W D. roads which was 1705 Kms. only in 1961 rose to 2599 Kms. in 1971, 3728 Kms. in 1981 and to 4405 Kms. in 1987. The proportion of surfaced roads which was only 34 per cent in 1961 rose to an impressive 64 per cent in 1987.

Various schemes for widening, strengthening and improvement of roads, construction of minor bridges and culverts, etc. are taken up on a large scale in the State Highways and the Major District Roads since the beginning of the 7th Plan. Out of the 7th Plan target of widening/strengthening/improving about 495 Kms. of the State Highways, the achievement during the first two years of the 7th Plan period is 92.5 Kms. and the achievement for 1987-88 is 88 Kms. In the case of major district roads, the corresponding achievement for the first two years is 84 Kms. and the achievement for 1987-88 is 97 Kms. against the target of about 366 Kms. for the whole Plan period. Targets of construction of 107 kms. of State highways, will be achieved in the current year, 38 Public Administrative buildings and residential buildings at a total cost of Rs. 3.70 crores will also be completed. Buildings for Medical, Revenue, Judicial and Jail Departments with assistance from the 8th Finance Commission are making good progress.

#### 6.1.1 Other District Roads (ODRs) :

The Circle Offices, important village groups and administrative centres are connected by Other District Roads (ODRs). The total length of ODRs by the end of the 6th Plan was 340 kms. Another 160 kms. are proposed to be constructed during the 7th Plan period, out of which, the achievement made as on the 31st March 1986 and 1987 were 42 kms. and 22 kms. respectively. The target of constructing 89 kms. of District roads will be achieved in the current year 1988-89.

#### 6.1.2 Village Roads :

A sound system of road network serving the rural areas is a primary need for social justice, intergration and co-ordinated rural development. Village roads are basic infrastructure for development works, such as, health, education, irrigation, power, agriculture, etc.

During the 6th Plan period, improvement and construction of rural roads was taken up with the objective of connecting all the villages having population above 1500 and 50 per cent of the villages with population 1000-1500 by the end of 1990. The total length of village roads at the end of the 6th Plan was 2205 kms. The physical target to be achieved at the end of the 7th Plan period is 2415 kms. Upto the 6th Plan period, road construction technology was labour intensive and time consuming. Efforts to introduce mechanisation in a phased programme have been made. The total length of village roads as on the 31st March 1986 and 1987 was 2311 kms. and 2395 kms. respectively, 192 kms. of inter-village roads will be constructed in the current year, 1988-89.



### 6.1.3 BRIDGES ;

Many of the road bridges in the State Highways and Major District Roads having standard single lane or double lane sections do not have the proper width. Such bridges were constructed before the Second World War and need replacement.

#### Major Bridges :

Major bridges are constructed to connect the missing links. Construction of major bridges was started mostly from the 6th Plan period and due emphasis is given to complete these bridges during the 7th Plan period. The target for the 7th Plan period is to construct 29 major bridges of which 4 bridges were completed in 1986-87. The achievement for 1987-88 was 5 major bridges. 9 major bridges will be completed in the current year 1988-89.

#### Suspension Bridges ;

Suspension bridges are taken up to connect villages separated by rivers. Many suspension bridges have been taken up during the 6th Plan period and efforts are being made to complete these bridges during the 7th Plan period. The 7th Plan target is 56 suspension bridges. 10 suspension bridges have already been completed by the end of 1986-87 and another 14 bridges were expected to be completed during 1987-88. 20 more suspension bridges will be completed during 1988-89.

#### Minor Bridges and Culverts :

Widening and strengthening of sub-standard culverts on important State Highways and other district roads is unavoidable to maintain an efficient road network in the State. The physical target for the 7th Plan period is 2,632 minor bridges/culverts of which 2,273 are under Tribal Sub-Plan. The achievement made at the end of 1986-87 was 155 and another 42 bridges/culverts was expected to be completed in 1987-88. 68 minor bridges and culverts will be completed during 1988-89.

The other programmes taken up by the State Public Works Department during the 7th Plan period are investigation, research, mechanisation, etc. The overall performance may be seen from the table given below ;

**Table No. 33 : Development Schemes, Outlay and Expenditure for Roads and Bridges during the 7th Plan Period**

( Rs. in lakh )

Scheme	7th Plan 1985-90 Agreed Outlay	1985-86 Actual Exp.	1986-87 Actual Exp.	1987-88 Actual Exp.	1988-89 Anticipated Exp.
1	2	3	4	5	6
<b>A — State Highways &amp; Major District Roads</b>					
<b>(i) Roads :</b>					
(a) State Highways	1,700.00	231.36	307.71	355.14	385.00
(b) Major District Roads	1,100.00	136.92	158.83	206.60	290.00
(ii) Bridges :	1,000.00	153.04	111.88	184.38	160.00
(iii) Machineries equipments & others	450.00	51.87	52.72	125.22	190.00
<b>B — District and Other Roads</b>					
(i) Other District Roads	400.00	72.10	62.80	102.38	85.00
(ii) Village Roads	850.00	—	1.20	4.71	25.00
(iii) Minimum Needs Programme	1,450.00	218.63	271.92	387.90	300.00
<b>C — General</b>					
(i) Research & development	30.00	8.97	5.39	6.75	10.00
(ii) Survey & investigation	20.00	—	—	—	5.00
<b>Total : Roads &amp; Bridges</b>	<b>6,400.00</b>	<b>872.89</b>	<b>972.45</b>	<b>1,373.08</b>	<b>1450.00</b>

#### 6.1.4 NATIONAL HIGHWAYS :

The main artery of communication having considerable economic importance is the National Highways No. 89 connecting Imphal with the railhead at Dimapur in Nagaland. Mao to Imphal section of this road was constructed as a cart track in 1881 and was improved to a large extent during the Second World War. The Imphal-Moreh section was constructed and improved during that War. The road passes through hilly areas and the occurrence of landslids on the hill tracks being very frequent, improvement works including strengthening and widening are required every year. Out of the 1,047 culverts required, 472 are yet to be constructed. Out of 4 major bridges taken up during the 7th Plan, 2 bridges, viz, Karong and Sanapati bridges are targeted for completion by March, 1988.

Another road of economic importance is the National Highways No. 53 connecting Imphal with Jirighat in Manipur-Assam border. Construction of Imphal-Jiribam section was completed during the 6th Plan period by the BRDB. It passes through dense forests and difficult terrains of Tamenglong District which is considered to be the most inaccessible district in the State. The opening of this road brings the District closer to other parts, helps exploration of untapped resources of the district, gives incentives for more production and general development besides being a second life-line for the State.

The approved outlay during 1987-88 for National Highways works is Rs. 270 lakhs and the whole amount is being utilised. Several improvement works were taken up to improve the riding quality of the surface and also cross drainage works.

#### 6.1.5 N.E.C. WORKS :

The proposed allotment during 1987-88 is Rs. 400.00 lakhs including Rs. 50.00 lakhs for new roads scheme which is yet to be finalised. The programme for construction during 1987-88 is given below :

- (i) 28 kms. of formation cutting is completed; works of pavement construction for various roads are in progress.
- (ii) 65 kms. of metalling and 25 kms. of premix carpeting are being completed.

#### 6.2 ROAD TRANSPORT :

The programme for Road Transport is mainly for improvement of Manipur State Road Transport Corporation, which was formerly a State Government Department (MST). The passenger transport is carried out both by the Manipur State Road Transport Corporation and the private sector road transport operators. In respect of movement of goods traffic through roads, private sector road transport operators play the dominant role.

The Manipur State Road Transport Corporation (MSRTC) is the only public sector road transport organisation in the State. It covers a total route length of 4,735 Kms. during 1986-87 which was only 534 Kms. at the end of the first plan (1955-56). The Corporation operated in 51 routes and was having 109 vehicles in 1986-87. The following table gives the progress of the MSRTC since the First Five Year Plan.

Table No. 34 : Progress of Manipur State Road Transport Corporation

Item	At end of							
	1st Plan (1955-56)	2nd Plan (1960-61)	3rd Plan (1965-66)	4th Plan (1973-74)	5th Plan (1977-78)	6th Plan (1984-85)	7th Plan '85-86	'86-87
1	2	3	4	5	6	7	8	9
1. No. of motor vehicles	47	115	183	127	153	128	145	109
2. No. of routes under operation	8	12	9	26	27	51	51	51
3. Route length (Km.)	534	592	584	1,586	2,001	4,735	4,735	4,735
4. No. of persons employed	153	602	692	713	706	638	662	724

Altogether there were only 578 vehicles on roads in 1955-56 in the State which was increased to 12,328 and 28,360 in 1984-85 and 1987-88 respectively.

The agreed outlay for the 7th Plan period is Rs. 750.00 lakhs, of which Rs. 144.85 lakhs and Rs. 120.40 lakhs were spent in 1985-86 and 1986-87 respectively. Another sum of Rs. 137.00 lakhs is expected to be spent in 1987-88.

#### 6.2.1 Transport Department achievements :

The transport Department has been entrusted the responsibility for the development of transport in the State and to carry out the provision of Motor Vehicles Act & Rules. The State Transport Authority has been Constituted to perform the following works. (i) To issue State carriage permit of Buses and Mini Buses, National permits. All India Tourist Bus permits and special permits.

(ii) Fixing of fares & freight charges.

(iii) Co-ordination & Regulation of the activities of the Regional Transport Authorities.

(iv) To discharge such other functions as may be prescribed by the State Govt from time to time.

The total number of Vehicles registered is 34,542 as on 31-12-88 and Number of Driving Licences issued as on 31-12-88 are 16,431 for professional and 63,724 for non-professional having a total of 82,155.

The number of different permits issued so far as on 31/12/88 is given below.

1. Stage Carriage Permits
  - (a) Buses--529
  - (b) Mini Buses 198
2. National Permits—34
3. All-India Tourist Bus permits—48
4. Special Permits
  - (i) Trucks -4,184
  - (ii) Buses --221
  - (iii) Local Public
5. Carriage Permits—2,425

During the current year up to the month of December 1988 a sum of Rs. 114.67 lakhs has been collected against the target of Rs. 165.00 lakhs. During the year 1987-88 the Department collected revenue of Rs. 143.59 lakhs out of the target of 157.00 lakhs.

### 6.3 INLAND WATER TRANSPORT :

Inland Water Transport in the rivers and lakes of Manipur valley was an important means of transport, mainly of merchandise, prior to the Second World War when road transport in Manipur was mainly by bullock-carts. With the Development of motorised road transport system, the water transport system became obsolete and uneconomic since transport was mainly in small boats in small rivers which are not always perennial.

### 6.4 AIR TRANSPORT :

The Indian Airlines operates regular Boeing services between Imphal and Calcutta via Silchar and Imphal and Delhi via Guwahati and Bagdogra on every day of the week. Besides, a Vayudoot service was introduced in 1986 between Calcutta, Imphal and Dimapur. The number of air passengers originating from Imphal which was 19,830 in 1973-74 increased to 74,814 in 1985-86.

### 6.5 POSTAL & TELECOMMUNICATION SERVICES :

There has been a steady growth in the postal and telecommunication facilities in the State. The total number of post offices in the State increased to 533 in 1986-87 from only 80 in 1955-56. The following table gives the growth of the postal facilities in the State during the Plan periods.

Table No. 35 : *Postal Facilities In Manipur*

At the End of	No of post offices	No. of telegraph offices	No of letter boxes
1	2	3	4
1st Plan ( 1955-56 )	80	1	16
2nd Plan ( 1960-61 )	154	6	17
3rd Plan ( 1965-66 )	205	17	11
4th Plan ( 1973-74 )	331	21	45
5th Plan ( 1977-78 )	447	21	62
6th Plan ( 1984-85 )	546	37	704
1985-86	533	24	NA
1986-87	553	38	NA

Telephone facilities show a slow but steady growth in the State. During 1987, the State had 50 Public Call offices as against only 6 in 1958. The growth of the telecommunication facilities in the State over the past few years may be seen in the table given below.

Table No. 36: *Telecommunication Facilities In Manipur*

Year	No. of public call offices	No. of telephones
1	2	3
1958	6	NA
1961	7	NA
1974	22	1,430
1978	32	1,795
1980	46	2,068
1981	49	2,124
1982	42	2,387
1983	36	2,654
1984	36	2,663
1985	36	2,773
1986	41	2,602
1987	50	3,324

NA--Not Available

## 6.6 TOURISM :

Manipur has been variously described as "A Little Paradise on Earth," "A flower on the lofty hills", "The Switzerland of India" etc. In spite of its immense tourist potential, the State Government could not do much for the development of tourism during the earlier Five Year Plans. The 4th plan set out with a modest outlay of Rs. 2.35 lakhs, led to the opening of a Tourism Directorate during 1972-73. Construction of Tourist Lodges at a number of historic, religious and other important places has been started. An investment of Rs. 6.89 lakhs was made during the entire Fourth Five Year Plan period while a sum of Rs. 13.07 lakhs was spent during the Fifth Five Year Plan against the outlay of Rs. 10.30 lakhs. During this period, the construction of tourist homes at Sendra and Walthou was completed and that of the first phase of the Tourist Lodge at Imphal started. The outlay for the Sixth Plan was Rs. 50.00 lakhs. The construction of the second phase of the Tourist Lodge at Imphal and improvement of other tourist places/homes were also taken up.

The plan outlay for the 7th Five Year Plan is Rs. 100.00 lakhs. The actual Plan expenditures for 1985-86 and 1986-87 were respectively Rs. 8.06 lakhs and Rs. 26.30 lakhs while the actual expenditure for 1987-88 and the anticipated expenditure for 1988-89 are respectively Rs. 42.31 lakhs and Rs. 36.00 lakhs. The proposed outlay for 1989-90 is Rs. 70.00 lakhs.

The construction of the third phase, 50-bed wing of the Hotel Imphal Ashoka was completed during 1987-88. Construction of Tourist Homes at Khongjom has been completed and commissioned on 2nd Oct. 1988. The construction of Tourist home at Churachandpur has almost been completed. The construction of Tourist home at Siroy is now in good progress. A sum of Rs. 40.75 lakhs has been released as advance by the Department of Tourism, Govt of India as Central Scheme for construction of a Tourist Guest House at Moirang, way side amenities (Cafeteria) at Mao, Kangpokpi, Litan, and Tourist home at Moreh, Tamenglong, Nungba and Jiribam. Proposed scheme under the Central Annual Plan for 1989-90 estimated Rupees five crores eighty one lakhs fifty three thousand seven hundred and eleven only are for development of Tourist home, way side amenities, alpine huts, Tourist, Transport and mobile restaurants etc. Again, provision exists for purchase of 10 rowing boats and 5 motor boats for water sports at the Loktak lake. Three powerful telescopes which will be fitted to the Watch Tower being constructed at Chingmeiching have been purchased.

For the Khongjom and Churachandpur Tourist Homes, construction of staff quarters will also be taken up. Renovation of the Hotel Imphal Ashoka as suggested by the I.T.D.C. is likely to be taken up soon. The revenue collection for the year 1988-89 upto the end of December 1988 is Rs. 16,38,065 (Rupees sixteen lakhs thirty eight thousand and sixty five) only. The number of accommodation facility has been increased from 156 to 174 at present.

## 7—SOCIAL AND COMMUNITY SERVICES

### 7.1 GENERAL EDUCATION :

#### Literacy Trend :

By 1901 literacy percentage of Manipur was less than one and those of 1941 and 1951 were 5 and 11 respectively. Just after independence, high priority was accorded to Education and by 1981 literacy percentage had gone up to 41 per cent against the all-India average of 36 per cent occupying the 15th position in all-India ranking.

#### Elementary Education :

As on 31-3-1987, there are in Manipur, 3214 elementary schools having 13,000 teachers and 2,42,610 scholars. Teacher pupil ratio is 1 : 19 (approximately). Population served per elementary school is about 516 persons for the State and that of hill and valley are 325 and 781 persons respectively, whereas area served per elementary school for hill and valley are 10.7 and 1.7 sq. kms. respectively. By 1981 census, population in the age-group 5-12 is 3,14,594. By 1987, expected population for this age-group is about 3,76,281. According to the official statistics available so far, more than one lakh children in this age-group are yet to be brought to schools, for achieving the objective of universalisation of elementary education in order to make the whole nation literate.

It is a known fact that there are a large number of unrecognised English medium elementary schools in Manipur, in urban areas, in particular, for which information are not available and hence not accounted for in the figures given above. It is also evident that the number of scholars under Elementary education for the year 1986-87 decreases from 2,51,837 of 1985-86 to 2,42,610 i. e. 8,627, scholars.

Actual expenditure under elementary schools during 1985-86 was Rs. 1545.91 lakhs out of which Rs. 92.05 lakhs were under Plan expenditure. Expenditure per scholar was about Rs. 615. Budget estimates for the year 1988-89 is Rs. 2047.82 lakhs under Elementary Education against Rs. 1851.14 lakhs for the year 1987-88. Out of the total Budget estimates of 1988-89, 64.6%, is for the valley.



Important schemes of Elementary Education which are being taken up are enumerated below ;

#### Strengthening of Elementary Schools (I-VIII)

For bringing these additional children to schools and also taking into account the changes brought about by the introduction of new syllabus, strengthening of teaching staff during the Seventh Plan period is imperative. Estimated requirement of additional teachers is about 800 for Primary Schools and 1400 for Middle Schools for the Seventh Plan period.

#### Science Education :

As per new syllabus, much emphasis is given to Science Education for which schools must have well-equipped laboratories and teachers should also undergo short course workshops/orientation training. Apart from this, science text books which are now in Manipuri are to be rendered into English for tribal students who are not familiar with the Manipuri language.

#### Hindi Education :

The Govt. of India takes great incentives for effective teaching of Hindi, a compulsory subject in Classes III - VIII. During 1988-89, 250 posts of Hindi teachers (100 graduates & 150 matriculates) have been created with cent per cent financial assistance from the Govt. of India.

#### Incentives :

For successful implementation of the scheme for the universalisation of Elementary Education, incentive to the children is necessary for bringing more children to schools and reducing drop-outs. For this purpose, a scheme "The operation black board" for improvement of infra-structure and other facilities available in the primary schools has recently been taken up in Manipur as per directions of the Govt. of India. Construction of pucca buildings for 1,103 primary schools taken up under this scheme is being completed during 1988-89. Further, provision of Rs. 8,000/- per school has been kept for making reading/learning materials available to 541 primary schools as first phase. The Project for second phase to cover 954 primary schools has also been finalised by the State Empowered Committee.

### **Saraswati Scheme :**

Under the new policy of education, provisions are made to provide equal education opportunities to all sections of the society by attending their specific needs. However, present rise in the cost of education affects the poorer sections. In order to mitigate financial hardships of such families, a welfare scheme named as "Saraswati Scheme" has been implemented during the year 1988-89. Under this scheme, incentives are given to the students of elementary schools belonging to the families below the poverty line by providing them free textbooks, exercise books, uniforms etc. By the end of the current year 1988-89, this scheme aims at cover as much as 1.50 lakhs students.

### **Socially Useful Productive Works/Creative Works :**

As a preparation for vocationalisation of education at 10+2 stage, the programmes of socially useful productive workshd been taken up at the elementary stage. Under this programme, a sum of Rs. 3.00 lakhs is proposed during the year 1989-90 for supplying materials, tools and equipments and also for organising community singing at District Headquarters for every important national days.

### **Students' Health Programme :**

Under this programme, a sum of Rs. 3.00 lakhs is proposed for the year 1989-90 for regular student's health check-up providing drinking water, training of teachers in health Education and School sanitation.

### **Merit Scholarships :**

Merit Scholarship Examination at the end of Class V is conducted to induce competitive awareness amongst the students and also public examination at the end of Class VIII. 200 students, 100 for each of the two examinations are selected for awarding scholarship.

#### **7.1.1 Secondary Education :**

By the end of 1986-87, there are 379 High/Higher Secondary Schools in Manipur out of which 129 High Schools are in the Hills. Teacher pupil ratio is 1:20 for the State and those of Hills and Valley are 1:16 and 1:22 respectively. Number of Scholars per institution is 282 only. Again, average areas served per institution for Hill and Valley are 156 sq. kms. and 9 sq. km. respectively.

Budget Estimates for the year 1988-89 under Secondary Education is Rs. 1,361.77 lakhs against Rs. 1,233.19 lakhs (RE) for 1987-88. Out of the Revised Estimates for the year 1987-88, only Rs. 143.00 lakhs are under Plan as against Rs. 210.00 lakhs for the year 1988-89.

Important Plan Schemes which are being taken up are given below :

**Strengthening :**

With the introduction of new syllabus leading to 10+2+3 pattern of education, the teachers available at present will not be adequate. There are 208 Govt. High & Higher Secondary Schools and the estimated requirement of a single section High School of Class IX and X is 10 teachers including the Head Master and Asst. Head Master. Calculating on this basis, the estimated additional requirement of teachers is about 440 graduate teachers.

**Improvement on Teaching of Science & Mathematics :**

For effective teaching of Science and Mathematics as per new syllabus for 10+2 pattern of education, laboratory equipments are to be provided. Over and above, all Science and Mathematics teachers are to undergo orientation training courses. For them, at least actual conveyance allowances are to be given. It is also proposed to open one Science Museum at all District Headquarters for extending facilities to students for seeing scientific equipments/articles there.

**Book Bank/Library :**

The Library facilities available at present is not adequate. Moreover, new text books as per new syllabus introduced from the session 1984-85 are to be supplied to the Book Banks being set up in High Schools and Higher Secondary Schools. The anticipated expenditure for the purpose is Rs. 10 lakhs for 1987-88 and an amount of Rs. 35.00 lakhs is being purposed for 1988-89.

**Non-Formal Education :**

To cover the whole population under universalisation of elementary education during the 7th Five Year Plan period, Non-Formal Education has to play an important role for enrolling those children dropped out of the schools and also those who have not attended any school. The target for the 7th Plan is to open 250 centres and to appoint 250 instructors for enrolling 10,000 children of the age-group 6-14. During the first year of the 7th Plan, no new centre was opened. During 1986-87, 100 centres were opened with 100 instructors enrolling 2,00 children. The target for 1988-89 is to open another 100 new centres with 100 instructors to enrol 2,000 children.

**Computer Education :**

Computer literacy programme has become a very important one for Science and Technology Education. During the previous 2 years, 15 High/Higher Secondary Schools have been provided with Computer machines by the NCERT, New Delhi and necessary infrastructure for installation of the machines were provided by the State Govt at a cost of Rs. 70,000 per school. During 1988-89, 10 High Schools may be provided

with computer machines by the NCERT and necessary infrastructure will have to be provided by the State Govt, for the schools. In view of tight provision, a sum of Rs. 1.00 lakh is proposed for 1989-90.

### **Navodaya Vidyalaya :**

During 1987-88, four Navodaya Vidyalayas have been established in 4 Districts of Manipur. For meeting contingent charges for establishment of new Vidyalaya, a sum of Rs. 0.50 lakh is proposed for 1989-90.

### **7.1.2 Teachers' Education :**

#### **A—Elementary :**

In Manipur, there are 4 Teachers' Training Institutes having intake capacity of 400 teachers of both primary and middle schools. During the 7th Plan period, targets have been fixed to train all untrained teachers. Moreover, effort has been made to restructure the syllabus in the light of the new school syllabus.

#### **B—Secondary :**

For, training of Secondary School Teachers, there are 2 colleges in Manipur. In addition, there are 2 more training centres opened in collaboration with R. C. B., Bhubaneswar for removing the back-log of untrained teachers in the State. Till date, science method subjects are not introduced in these colleges. Arrangements are made to introduce these subjects during the year 1989-90.

#### **C—State Institute of Education (SIE) :**

The State Institute of Education is an academic wing of the Education Department for bringing out qualitative improvement of school education. The following programmes are undertaken in collaboration with the NCERT. These are—(a) In-Service Teachers' Training, (b) Massive Teachers' Orientation Programme, (c) Population Education Programme, (d) Activities relating to implementation of National Policy on Education etc.

### **7.1.3 Higher Education :**

In Manipur, there are 26 government colleges, around 20 private colleges, 9 aided colleges. Out of 26 government colleges, 13 colleges have both science and Arts faculties, one college, both Arts and commerce faculties, in one college, there is only science faculty, and the remaining 8 colleges have only Arts faculty.

The 3 years' degree course has been introduced in the State from the academic session, 1985-86. In conformity with the guidelines given by the UGC, the courses have been restructured with the introduction of relevant application oriented subjects. To teach these subjects effectively, specialised additional teachers and sufficient teaching aids are required.

Bridge Course subjects meant for students who passed 2 year degree course are concurrently treated as core subjects for students of 3rd year class of the Three Year Degree course and will continue as core subjects from the academic session: 1988-89. Govt. has also decided to open Bridge Course in 18 colleges from the Academic Session 1987-88.

#### Pre-Service Training Centre :

The programme for training/coaching of deserving students of scheduled castes and scheduled tribes for appearing in various All-India Service Competitive Examination was continued 38 students were admitted during 1988-89. A Jaisan officer has been appointed specially for Hindi for coaching the deserving of student for examination.

#### Students' Amenities :

Under the scheme "Students' Amenities", educational excursions, inter-college sports, festivals, inter-college short play competition, etc. are being organised. A sum of Rs. 10.00 lakhs is proposed for the year 1989-90. For providing T.V. sets to colleges for extending facilities to students for educational programme etc. a sum of Rs. 1.00 lakh also was proposed for the year 1987-88.

#### 7.1.4 Quality Improvement Programmes :

##### Matching Share of U.G.C. Grants :

21 Government colleges are eligible for receiving financial assistance from the U.G.C. for purchase of library books/science equipments. The matching share to be contributed by the State Government ranges from 25% to 50% according to the items. At least a sum of Rs. 2 to 3 lakhs each can be lifted from the U.G.C. by such eligible colleges. A sum of Rs. 52.00 lakhs is proposed for the year 1989-90.

For financial assistance for publication of college level text-books, academic journals, quarterlies etc. a sum of Rs. 0.50 lakh was proposed for the year 1987-8. For development and promotion of sports infra-structure in colleges under national sports organisation/U.G.C. programme a sum of Rs. 10.00 lakhs was proposed for the year 1988-89 as State share of contribution to U.G.C. scheme.

**Building f**

The approved outlay on capital component for Higher Education for the Seventh Five Year Plan period is Rs. 130.00 lakhs and for the year 1988-89, a sum of Rs. 60.00 lakhs is proposed.

**Assistance to Manipur University :**

The Manipur University which was established only in 1980 needs further development. It is estimated, that there would be about 2000 post-graduate students by the end of the Seventh Five Year Plan, and faculty members would be about 250 by then, exclusive of Library, Technical and other supporting staff. The existing buildings, laboratories, equipments, library books etc. are not sufficient to meet the basic needs of the students as well as the teaching and non-teaching staff members of the University. Therefore, during the 7th Plan period basic needs in the form of buildings, libraries, laboratories, science equipments etc. will have to be provided. A sum of Rs. 130.00 lakhs has been proposed for the year 1989-90.

**Development of Language in the State :**

A—A Scheme for production of more books in Manipuri language on literature, science, commerce, technology, arts, music etc. by giving financial assistance as incentives to writers has been introduced.

B—A Scheme for extending facilities to Muslim students for studying Urdu in Madrassa by appointing Urdu teachers is under consideration. There are at present 107 Madrassas.

**C—Development of Tribal dialects :**

There are 29 tribal dialects out of which 5 dialects are recognised by the Govt. as medium of instruction and examination upto Class V is being conducted for children whose mother tongue is one of the recognised dialects. The recognised dialects are Tangkhul, Hmar, Paite, Lushai and Thadou/Kuki. The remaining 24 dialects are also to be developed so that they may be used as medium of instruction and examination at least upto Class II. Production of teaching and reading materials in these dialects is to be done with the assistance of the Govt.

**D—Learning of Meetei Script :**

Learning of Meetei Script in Class VIII in the schools of valley has been introduced. Teachers are to be trained and supplementary reading materials are to be developed for the same.

**E—Propagation of Sanskrit :**

Voluntary organisations engaged in the propagation of Sanskrit are being encouraged by giving financial assistance.

### 7.1.5 Adult Education :

Adult Education Programme are meant for effective implementation of the National Programme for hundred per cent coverage of adults in the productive age-group of 15-35 years by 31-3-1990. It is included in the 20 point programme and the Minimum Needs Programme.

Adult Education Department was set up as a full-fledged Department in the year 1980 to implement the Adult Education Programmes in the State. The Department is now implementing the programmes by running six State Adult Education Projects (SAEPs) with State fund and six Rural Functional Literacy Projects (RFLPs) with Central fund. The SAEPs are in the districts of Imphal, Bishnupur, Thoubal, Churachandpur, Tamenglong and Ukhrul while the RFLPs are in the districts of Imphal, Thoubal, Senapati, Ukhrul, Chandel and in the sub-divisions of Jiribam, Tipaimukh and Tousem.

The approved outlay for the 7th Five Year Plan period is Rs. 180.00 lakhs. The approved outlay for 1988-89 is Rs. 50.00 lakhs as against the actual expenditure of Rs. 44.03 lakhs in 1987-88. The target for 1989-90 is to run 1200 Adult Education Centres by enrolling 36,000 learners.

### 7.1.6 Technical Education :

This Department is arranging for admission of students in different branches of Engineering and Technology at degree level in the institutions of different States of India. During the year 1988-89, 69 students were selected for training. The Government Polytechnic, Imphal having Civil, Electrical and Mechanical diploma courses is running under this Department. The annual intake of students will be increased from 120 to 180 during 1989-90. Approval of the Government of India has already been obtained for opening 2 new courses i.e, Pharmacology and Computer. These two courses will be started from the session 1989-90. In addition, new courses, such as Textile Chemistry. Architecture may also be started in this Polytechnic.

### 7.2 SOCIAL WELFARE :

The Social Welfare Department was set up in the State for taking special care of the problems of women; children, the aged and the infirm and the mentally and physically handicapped persons. At present, the following schemes are being implemented : (1) Child Welfare, (2) Welfare of the Handicapped, (3) Women's Welfare, (4) Financial assistance to the poor and the needy, (5) Old Age pension, (6) Welfare of Children in need of care and protection, (7) Correctional Services, (8) Grants-in-aid to voluntary organisations, (9) Special Nutrition Programme and (10) Integrated Child Development Services Scheme.

An outlay of Rs. 160.00 lakhs is provided for the 7th Five Year Plan, (1985-90), of which Rs. 41.00 lakhs was spent in 1987-88 and another sum of Rs. 42.00 lakhs is expected to be spent in 1988-89.

### 7.2.1 Child Welfare :

The Children's Parks have been opened in different parts of the State. A Museum-cum-Dole House-cum-Library (Bal Bhavan) at Khumanlampak as mark of observance of International Year of the children was completed. 57 dependent children were given financial assistance of Rs. 60/-per month per child for meeting the expenditure on food, clothing, medicine and educational requirements under Foster/Sponsorship Programme. Under the Family and Child Welfare Project, various welfare programmes, such as, periodical health check up, supplementary feeding, health education, and home management, play activities, immunisation and training to young mothers have been taken up. Children in the age group of 0-6 years are covered under the scheme.

### 7.2.2 Welfare of the Handicapped :

A blind school for providing academic education to the blind children upto High School standard has been running and residential accommodation facilities to the students have been provided. The Directorate has also been running a Deaf & Mute School for providing modern educational treatment to the Deaf and Mute Children. The school provides both residential and day scholar facilities. The scheme to give scholarships to the handicapped students in pursuing their education, professional or technical/vocational training is implemented by the Directorate. 307 handicapped students have been selected for the scholarship during the year 1987-88. Financial assistance at the rate of Rs. 200/- each were given to the handicapped persons during the year 1987-88. The Directorate has also taken up a scheme of vocational training -cum-production-cum-rehabilitation centre for physically handicapped persons.

### 7.2.3 Women's Welfare :

The working ladies hostel at Takyel Welfare Complex will start providing safe accommodation for working women of low-income group in the State from the year 1987-88. For upliftment of the socio-economic condition of the womenfolk, one training-cum-production centre is imparting training to 100 destitutes, divorcee, deserted and neglected women during the current year. One such centre is being opened at Bishnupur District during the year, 1988-89. Out of the agreed outlay of Rs. 19.00 lakhs of the 7th Plan Period, a sum of Rs. 2.92 lakhs was spent in 1987-88 and another sum of Rs. 4.00 lakhs is expected to be spent in 1988-89.



#### **7.2.4 Financial Assistance :**

903 poor and needy persons have been given financial assistance at the rate of Rs. 200/- each during the year 1987-88.

#### **7.2.5 Old Age Pension :**

The Directorate has been giving old age pension to the aged persons at Rs. 60/- per head per month on a continuing basis.

#### **7.2.6 Grants-in-aid to Voluntary Organisations :**

Grants-in-aids are being given to various voluntary organisations dealing with the handicapped women and children etc. Grants-in-aids are also given to the Manipur State Welfare Advisory Board & the Border Area Welfare Extension Projects.

#### **7.2.7 Special Nutrition Programme :**

Under the Minimum Needs Programme, Supplementary Nutritional Foods are given to pre-school children and pregnant & nursing mothers. The Scheme covers 16 ICDS projects, 86 Balwadi and 36 Family and Child Welfare Centres.

#### **7.2.8 Integrated Child Development Services Schemes :**

Under this scheme, children below 6 years of age, expectant and nursing mothers, specially belonging to backward and tribal areas are given integrated services to accelerate physical, mental and psychological growth, such as, Pre-school education, Nutrition, Immunisation, Health and Nutrition education under ICDS. 16 (sixteen) Projects are under operation in the State. The scheme is wholly financed by the Government of India.

### **7.3 ARTS AND CULTURE :**

The Arts and Culture Department is a new Department carved out from the Education Department during the Sixth Five Year Plan period. The Department has at present 8 schemes, viz, (1) Direction & Administration, (2) Fine Arts Education, (3) Improvement of Museum, (4) Library Services, (5) Archaeology, (6) Gazetteer, (7) Archives and (8) Promotion and Preservation of Arts & Culture. The agreed plan outlay for the 7th Five Year Plan is Rs. 100.00 lakhs. The actual expenditures during the year 1986-87 and 1987-88 were Rs. 55.11 lakhs and Rs. 82.44 lakhs respectively. The anticipated expenditure for the year 1988-89 and the proposed outlay for the year 1989-90 are Rs. 100.00 lakhs and Rs. 141.00 lakhs respectively.

### 7.3.1. Fine Arts Education :

The scheme comprises (i) Govt. Music College, (ii) Grants-in-aid to Manipur Kala Akadamy and (iii) Imphal Arts College. The Govt. Music College has been teaching Hindusthani Music (Vocal and Instrumental) and producing Visharads. Out of the agreed outlay of Rs. 28.06 lakhs, a sum of Rs. 8.22 lakhs was spent in 1987-88 and another sum of Rs. 11.00 lakhs is expected to be spent in 1988-89.

### 7.3.2 Manipur State Kala Akadamy :

The Manipur State Kala Akadamy is a composite regional version of the 3 National Kala Akademies viz. Sahitya, Sangeet Natak and Lalit Kala Akademies of New Delhi. This institute gives annual awards to various fields of culture and organises festivals, seminars, workshops and exhibitions. It has the schemes like grants-in-aid, Old age pension for distinguished artists and scholarship/fellowship for advance training.

### 7.3.3 Imphal Arts College :

The Imphal Arts College, the only college of its kind in Manipur has been functioning as a standard college comparable to other Arts Colleges of Calcutta, Lucknow and Delhi.

The Manipur State Museum is housed in a two-storied building in the centre of the Imphal town. It has Ethnology, Archaeology and Geology Sections. A number of objects have been acquired and displayed.

### 7.3.4 Library Services :

The Manipur Central and the District Libraries have a rich collection of books in English, Hindi, Bengali, Sanskrit and Manipuri. Two District Libraries, one each at Thoubal and Bishnupur were opened during the year 1987-88. A sum of Rs. 3.75 lakhs was spent in 1987-88 out of the agreed outlay of Rs. 10.00 lakhs for Library Services. Another sum of Rs. 5.25 lakhs is expected to be spent in 1988-89.

### 7.3.5 Manipur State Archaeology :

The State Archaeology was established in the year 1978 with the enactment of the Manipur Ancient and Historical Monuments and Archaeological Sites and Remains Act, 1976. So far, proper exploration and excavation has not been carried out. Exploration and excavation of a few sites, like Khangbi cave, Sekta and Napachik areas may be taken up.

### 7.3.6 Promotion of Arts and Culture :

The scheme deals with (1) Manipur Film Development Corporation, (2) Grants-in-aid to Voluntary Cultural Organizations, (3) Pension Scheme, (4) INA Museum-cum-Library, (5) Eastern Zone Cultural Centre, (6) Grants-in-aid to Artists for visits outside Manipur & (7) Scholarship to Artists for studies outside and inside Manipur, etc. The agreed outlay for promotion of Arts and Culture during the 7th plan period was Rs. 20.00 lakhs.

#### 7.4 YOUTH AFFAIRS & SPORTS

The tiny State of Manipur in the north eastern corner of India had a glorious part in the field of sports and martial arts. In the recent past also, it proved its mettle in sports and games at the National Level. Considering the fact that the State has a population of only about 1.5 million with virtually no infrastructural support for sports and games, its representation and performance in National and International events in the recent past could be considered as something unique. Notable events are hockey, swimming, archery, women's football, cycling and martial arts. Certainly, the boys and girls of this State have the ability and will-power to reach more lofty heights.

Prior to the formation of a separate Directorate of Sports, Physical Training and Youth Services in 1980, such programmes were implemented by the Education Directorate. During the short span of about 7/8 years, the new Directorate with its limited resources has been providing necessary administrative, financial, infrastructural and other similar supports for promotion of sports and allied activities in the State.

The approved outlay for the 6th Five Year Plan (1980-85) was Rs. 250.00 lakhs. Besides the normal activities, construction of Sports Complex at Khuman Lampak and construction of Mini-Stadium at District Headquarters, etc. are worth mentioning. District Sports Offices have also been opened in all the 8 District Headquarters and a separate branch office was opened at Jiribam, the sub-divisional Headquarters.

The approved outlay for the 7th Five Year Plan is Rs. 400.00 lakhs. The actual expenditures for the years 1985-86, 1986-87 and 1987-88 were Rs. 81.01 lakhs, Rs. 95.76 lakhs and Rs. 138.02 lakhs respectively. A sum of Rs. 150.00 lakhs is expected to be spent in 1988-89. The following schemes, namely (1) Direction & Administration, (2) Physical Education, (3) Youth Welfare Programme for students, (4) Youth Welfare Programme for non-students and (5) Games and Sports including sports facilities will be implemented during the year 1989-90 for which an outlay of Rs. 396.48 lakhs has been proposed.

During 1987-88, a cultural troupe and a team playing indigenous games were sponsored for participation in the India Festival held in the U. S. S. R. Fifty one youth delegates from the U. S. S. R. visited Manipur from 6th to 8th January, 1988 during the U. S. S. R. Festival in India.

## 7.5 MEDICAL AND PUBLIC HEALTH SERVICES :

The growth rate of population of Manipur during the decade 1941-1951 was 13% only. The decadal growth rates of population after 1951 has gone up to 30% plus, in spite of different measures for birth control. One of the most important factors contributing to the high growth rate is a sharp fall in death rate because of the extension of medical facilities to both urban and rural areas. Crude death rate by 1981 per 1,000 population for Manipur is 6.8 only against the all-India average of 12.5.

The infrastructures of Medical and Health Services are enumerated below :

In Manipur, there are 509 Medical Institutions as on 31-3-1988 spread over the whole area of the State for bringing health services within easy reach of the people in general and the rural population in particular. A statement showing distribution of Medical Institutions in Hill and Valley areas by types of institutions is given below :

Table No. 37

Sl. No.	Types of Institutions	Number of Institutions		
		Hill Area	Valley Area	Total
1	2	3	4	5
1.	District Hospital	5	1	6
2.	T. B. Hospital	—	1	1
3.	Leprosy Hospital	—	1	1
4.	Regional Medical College Hospital, Imphal	—	1	1
5.	Jail Hospital, Imphal	—	1	1
6.	Police Hospital	—	1	1
7.	Community Health Centre/R.H.	4	4	8
8.	Primary Health Centre (PHC)	29	20	49
9.	Primary Health Sub-Centre	206	183	389
10.	Dispensaries	41	11	52
Total :		285	224	509

Population served per Medical Institution is 3,340 in Manipur in 1988 against the all-India average of 21,984 in 1985. This may be due to the very low population density of Manipur when compared with all-India average. By 1981, population density per square kilometre of Manipur was 64 persons against the all-India average of 208 persons.

As on 31-3-1988, there were altogether 1,794 beds of which 670 beds were in the hills and 1,124 beds in the valley. Population per bed were 948 against the all-India average of 1,149 by 1985.

A statement showing distribution of hospital beds as on 31-3-1988 amongst the districts are shown below :

Table No. 38

Sl. No.	Name of District	Number of beds						Total
		Hosp.	CHC	PHC	TB	Leprosy	Others	
1	2	3	4	5	6	7	8	9
1.	Imphal	658	60	68	100	50	18	954
2.	Thoubai	—	30	56	—	10	—	96
3.	Rishnapur	—	30	34	—	10	—	74
	Valley :	658	120	158	100	70	18	1,124
4.	Churachandpur	100	30	48	25	—	—	203
5.	Ukhrul	50	30	54	10	—	—	144
6.	Senapati	25	60	46	—	—	—	131
7.	Tamenglong	50	—	48	10	—	—	108
8.	Chandel	30	—	54	—	—	—	84
	Hill :	255	120	250	45	—	—	670
	Stats :	913	240	408	145	70	18	1,794

In Manipur, there are 617 doctors as on 31-3-1988 under the State Health Department and the R.M.C. Number of Registered private practitioners (doctors) in Manipur is not many. Number of persons per doctor as on 31-3-1988 is 2,755 against 2,608 of-all India by 1986.

A statement showing the total number of specialist and non-specialist doctors as on 31-3-1988 is given below :

Table No: 39

Sl.No.	Institutions	Specialists	Non-Specialists	Total
1	2	3	4	5
1.	R.M.C.	111	64	175
2.	State Health Department	103	339	442
	Total :	214	403	617

4,24,461 patients (excluding RMC) are treated in the Medical Institutions under the State Health Department during 1987-88. Out of the patients treated, 1,041 operations are done excluding deliveries. Total number of deliveries conducted during the year is 3,271. Patients treated per doctor is 960 during 1987-88.

## 7.5:1 Control of Communicable Diseases :

### A - Expanded Programme on Immunization (EPI)

Implementation of Programme was started in January, 1978 with the objective of providing Integrated Immunization services to the target population. The objective of the programme is to cover 100% of pregnant women with 2 doses or a booster dose of T.T. and at least 85% of the infants with 3 doses of D.P.T. and Polio and one dose of B.C.G. and Measles vaccine. Performance of the programme was not up to the mark during 1985-86. Poor response of the public may be one of the most important factors for poor performance. The Government of India has launched the Universal Immunization Programme (UIP) since 1985-86 and in Manipur implementation of the programme has been started since July 1987. The Imphal, Thoubat, Bishnupur and Churachandpur Districts have been covered under UIP. The state Govt. is planning to cover all the districts during 1989-90. An outlay of Rs. 1.00 lakh is provided for the programme during the year 1988-89.

### B - National T.B. Control Programme :

Under this programme, there is a 100 bedded T.B. hospital at Chingmeirong, Imphal. Clinics at Imphal, Churachandpur and Uthral and district T.B. control centres at Senapati, Tamenglong and Chandel were also functioning during the year 1988-89. A 25 bedded T.B. ward at Churachandpur also started functioning during 1985-86.

The B.C.G. vaccination programme which is one of the most important of the T.B. control programme continued to provide B.C.G. vaccination to all eligible children, particularly those under one year. The prevalence rate of Tuberculosis in Manipur during the year 1986-87 was 2%. An allocation of Rs. 9.91 lakhs was provided by the Govt. of India for implementation of the programme during 1987-88.

### C - National Leprosy Eradication Programme (NLEP) :

The prevalence rate of Leprosy during 1980-81 was 5.59 per 10,000 population in Manipur. Under this scheme, 4 Leprosy control Units at Thoubat, Bishnupur, Tamenglong and Uthral and 15 S.E.T. centres and one Zonal Leprosy office at Imphal are functioning during 1988-89. The multi-drug therapy (MDT) has been started in three districts of Imphal, Thoubat and Bishnupur during 1988-89. An allocation of Rs. 25.67 lakhs is provided by the Govt. of India for the implementation of the programme during 1988-89.

**D—National Programme for Control of Blindness (NPCB) :**

Three District Hospitals at Imphal, Churachandpur and Senapati have been covered under this programme. One Mobile Ophthalmic Unit is also functioning under one Medical Officer at D.M. College Dispensary. 14 PHCs has been equipped and staffed with Ophthalmic Assistants during 1987-88. An outlay of Rs. 14.35 lakhs is provided by the Govt. of India for implementation of the scheme during 1988-89.

**E—National Malaria Eradication Programme (NMEP) :**

This programme has been in operation since 1958 as a Centrally Sponsored Scheme. During 1986-87, there were 3 District Malaria Officers looking after the Malaria Eradication programme of the Districts. For successful implementation of the programme, there are 200 sections, each under the charge of one Surveillance Worker and 50 sectors, each under the charge of one Surveillance Inspector. The programme is supported with Laboratory services. The State Government is taking up the Control of Japanese Encephalities as integrated programme of NMEP. During 1988-89, a provision of Rs. 56 00 lakhs is made under the centrally sponsored scheme (50% state share).

**F—Sexually Transmitted Diseases (STD) :**

There were 2 STD clinics with laboratory facilities at Imphal and Churachandpur at the beginning of the 6th Plan. By the end of the 6th Five Year Plan, 4 more clinics were established at Ukhrul, Senapati, Tamenglong and Chandel. Altogether 1315 (1221 males, 94 females,) S.T.D. cases were treated during 1987-88.

**G—Acquired Immune Deficiency Syndrome (AIDS) :**

AIDS Surveillance programme was taken up in the State from the month of September, 1986 as per guidelines of the Government of India. The Regional Medical College, Imphal has been identified as reference centre for AIDS for the neighbouring North Eastern States except Assam. A number of sentinel centres have also been identified for surveillance of AIDS.

**H—ISM and Homoeopathic :**

One ISM and Homoeopathic Cell was opened at the Medical Directorate during January, 1986. During 1986-87, three Homoeopathic Clinics at Churachandpur, Tamenglong and Chandel were opened with one Homoeopathic Physician and one Pharmacist for each clinic. One Yoga and Nature Cure Clinic headed by one Nature Cure Physician was also established at Khumbong during 1987.

## 7.6 Water Supply and Sanitation :

Provision for safe drinking water and sanitation facilities is a basic ingredient for improving the quality of life. The programme was taken up at a very low key in the early plans. By 1968-69, pipe water supply schemes covered Imphal town and 5 villages only. By the end of the Fourth Five Year Plan, pipe water was supplied to Imphal and other four small towns as well as 45 villages. A concerted effort to improve the water supply position began only in the latter part of the Fifth Five Year Plan period when as many as 66 per cent of the villages were categorised as the problem villages. However, even by the end of the year 1979-80, the programme could be extended to only 68 problem villages. Accordingly, a major thrust was initiated by strengthening the Public Health Engineering Department from the Sixth Five Year Plan onwards as indicated below :

The approved outlay for the 5th Five Year Plan, the 6th Five Year Plan and the 7th Five Year Plan were respectively Rs. 438.27 lakhs, Rs. 2,735.00 lakhs and Rs. 4,590.00 lakhs. The actual expenditures for 1985-86, 1986-87, and 1987-88 were respectively Rs. 759.00 lakhs, Rs. 841.49 lakhs and Rs. 869.00 lakhs. The anticipated expenditure for 1988-89 and the approved outlay for 1989-90 are respectively Rs. 865.00 lakhs and Rs. 1,265.00 lakhs.

### 7.6.1 Imphal Water Supply :

Imphal City and its surroundings are suffering from inadequate supply of drinking water, partly due to depletion of sources and partly due to non-commission of Singda Dam Multipurpose Project. At present, against the requirement of 13.00 mgd., the installed capacity is only 9.70 mgd. which again further depleted between 5.50 to 6.00 mgd. during dry season. Erratic power supply and frequent voltage drops also create problems and very often interrupt the level of water supply.

In order to bridge the supply and demand gap, augmentation of Porompat and Canchipur water supply schemes for an additional 2.50 mgd. for Imphal water supply system have been taken up. Porompat augmentation scheme (1.50 mgd.) is functioning as trial run since Sept. 1988 and Canchipur augmentation scheme (1.00 mgd.) is expected during 1989-90. It is also expected to get 3.00 mgd. of water from Singda along with 1.30 mgd. from bore-wells by 1989-90. Hence by 1990, the installed capacity will be of the order of 15.00 mgd. which is at par with demand. The requirement is estimated at 18.50 mgd. by 1995 and 22.00 mgd. by 2001. To meet these requirements, it is very essential that a few viable schemes are taken up without delay. Hence, further investigations are now in progress and about 10-15 mgd. of water is also expected from Thoubal Irrigation Project which is likely to be completed by 1995.



### 7.6.2 Water Supply for other Towns :

The State has 7 other municipalities and 29 small towns. Water supply schemes of rural standard have been provided to all municipalities and small towns except 4 for which the works are in progress. For 16 towns, the augmentation schemes have already been taken up to upgrade the same to urban standard and for the remaining towns similar augmentation schemes will be taken up by phases. Augmentation of 6 towns and water supply for 2 new towns is expected to be completed by 1988-89. It is proposed to cover remaining 2 new towns and 6 augmentation schemes during 1989-90.

### 7.6.3 Rural Water Supply :

The objective of the scheme is to provide safe drinking water to all rural population in the State. There are 2035 inhabited villages in the State as per the 1981 Census out of which 1280 villages were earlier identified as problem villages. Upto the end of the 6th Five Year Plan Period, 887 problem villages were covered and schemes for remaining 393 problem villages were spilled over to the 7th Plan. Further, 469 additional problem villages were identified. The 7th Plan Programme is to provide water supply to all the villages in Manipur. It is proposed to cover all these problem villages during the 7th Plan period. 200 villages out of the remaining 286 non-problem villages will also be covered during the 7th Plan. Thus 86 villages will be spilled over to 8th Plan. During the first three years of the 7th Plan 557 problem villages were covered and the anticipated coverage for 1988-89 will be 220. 1444 villages have been provided with drinking water supply so far in Manipur. It is proposed to cover 160 partly covered villages to full and 160 other villages during 1989-90.

### 7.6.4 Urban Sanitation and Drainage :

The decadal Programme (1981-1991) envisages provision for Low Cost Urban Sanitation facilities to 80% of the urban population. So far a few demonstration units which may subsequently be converted into sewage system in due course have been constructed in urban areas. During 1988-89, it is proposed to construct 380 latrines in 32 towns whereas the target for 1989-90 is construction of 2500 latrines in 32 towns. Again, there is no proper drainage facilities in Imphal town. But extensive works on drainage could not be taken up for want of adequate funds. However, the high priority are like Secretariat Complex, Babupara area, Paona Bazar, Old Lam-bulane areas etc, are taken up in phases and the works are nearing completion. Further an estimate amounting of Rs. 100.00 lakhs for waste basin is also made for the core area of the Imphal City and submitted to the Government for approval.

### 7.6.5 Rural Sanitation :

The decadal programme (1981-1991) will provide sanitation facilities to 25% of the rural population by March, 1991. A few demonstration units on low cost pattern have been constructed. It is proposed to construct 12,500 units by the end of the 7th Five Year Plan period, of which 1,562 units had been completed during 1987-88 and the anticipated achievement for 1988-89 is 1,100. The proposed target for 1989-90 is 3,750 units.

### 7.6.6 Ground Water Exploration :

The work could not be taken up successfully for want of reliable hydrogeological data and due to the presence of gas in the valley areas. However, with the technical assistance from the Central Government and the UNICEF, it is possible to get more successful wells in future. So far, digging of wells have been completed out of which 600 are found successful by the end of December, 1987.

### 7.7 Science, Technology and Environment :

The State Council of Science, Technology and Environment was set up in the early part of 1985 and various schemes concerning the specific local problems were initiated. So far 6 (six) Science Centres have been opened in 6 (six) districts and another 16 (sixteen) Science Centres through schools and community centres are also opened during the year. A Regional Workshop on Development of Science & Technology in the North Eastern States is also organised. A Computer Centre and a Remote Sensing Cell have been opened. Various environmental programmes are also taken up. A Science Centre has been opened at D. M. College of Science, Physics Block, Imphal in June, 1987. Another Centre is also opened in Ukhrul. The works for opening one more Centre at Tadubi is in progress.

The Remote Sensing Cell has been equipped with visual aids and will be further strengthened by providing ground instruments, Photographic dark room facilities, etc. Latest land-use patterns and other environmental studies for Microhydel projects have been made possible using satellite imageries.

The system available at the Computer Centre consists of one Multi-user, Multi-programming, HCL Horizon III Computer System with two IBM compatible P. C.'s. Another 10 IBM compatible PC/XT, PC/AT have been procured during 1987-88 and the same were given to District Headquarters for monitoring of schemes, setting up of data base, etc. at district level.

Under the Environmental Studies and Education, multi-disciplinary studies covering the Loktak Lake and its catchment areas are taken up. 17 Solar Street lamps have been installed during 1987-88 and 86 more lamps will also be procured and installed under "Non-Conventional Energy Programme". During 1988-89, there is a proposal to

set up 21 Bio-gas plants and 5 Bio-mass Gasifiers of 20 KW capacity. The Directorate will implement solar energy schemes with the proposed physical targets of 6 solar water heaters, 10 solar desalination systems, 10 domestic solar water heaters, 600 solar cookers, 200 SPV street lightings, 15 SPV community lightings, 10 SPW battery charging for wireless & 5 solar PV pumps during 1988-89. It is also proposed to install 4 wind mill pumps and 2 wind Generating Units.

Emphasis will be given to 3 main programmes i.e. (i) Science and Technology, (ii) Ecology and Environment and (iii) Non-Conventional source of energy during 1988-89. 14 continuing schemes and 2 new schemes are proposed to be taken up during 1988-89.

The agreed outlay for the 7th plan period is Rs. 365.00 lakhs. The actual expenditures for 1985-86, 1986-87 and 1987-88 were Rs. 32.40 lakhs, Rs. 30.87 lakhs and Rs. 48.93 lakhs respectively. The anticipated expenditure for 1988-89 is Rs. 110.00 lakhs and the proposed outlay for 1989-90 is Rs. 223.50 lakhs.

#### 7.8 Development of Tribals and Other Backward Classes :

Of the eight districts in Manipur, five districts comprising about 90 per cent of the State area are hills with people belonging mostly to the scheduled tribes. According to the 1981 Census, the scheduled tribes accounted for 27.3 per cent of the total State population. It was observed that about 94 per cent of the scheduled tribes population was found in the five hill districts. The percentage composition of the scheduled tribes in the districts as per information revealed in the 1971 and 1981 censuses is given below :

Table No. 40

District	Scheduled Tribe population as percentage to total population according to census	
	1971	1981
1	2	3
<b>A. HILLS</b>		
1. Senapati	79.4	68.0
2. Churachandpur	93.8	86.3
3. Ukhrul	96.3	90.0
4. Tamenglong	97.8	47.0
5. Chandel	89.1	68.1
<b>B. VALLEY</b>		
6. Imphal	6.7	3.2
7. Bishnupur	1.7	2.8
8. Thoubal	1.0	1.0
<b>Total Manipur :</b>	<b>31.2</b>	<b>27.3</b>

The decrease in the proportion of scheduled tribe population in the hill areas seems to be mainly due to the reporting of "Kabui" tribe as "Zehangrong" tribe which is not counted as a scheduled tribe.

The tribal population in Manipur is composed of 29 scheduled tribes broadly classified into the Nagas and the non-Nagas. The distribution of scheduled tribes population reveals different patterns in the hill and the valley. In the hills, the scheduled tribes live in compact areas, but in the valley, they are found dispersed in small pockets. The different tribes have also different pattern of distribution. The Naga tribes have area concentration but the non-Nagas have dispersed habitation all over the State.

The administration of the hill districts is carried out by the Deputy Commissioners. Most of the schemes for development and welfare of scheduled castes and tribes are implemented through the Deputy Commissioners who have been declared as Additional Development Commissioners. The Hill Commissioner is to supervise and co-ordinate the activities of the Deputy Commissioners in the 5 hill districts. The normal departments in various sections of development prepare and execute them through their field agencies subject to the general sanction of the Hill Commissioner and Tribal Welfare Department. A Directorate for Development of Tribals and Other Backward Classes was set up in 1976 and there is an Advisory Board on Welfare of Scheduled Castes/Tribes under the Chairmanship of a Scheduled Tribe M.L.A. with some prominent members of ST/SC Communities.

The Manipur Tribal Development Corporation Ltd. was established for bringing about a rapid economic development of the scheduled tribes. A comprehensive Tribal Sub-Plan strategy has been adopted since the beginning of the Fifth Five Year Plan. The Tribal Sub-Plan envisages development efforts in identified areas with resources pooled from (i) Outlays from the State Plan, (ii) Investment from Central Ministries, (iii) Special Central Assistance and (iv) Institutional finance.

Various schemes under the backward classes sector were implemented through the successive plans for the up-liftment of Tribals, Scheduled Castes and other backward classes in Manipur. The schemes like (i) development of education, (ii) economic upliftment, (iii) health and housing scheme, (iv) establishment of the Manipur Tribal Development Corporation Ltd., etc. were taken up with actual expenditure of Rs. 77.83 lakhs for 1985-86, Rs. 77.78 lakhs for 1986-87 and Rs. 99.99 lakhs for 1987-88. The anticipated expenditure for 1988-89 and the approved outlay for 1989-90 are respectively Rs. 123.00 lakhs and Rs. 211.00 lakhs. The approved outlay for the 7th plan period (1985-90) is Rs. 400.00 lakhs.

All these schemes will continue during 1988-89. Besides, two new schemes, viz. (i) Technical Training Institute and (ii) Tribal Research Institute have also been taken up during 1988-89. The physical achievements are briefly described below:—

## 7.8.1 Education :

Various schemes like (i) opening/strengthening of schools in school-less villages, (ii) award of pre-matric/meritorious stipend, (iii) construction of hostel buildings, (iv) construction of school buildings, (v) financial assistance to schools for purchase of equipments, (vi) financial assistance for encouraging publication of books in tribal dialects, (vii) construction/maintenance of community halls, (viii) assistance in cash/kind to clubs/organisations under Arts & Culture Programme, etc. have been taken up during 1988-89. The physical achievements, made during the 7th Five Year Plan are presented below :

Table No. 41 : Physical achievements on Education-schemes

Sl. No.	Items	Unit	Agreed Target 1985-90	Actual achievements in			Proposed Target, 1988-89
				1985-86	1986-87	1987-88	
1	2	3	4	5	6	7	8
(i)	Opening of Schools in school-less villages	No.	50	20	12	15	19
(ii)	Award of pre-matric stipend	No.	7055	367	280	156	320
(iii)	Construction of School buildings	No.	50	12	17	24	29
(iv)	Construction of Hostel buildings	No.	15	5	—	3	3
(v)	Financial Assistance to schools for purchase of equipments	No.	100	38	28	28	60
(vi)	Financial assistance for encouraging publication of books in tribal dialects	No.	200	66	93	72	60
(vii)	Construction/maintenance of community halls	No.	25	5	4	5	5
(viii)	Assistance in cash/kind to clubs/organisations under Arts & Culture Programme	No.	525	1595	905	521	258
(ix)	Award of meritorious scholarship	No.	—	—	—	—	50
(x)	Award of stipend for special coaching	No.	1000	—	105	705	105

### 7.8.2 Economic Upliftment Programmes :

Programmes of economic upliftment like (i) Communication in ST areas, (ii) Piggery development (ST & SC), (iii) Duckery Development (ST & SC), (iv) Handloom Development (ST & SC), (v) Supply of Autorickshaw (ST & SC), (vi) Poultry Development (ST & SC), (vii) Supply of Carpentry tools (ST & SC), etc. have been taken up during 1988-89.

The physical targets and achievements for the 7th Five Year Plan period are presented below :

Table No. 42 : *Physical targets and achievement of Economic upliftment programmes*

Sl. No.	Items	Unit	Agreed Target 1985-90	Actual Achievements in			Proposed Target 1988-89
				1985-86	1986-87	1987-88	
1	2	3	4	5	6	7	8
( i )	Communication (construction of Inter-village roads and culverts) in S. T. areas	kms.	200	40	27	11	40
( ii )	Piggery Development Programme (S.T. & S.C. families benefited)	No.	270	72	66	93	151
(iii)	Duckery Development Programme (S. T. & S.C. families benefited)	No.	135	33	35	50	60
(iv)	Handloom Development Programme ( S.T. & S.C. families benefited )	No.	500	100	70	77	92
( v )	Supply of autorickshaw (S.T.&S.C. families benefited)	No.	75	15	50	77	119
( vi )	Poultry Development Scheme (S C. & S.T. families benefited )	No.	150	16	12	50	20
(vii)	Poultry Dev. Programme (S.T. & S.C. families benefited)	No.	—	—	37	50	—
(viii)	Supply of Carpentry tools (S.T & S.C. families benefited)	No.	—	9	—	—	—

### 7.8.3 Health and Housing Programme :

Programmes like (i) Housing Programme (ST&SC), (ii) Financial assistance for medical treatment (ST & SC), (iii) Construction of Kitchen at Hospitals (ST) and (iv) Improvement of Water Supply have been taken up during the 7th Five Year Plan period as a continuing scheme from the 6th Plan period. The physical targets and achievements for the 7th Plan period are given below :-

Table No. 43 : *Physical targets and achievements of Health and Housing Programme*

Sl. No.	Items	Unit	Agreed Target for 1985-90	Actual Achievements in			Prepared Target, 1988-89
				1985-86	1986-87	1987-88	
1.	2	3	4	5	6	7	8
(i)	No. of families benefited under Housing Programme	No.	200	80	40	58	60
(ii)	No. of families benefited under Medical treatment scheme	No.	1,000	151	87	187	142
(iii)	Construction of Kitchen at Hospitals	No.	—	—	1	1	—

Further, "Improvement of Water Supply Scheme" is taken up to solve the problem of non-availability of proper drinking water at the scheduled castes villages in the State.

### 7.8.4 50% of State's share of Centrally Sponsored Scheme :

Under this scheme, (i) construction of Girls' Hostel (S.T. & S.C), (ii) Other scheme (Research & Training), (iii) Technical Training Institute, (iv) Tribal Research Institute, (v) Establishment of Book Bank, and (vi) Scheduled Castes Development Corporation have been implemented. All these schemes have been implemented in a noticeable manner during 1988-89. The physical targets and achievement are given below :

Table No. 44 Physical targets and achievement of centrally sponsored schemes

Sl. No.	Items	Unit	Agreed	Actual Achievements in			Proposed	
			Target for 1985-90	1985-86	1986-87	1987-88	Target 1988-89	
1	2	3	4	5	6	7	8	
(i)	Construction of Girls' Hostel	No.	8	4	2	2	2	
(ii)	Other Schemes (Research & Training)		Maintenance and running of the Research Cell					
(iii)	Technical Research Institute	No.	—	—	—	—	—	
(iv)	Tribal Research Institute	No.	—	—	—	—	2	
(v)	Establishment of Book Banks	No.	1	2	2	Maintenance of one book bank at RMC	2	
(vi)	S.C. Development Corporation	No.	—	—	—	1	1	

#### 7.8.5. Manipur Tribal Development Corporation :

The Government of Manipur is at present participating in the share capital of the MTDC by purchasing shares. It is proposed to implement various family oriented and income generating schemes during the 7th Five Year Plan period. A reasonable amount is given to the MTDC as grant-in-aid for taking up programmes relating to Jhumma Rehabilitation and share capital. 115 families have been covered under Mushroom Training-cum-production programme, Cardamom plantation and Coffee plantation. The Post-Matric Scholarship was given to 6,454 B. T. students and 503 S.C. students upto the end of December, 1987. Out of the total outlay of Rs. 45.00 lakhs for the 7th plan period a sum of Rs. 11.00 lakhs have been utilized during 1987-88 and amount of Rs. 13.00 lakhs is earmarked for the year 1988-89.



## 7.9 FOOD & CIVIL SUPPLIES :

### 7.9.1 Public Distribution System in Manipur :

In a welfare State, one of the important tasks is to make the essential commodities available to the common man at fair prices. The Directorate of Food & Civil Supplies has been entrusted with this task. The Department of Food & Civil Supplies, Manipur came into existence by amalgamating two offices namely (i) the Civil Supply office and (ii) the State Trading office with the Deputy Commissioner (the erstwhile MCD) as Head of the Department. The Department was converted into a Directorate w.e.f. the 9th September 1974. Besides foodgrains, other commodities such as, levy sugar, edible oil, salt, cement, etc. are also supplied to the people at controlled prices.

#### Strengthening of Public Distribution System :

In Manipur, there are at present, 8 districts out of which 5 are in hill districts. In all districts, Civil Supply Offices have been opened at the District Headquarters for providing administrative support to the Dy. Commissioners. The main objectives are (i) to ensure timely movement of foodgrains and other essential commodities specially in the hill areas at the cheapest cost of transportation, (ii) to improve storage facilities for foodgrains in rural and hill areas and, (iii) to ensure availability and distribution of these commodities to the public at fair prices.

A plan outlay of Rs. 36.00 lakhs is provided for the 7th Plan period to meet expenditure on maintenance of Transport trucks/transport subsidies for effective control and supervision and also to transport foodgrains and other essential commodities to the distribution centres where trucks are not accessible. 4 trucks were purchased during 1984-85 and another 3 small vehicles were also purchased during 1986-87. The Govt. of India, Ministry of Food and Civil Supplies sanctioned a sum of Rs. 19.00 lakhs under Centrally Sponsored Scheme for purchase of 9 trucks during 1986-87 for use in operating mobile fair price shops, especially in the hill areas. Of the 9 trucks purchased, 8 trucks are being pressed into service. With these 16 trucks, the Department will be able to manage movement of foodgrains and other essential commodities timely in hill areas.

At present, there are 1583 fair price shops operating in the State covering the entire population. The number of Fair Price Shops opened during the year 1988-89 is 58 as against the target of 50 such shops. Number of households served per fair price shop is about 185 for the State during 1988-89. In view of the difficult terrain and sparse population in hill areas, it is still felt that there is urgent need for opening more fair price shops.

### 7.9.2 Distribution of foodgrains at specially subsidised prices in ITDP areas :

At the instance of the Government of India, a new scheme for distribution of foodgrains at specially subsidised prices to the population in the tribal area, covered by the Integrated Tribal Development Projects, has recently been introduced in Manipur. Under this scheme, there are 10 Principal Distribution Centres (PDC) viz. Senapati, Ukhrul, Chandel, Churachandpur, Tamenglong, Paomata, Kamjong, Parbung, Tengnoupal and New Kaphundai. The Government of India will provide transportation subsidy to the principal distribution centres and in turn, the Government of Manipur will bear the transportation charges upto the fair price shops, by adding Rs. 20 per quintal to the procurement prices. Profit margin of Rs. 5 per quintal is also allowed to the fair price shops.

### 7.9.3 Storage facilities :

At present, there are 16 godowns for F.C.S. out of which 3 are in the hills. Total capacity is 17,700 tonnes out of which 1,200 tonnes are in the hills. Provision has been made for constructing 4 more godowns, 3 in the hill and one in the valley, creating additional capacity of 2,000 tonnes and construction works are at final stage. During the annual Plan 1988-89, a provision is made for construction of 5 godowns of 200 tonnes capacity each at the principal distribution centres of hill areas.

### 7.9.4 Commodities distributed :

#### (a) Rice :

During the year 1988-89, 24,897 tonnes of rice have been distributed through the Fair price shop/Rationing Agents. Quantity of rice distributed during the period worked out to be about 14.45 Kgs. per person against the per capita per annum consumption requirement of 207 Kgs.

#### (b) Sugar :

3,552 tonnes of levy sugar were distributed during the year 1988-89. Estimated quantity of sugar distributed per person per annum during the period is 3.22 Kgs. (approximately)

#### (c) Other Commodities :

549 tonnes of G. C. I. sheets, 18 tonnes of iron rods and 11,465 tonnes of levy cement were also distributed to the needy people by issuing permits through Government nominated stockists. Besides, 2,990 MT'S of R.S.O. and 840 MT'S R.B.D. have also been distributed during the year 1988-89.

To protect consumers' interest, the Government has taken up various administrative and legal measures for all districts. For all districts, district level Consumers, Advisory Council has been constituted. A State Level Price Fixation Committee has been operating to help and maintain price stability in the market. The department made all out efforts to enforce regulatory provisions of enforcement laws including the Consumers, Protection Act, 1986.

#### 7.9.5 Budget Estimates :

Budget Estimates for Food and Civil Supplies for the year 1988-89 is Rs. 657.66 lakhs against the revised estimates of Rs. 663.52 lakhs for the year 1987-88. Out of the total Budget Estimates for the year 1988-89, Rs. 641.65 lakhs representing 97% is under Non-Plan capital outlay on Food, Storage and Ware-housing.

#### 7.10 LABOUR AND EMPLOYMENT :

The Department of Labour and Employment keeps an account of existing working force and the likely addition to it from time to time. The demand and supply of available manpower is regulated through employment agencies, vocational guidance and a system of employment market information. Another important function of the department is the labour welfare, which is ensured through the effective implementation of various labour welfare laws.

##### 7.10.1 A picture of Labour Force from Population Census :

As on 1st March 1981, the total population of Manipur is 14,26,953 out of which, the population in the age group 15-59 years is 7,77,080 representing 55 per cent. of the total population. Again the total workers consisting of Main and Marginal Workers is 6,13,806 representing 43 per cent of the total population and there is about 9 per cent increase in the percentage of workers to total population during 1971 to 1981. The increase is reflected mainly in Manipur Central and South Districts. Out of 5,73,339 main workers in 1981, 3,64,621 are cultivators accounting for 63.6 per cent against 67 per cent in 1971. The decrease in percentage of cultivators may be due to an increase in job opportunities during 1971 to 1981 in sectors of economy other than Agriculture.

Sex ratio i. e. females per one thousand males which decreased from 1015 in 1951 to 980 in 1971, decreased still further to 971 in 1981 whereas labour participation rate of females increased from 34% (female worker to total labour force) in 1971 to 45% in 1981 against the all-India average of 26%.

### 7.10.2 Manpower and Employment Schemes :

The main objectives are (a) to assist the employment seekers in finding suitable jobs according to qualification and experience (b) to assist employers by providing suitable workers, (c) to collect information regarding employment opportunities, training facilities, etc. and (d) to guide young persons and employment seekers in re-orienting their training programme, etc. according to the market needs.

### 7.10.3 Employment Exchange :

At all the District Headquarters of the eight districts of Manipur, District Employment Exchanges have been opened for giving employment assistance to the job seekers of the respective districts. 2 Town Employment Exchanges at Kangpokpi and Jiribam are also functioning in the State. With the assistance from the Central Govt., the operation of the Imphal Exchange is being computerised for efficient functioning. One Special Employment Exchange for the Physically Handicapped Persons has also been opened. One Self Employment Promotion Cell has also been set up under a Centrally Sponsored Scheme to assist and motivate the unemployed job seekers in taking up self-employment ventures. One University Employment Information and Guidance Bureau is being set up in the Manipur University for giving employment assistance to professional/technical persons and University students. One State Vocational Guidance Unit is also being set up for giving guidance to youths.

### 7.10.4 Employment Situation :

As on 31-1-1989, number of applicants on the Live Register of Employment Exchanges is 2,48,840 (including 59,562 females) which is about 27 per cent of the population in the age group 15-59. Estimated total number of Manipur Government Employees as on 1-1-1982 is 43,881 which is about 5 per cent of the population in the age group 15-59. "Quick" estimates of employment as on 31st March, 1987 in Public and Private Sectors of Manipur are 46.5 thousands and 0.4 thousand persons respectively, representing 2.80% and 0.02% of total population against 2.41% and 0.981% of All-India.

A statement showing percentage distribution of workers by industry divisions is given below :



Table No. 45 (Concl.)

Industry	Year	Urban					
		male			female		
		main	marginal	all	main	marginal	all
1	2	9	10	11	12	13	14
Agriculture	1977-78	25.39	100.00	25.65	27.12	27.78	27.18
	1983	51.35	—	51.35	62.18	19.36	0.87
Mining &	1977-78	—	—	—	0.42	—	0.87
Quarrying	1983	0.86	—	0.86	—	—	—
Manufacturing	1977-78	6.43	—	6.41	38.56	50.00	39.38
	1983	7.14	—	7.14	20.95	80.64	22.77
Electricity, gas & water	1977-78	—	—	—	—	—	—
	1983	1.48	—	1.48	—	—	—
Construction	1977-78	2.09	—	2.08	—	—	—
	1983	2.96	—	2.96	—	—	—
Trade	1977-78	23.65	—	23.57	22.46	22.22	22.44
	1983	5.06	—	5.06	8.14	—	7.90
Transport	1977-78	1.22	—	1.21	—	—	—
	1983	3.99	—	3.98	—	—	—
Services	1977-78	41.22	—	41.08	11.02	—	10.24
	1983	27.15	—	27.15	8.72	—	8.46
Others	1977-78	—	—	—	0.42	—	0.38
	1983	—	—	—	—	—	—
Total:	1977-78	100.00	100.00	100.00	100.00	100.00	100.00
	1983	100.00	100.00	100.00	100.00	100.00	100.00

Source: NSS 32nd &amp; 38th Rounds (Central Sample)

**7.10.5 Labour Welfare:**

The Labour Organisation ensures proper implementation of various Labour Laws, Acts and Rules for the welfare of labour in the State. Labour Department inculcates a sense of involvement, belongingness and partnership through workers' participation scheme in the management with a view to achieving the goal of optimum production and productivity. Labour Welfare Schemes in operation are given below:

**1. Administration of Labour Laws:**

The objective of the scheme is improvement of administration/enforcement/implementation of the Laws/Acts for ensuring maintenance of harmonious industrial relation without strike, lock-out in the industrial establishments, payment of wages, compensation, bonus, gratuity, etc. by the employer to their employees and regulation of employment and condition of services of various workers.

## 2. Labour Welfare Scheme :

A scheme for giving financial assistance to workers employed in handloom, fishery, leather works and agriculture whose annual income does not exceed Rs. 5,000 has been taken up in the following cases to promote welfare of workers ;

- (a) Post-matric education of children and other dependants of the workers.
- (b) Maternity purpose of a woman worker and wife of a male worker.
- (c) Accidental death, prolonged illness or permanent disablement of the worker.

## 3. Legal Aid to Labourers :

To provide legal aid to workers or trade unions of workers where the services of workers employed in the industrial establishments are terminated by either discharge or dismissal by the employers, to enable them to get the benefits of the services of an advocate at Government cost.

## Industrial Training Institute (ITI) :

For giving job opportunities/facilities and producing skilled workers so as to promote self-employment, 6 ITIs located at Imphal, Saikul, Ukhrul, Tamenglong, Tadubi and Jiribam have been functioning in Manipur. Total intake capacity of these ITIs is 532 in 16 different trades. Out of the six ITIs, only the Imphal ITI is permanently affiliated to the NCVT enabling it to get grant-in-aids from the Central Government. The remaining ITIs which are yet to be affiliated are below the prescribed national norm. New trades viz (i) Dress making (ii) Knitting with hand and hand-machine and (iii) Painting are being opened. One unit of 16 seats in Electronics is opened and action for opening more trades has been initiated.

## Budgetary Position :

Total budget estimate for the year 1989-90 is Rs. 104.24 lakhs against a revised budget estimate of Rs. 113.59 lakhs for the year 1988-89. Out of the total budget estimate for the year 1989-90 a sum of Rs. 39.00 lakhs is under plan schemes and Rs. 60.30 lakhs under non-plan schemes. Out of the remaining Rs. 4.94 lakhs a sum of Rs. 1.00 lakh is under NEC schemes and Rs. 3.94 lakhs under the Centrally Sponsored Schemes.

### 7.11 NEW WELFARE SCHEMES :

The present Chief Minister announced the Six Point New Welfare Programmes on the 31st March, 1988 for the benefit of the families living below poverty line in Manipur

The schemes are :

- (1) Free medical treatment
- (2) Supply of uniforms to S.C./S.T. Girl Students
- (3) Supply of note books to students
- (4) Free electric connection
- (5) Supply of minimum monthly ration
- (6) Enhancement of stipend for blind, deaf and dumb.

#### Free Medical Treatment :

Under this scheme free in-patient treatment is being provided to all cases of hospitalisation of families below the poverty line for a period of 15 days. A provision of Rs. 45 lakhs is provided and 745 families have been benefited till December, 1988.

#### Supply of Uniform to S.C./S.T. Girl Students :

Under this scheme, uniforms are being supplied to girls from families below the poverty line studying in Government schools in classes VIII to X. A provision of Rs. 6 lakhs is earmarked and 1,491 girls have been benefited till December, 1988.

#### Supply of Note Books to Students :

Under this scheme, note books are being supplied to the students of the families below the poverty line studying in classes I to VIII in Government schools. There is a provision of Rs. 45 lakhs and 1,540 students have been benefited till December, 1988.

#### Free Electric Connection :

Families below the poverty line in electrified villages are being given free electric connection upto one point. A provision of Rs. 40 lakhs is kept and 531 families have been covered till December, 1988.

#### Supply of minimum monthly ration :

Under the scheme, minimum monthly ration of 20 kg. of rice, 2 kg. of sugar 1 kgg. of iodised salt, 1 kg. of edible oil and 2 litres of kerosine oil is to be supplied to the families below poverty line. 1,33,690 ration cards have been prepared for the purpose. District-wise details of the ration cards distributed are shown in the tables given below :



**Table No. 46 : District wise number of Ration cards distributed to the families below the poverty line.**

Sl. No.	District	No. of cards distributed
1	2	3
1.	Imphal	47,009
2.	Bishnupur	12,104
3	Ithoubal	25,000
4.	Senapati	7,000
5.	Churachandpur	10,000
6.	Ukhrul	12,000
7.	Tamenglong	10,000
8.	Chandel	10,000
Total :		1,33,113

#### **Enhancement of Stipend for Blind, Deaf and Dumb :**

Under this scheme stipend for inmates of Government schools for blind, deaf and dumb has been enhanced to Rs. 10 per head per day.

## **8. MISCELLANEOUS**

### **8.1 Census, Survey and Statistics**

During the current year, the works relating to the 44th round of National Sample Survey are taken up. During the round, schedules on (a) living conditions of tribals (b) village characteristics, (c) level of living of tribals (d) economic activities of the tribals, (e) particulars of migration and ownership of land by non-tribals in tribal areas, (f) housing conditions, (g) particulars of construction and (h) household consumer expenditure are being canvassed. Along with the socio-economic enquiries, land utilisation survey and crop cutting experiments are also being conducted to obtain the area and production of different cereal crops. The tabulated results of the schedules, canvassed during the previous rounds are available and used by the administrators and planners.

Various regular and ad hoc surveys like (i) the Annual Survey of Industries, (ii) Socio-Economic Survey on the fishing women of Thanga and Karang villages, (iii) Survey on problems of the working women in Govt. Offices within the Imphal Town etc. have been completed. Besides, other ad-hoc surveys, crop-cutting experiments on other non-cereal crops etc. will also be taken up.

The quick estimates of State Domestic Product of Manipur both at current and constant (1970-71) prices for the year 1987-88 have been prepared and released. The 17th course of the training for the Primary and Intermediate Level Statistical Personnel has been completed.

Evaluation Studies on important plan schemes/programmes have been conducted as usual. Some reports have also been brought out and report writing for a number of studies is in progress.

The weekly retail/wholesale prices of essential commodities and monthly prices of livestock and livestock products are also collected from the District Headquarters markets. Construction of Consumer Price Index Numbers for Urban Non-Manual Employees is being continued.

The following publications/reports are published during 1988-89 :-

- ( i ) Manipur's Economic Progress in figures, 1987.
- ( ii ) Chandel District At-A-Glance, 1987.
- ( iii ) Manipur-At-A-Glance, 1987,
- ( iv ) Meteorological Data, 1972-1987.
- ( v ) District Socio Economic Review, Tamenglong, 1985-86
- ( vi ) District At-A-Glance, Imphal District, 1986
- ( vii ) District Statistical Handbook, Thoubal, 1985-86
- (viii) Tribal Benchmark Survey, Manipur Valley District.
- ( ix ) Report on Paddy-cum-Pisciculture in S C. villages.
- ( x ) The Impact of Hospital Management on the In-patients in Manipur.
- ( xi ) Report on Pineapple Cultivation in Manipur.
- ( xii ) Pre-Budget Economic Review of Manipur, 1988-89.

Table No. 47. Budgetary position for the 7th Plan Period

Sl. No.	Particulars	Actual Expenditure			Revised estimate for 1988-89
		1985-86	1986-87	1987-88	
1	2	3	4	5	6
1.	Plan	7.72	9.07	13.64	20.80
2.	Non-Plan	55.48	56.73	64.65	90.51
	Total	63.20	65.80	78.29	111.31

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