

# **GOVERNMENT OF ARUNACHAL PRADESH**



# **ECONOMIC REVIEW**

# OF

# ARUNACHAL PRADESH

# 2001

# (E.R. Section)

DIRECTORATE OF ECONOMICS STATISTICS GOVT.OF ARUNACHAL PRADESH ITANAGAR---- 791 113

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#### PREFACE

The publication entitled "Economic Review of Arunachal Pradesh – 2001 is the 13<sup>th</sup> issue of its kind annually published by the Directorate of Economics and Statistics, Govt. of Arunachal Pradesh. The publication portrays the economic situation of the state. Efforts are also nade to review and analyse the current year's data with that of past years to highlight the trend of achievement indifferent sectors of the economy of the state.

The co-operation extended by various departments / organisations inproviding requisite statistical information is gratefully acknowledged.

I appreciate the hard and sincere eforts made by Shri R. P.Kalwar, Inspector of Statistics in collection, compilation and analysis of the data under the guidance of Shri K.Mamai Research Officer (Publication). The co-operation exended by officers / officials of other sections of the Directorate is praiseworthy.

Suggestions for improvement of the subsequent issue of the publication will be gladly accepted.

Place - Itanagar Dete the 25<sup>th</sup> Sept'2002

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Arunachal Pradesh, the erstwhile North East Fontier Agency (NEFA) has reached the stage of present set-up through a gradual process of constitutional changes. On 21<sup>st</sup> January 1972, the NEFA was made a Union Territory with the new name of Arunachal Pradesh and placed under the charge of a Chief Commissioner. The territory was bestowed with legislative power with effect from 15<sup>th</sup> August, 1975. Arunachal Pradesh attained its present statehood status on 20<sup>th</sup> February, 1987

The State covering a geographical area of 83,743 Sq. Km. accounts for about 2.55% of the total area of the country (32.88 Lakhs Sc. Km.). The State is bounded by China (Tibet) in the North, Myanmar in the East and Blutan in the West. It has a common border with Nagaland in the East and South-East and Assam in the South. It falls in the outer Himalayas and Patkai range and is vivisected by innumrable rivers and streams flowing to the Brahmaputra in Assam. The major rivers are Kameig, Subansiri, Siang, Dibang, Lohit, Diyun and Dihing.

The State is endowed with rich natural resources like forests in green mountain ranges and water wealth in its numerous river: and streams. The vegetative cover of the state has been thinned out in number of places due to shifting cultivation, rapid deforestation to meet the need of growing population, natural disaster etc. Out of total geographical area of 83,743 Sq. Km. of the state neary 51,540 Sq. Km. (62%) has been reported to be under forest cover. However, as per satelite survey the area is 68847 sq.Km which constitute 82.21% of total area.

The long isolation and inaccessibility of the areas posed formidable constraints to the efforts for socio-economic development. However, with the introduction of economic planning in Independent India, the wheels of progress in this region have gained steady momentum during the successive Five Year Plans. The outlay approved for the Ninth Five Year Plan (1997-2002) was Rs.3570 crores as compared to Eighth plan outlay of Rs 1729 crores, The outlays for the Seventh Plan, Sixth Plan, Hifth Plan, Fourth Plan, Third Plan, Second Plan and Ist Plan of the state were Rs.552 crores, 223 crores, 63 crores, 18 crorers, 7 crores, 5 crores, and 3 crores respectively. The outlay approved for the Annual Plane for the year 1999-2000 was Rs 617 crores (Provisional) and for the year 2000-2001 was Rs 640 crores

The Net State Domestic Product (NSDF) of Arunachal Pradesh for the year 2000-2001according to the quick estimates, was Rs. 1591.41 crores at current prices and Rs 983.27 crores at constant prices. As compared to the pevious year, it indicates a growth of the NSDP by 11.49 per cent at current prices and 7.20 per cent at constant prices.

The Per Capita Income of the state for the year 2000-2001 (Q) was estimated at Rs.14587 at current prices and Rs.9013 at constant prices (base year 1993-94) and the corresponding figures for the year 1999-2000 (P) were Rs.13352 and Rs.8580 respectively. The per capita income also rose by 9.25 per cent at current prices and 5.05 per cent at constant prices over the figures of preceding year 1999-2000 (P). The quick estimates at current prices during 2000-2001 indicates increasing economic trend by 11.49 % over previous year 1999-2000(P). The economy of the state is largely agrarian. Agriculture occupies the most dominant position in the economy of Arunachal Pradesh since agriculture continues to be the main occupation of majority of the people of the state. Agriculture provides direct employment to about 67% of the total main workers of the state. Agriculture in the state is mainly dependant on monsoons. In the year 2000-2001 the production of food grains was 2.02 lakhs MT which is decreased by1.46%over the previous year's (1999-2000) production of 2.05 lakhs MT. The production of Rice decreased by about 1.48 %, but the production of Wheat increased by 20.00% and in case of Maize it showed increase of 8.33% during 2000-2001 over 1999-2000. The production of potato showed increasing trend during 2000-2001 over the previous year.

The varied agro-climatic condition in Arunachal Pradesh are conducive to horticulture. Nearly 55388 hectares of area was brought under fruit plants which indicates 33.14 % increase in area coverage as compared to previous year 1999-2000. During 2000-2001, the horticultural crop production was 133101 MT as against 107093 MT in 1999-2000.

Live stock plays a pivotal role in the agrarian economy of the state. As per live stock census conducted during 1992-93, the total live stock population in the state was 9,59,416. The total poultry was 11,72,245. Total milk produced during 1999-2000 was 45000 MT as against 44,500 MT in 1998-99. The production of eggs in 1999-2000 was 35.00 Million number as compared to 34.50 Million in 1998-99. In the case of Wool, 59,200 Kg. was produced during 1999-2000 as compared to 58,800 Kg. in 1998-99.

The state has vast potential of culturable water area which is estimated to be as much as 7200 hectares of which 4052 hectares were brought under systematic fish culture by 2000-2001. The production of fish registered an increase of about 4.38% in 2000-2001 over 1999-2000. The production of Fry (fish seed) increased from 24.50 Million in 1999-2000 to 25.00 Million in 2000-2001 ie increased by 2.04 %.

In the sphere of rural electrification, nearly 66 % villages of the state have been covered upto the end of March,2001 by electrifying 2416 villages out of 3649 villages as per 1991 census. The installed capacity of power in state stood at 32.12 MW from hydel hydel and 23.70.00 MW from diesel set during 2000-2001. The overall power supply position in the state is inadequate to meet the growing requirements. Under liberalised economic policy, the state government is also looking for private sector involvement in generation of hydel power in the state.

As at the end of March, 2001, the state had a total road length of 15297.67 Km of which 391.81 Km is National Highway. The state was brought under railway map of India for the first time with the opening of Balipara-Bhalukpong metre gauge line on 27.1.89. The Arunachal Pradesh Govt. also introduced Civil communication flight services through Pawan Hans Helicopter Ltd. (A Govt. of India enterprise) with effect from 9<sup>th</sup> December, 1995 as a first step towards the effort for development of air communication. The total Bus route covered by State Transport Department was only 141 with 228 number of buses during 2000-2001. At the end of March, 2001, there were 303 Post Offices and 94 Telephone Exchanges. The area served by one post office in Arunachal Pradesh is 276 Sq. Km. whereas the All India average is 22 Sq. Km. (1990-91).

There were 99 Bank Branches at the end of March,2000 with a deposit of Rs. 7023.00 lakhs and advances made to the tune of Rs. 14847.00 lakhs.

Inadequacy of infrastructural facilities like road, power, institutional finance etc. stood as hindrances to accelerate the process of industrialisation in the state. At the end of March,2001 there were 18 Medium scale Industries in addition to one Mini Cement Plant, one Fruit Processing unit, a Citronella Oil Industry and one Tea Industry and 4798 Small Scale registered units. As many as 15039 persons were employed in these Industries as on 31-3-2001 in the state The workers participation rate to total population registered a declining trend of 57.60%, 52.69% and 46.24% during the census of 1971,1981 and 1991 respectively. Though the cultivators constitute the major chunk of workers, their decadal rise during 1971-81 and 1981-91 had been only 5.69% and 5.83% respectively. There is alarming rise in the number of agricultural labourer by 60% and 150% during these two decades. The percentage of decadal rise in the number of workers in non-agricultural activities are 92.45% and 41.18% respectively. This trend is not only indicative of hidden unemployment in the agricultural sector but also leads to the conclusion that much avenues of employment were created in non-agricultural sectors during these two decades. According to 1991 census 67% of the total workers are engaged in agricultural activities who contribute only 29% of the state domestic product. This is indicative of under-employment in the agricultural sector and might be the reason for shifting of agrarian population to other economic persuits.

The educated unemployment is not so alarming in Arunachal Pradesh as compared to the rest of the country. The trend of registration of job seekers remained more or less static over last few years. However the employment exchange data has got its limitation as many of the unemployed youth may not register their names with the Employment Exchange. The government department is the main source of absorption.

The government is implementing a number of programmes for increasing employment opportunities. Employment provided under "Employment Assurance Scheme (EAS)" has generated 20.10 lakh mandays during the year 2000-2001. As many as 6.59 Lakh mandays of employment were generated during 2000-2001 under "Jawahar Rozgar Yojana(JRY)" presently known as "Jawahar Gram Samridhi Yojana(JGSY)".

# CHAPTER – 2 POPULATION

According to provisional population of 2001 census, Arunachal Pradesh has a population of 10.96102 persons consisting of 579158 males and 517444 females as against 1991 Census population of 8,64,488 comprising 4,65,004 males and 3,99,554 females. It shows an increase of 26.21% in total population, 23.43% in males and 29.44% in females as compared to 1991 Census. Arunachal Pradesh has 0.11 percent of the All India Population of 10270.15 lakhs. The decennial growth rate of the population between 1991-2001 shows that the population of the State increasel by 26.21% as against an increase of 21.34% at All India level.

The density of population in Arunachal Pradesh as per 2001 census is 13 as against 10 in 1991 Census showing an increase of 30.%. However, density is found to be the lowest among the States.

During 1961 censu, entire Arunachal Pradesh was treated as rural. But from 1971 census urbanisation started with the declaration of 3 (three) District HQ and 1(one) sub-Divisional HQ viz.,Bomdila,Tezu,Along and Pasighat as census towns. There had been an addition of two more urban areas *iz.*, Naharlagun (Old Itanagar) and Itanagar in 1981. In 1991 census, four more places viz., Namsai, Roing, Khonsa and Ziro were declared as urban areas thereby increasing the number of Census Town to 10(ten). In 2001 Census, 7(seven) more places vizTawang Seppa, Diporijo, Basar, Changlang, Jairampur and Deomali were declared as Census Towns which allied the number to 17 (seventeen) in total. As many as 8.68 lakhs (79.59%) people reside n rural areas and remaining 2.23 lakhs (20.41%) reside in urban areas. The degree of urbanisation has substantially improved in 2001 as compared to 1971. The trend is towards more and more urbanisation. The percentage of urban population to total population was 3.70 % in 971 which has increased to 20.41% in 2001. Table below shows some important features of the urban population and its decennial growth rate: POPULATION AND GROWTHRATE OF CENSUS TOWNS.

#### Table No. 2.1

Sl. No.	Census Town	1991 Census	2001 Census(Provisional)	Percentage of decadal Growth	
				(1991-2001)	
1	Tawang	-	4456	NA	
2	Bomdila	5655	6685	18.21	
3	Seppa	-	14965	NA	
4	Naharlagan	14369	26912	87.29	
5	Itanagar	16545	34970	111.36	
6	Ziro	8862	12289	38.67	
7	Daporijo	-	15468	NA	
8	Along	13238	16834	27.16	
9	Basar	-	3834	100	
10	Pasighat	14639	21972	50.09	
11	Roing	6966	10106	45.08	
12	Tezu ·	15271	15014	(-) 1.68	
13	Namsai	7975	11582	45.23	
14	Canglang	-	6394	NA	
15	Jairampur	-	5918	NA	
16	Deomali	-	6060	NA	
17	Khonsa	7079	9229	30.37	
Total	17 (Towns)	110628	222688	101.29	

The sex ratio i.e. number of females per thousand males is found to be 894 in 2001 which is increased from 859 in 1991 census. The sex ratio in Arunachal Pradesh is much lower than the All India average of 933. The sex ratio for urban areas is 850 in 2001.

According to provisional population of 2001 census, percentage of literacy to total population in the State is 54.74 as against 65.38 at All India level. Of the total literate population, 64.07% are males and 44.24% are femdes. The literacy rates were 20.79% and 41.59% in 1981 and 1991 census respectively. The literacy rate reflects a high trend which signifies that the educational amenities are being reached to the people gradually. Table below shows some important features of the population of Arunachal Pradesh and India.

GROWTH OF POPULATION, DENSITY AND LITERACY
IN ARUNACHAL PRADESH ANDINDIA

Particulars	1981CENSUS		1991 CENSUS		2001CENSUS (Provisional)	
	India	AP	Inda	AP	India	AP
1. Population (in lakhs)	6833.29	6.32	8463.)3 *	8.65	10270.15	10.91
2. Decennial	24.66	35.04	23.50	36.87	21.34	26.21
Percentage variation of population	(71-81)	(71-81)	(81-)1)	(81-91)	(91-2001)	(91-2001)
3. Density of population (per sq. km)	216	8	:67	10	324	13
4. Percentage of urban population to total population	23.34	6.56	2572	12.80	27.78	20.41
5. Literacy (%)	43.56	20.79	5211	41.59	65.38	54.74
6. Sex Ratio (females per 1000 males)	933	862	.29	859	933	894

\* Includes projected figures of Jammu & Kashmir.

Table No. 2.2

The total number of main workers according to 1991 census was 390976 constituting 45.22% of total population. The percentages of marginal workers and non-workers to total population of 1991 census were 1.02% and 53.76% respectively. The corresponding percentages to total population of 1982 census for main workers was 49.61%, marginal workers 3.02% and non-workers 47.37%. The significant feature of the composition of work force is that the percentage of cultivators and agricultural labourers together has decreased- from 73.75%(1981) to 65.49%(1991) with corresponding rise in workers proportion with household and other industries.

#### DISTRIBUTION OF POPULATION BY MAIN WORKERS, MARGINAL WORKERS AND NON-WORKERS AS PER 1991 CENSUS

Table No.2.3

1

District	Population	Main workers	Marginal workers	Non workers	Percentage of main workers to total population
1	2	3	4	5	6
1.Tawang	28287	15629	101	12557	55.25
2. W/Kameng	56421	24526	343	31552	43.46
3. E/Kameng	50395	25088	497	24810	49.78
4. L/Subansiri	83167	41205	477	41485	49.54
5. Papum Pare	72811	29086	202	43523	39.94
6. U/Subansiri	50086	22736	997	26353	45.39
7. E/Siang	99643	43539	657	55447	43.69
8. W/Siang	89936	38638	160	51138	42.96
9. D/Valley	43068	19538	175	23355	45.37
10.Lohit	109706	46021	2384	61301	41.95
11.Changlang	95530	41552	1946	52032	43.50
12. Tirap	85508	43418	867	41223	50.78
Arunachal Pradesh	864558	390976	8806	464776	45.22

DISTRIBUTION OF MAIN WORKERS BY CULTIVATORS, AGRICULTURAL LABOURERS, HOUSEHOLD INDUSTRY AND OTHER WORKERS AS PER 1991 CENSUS

District	Main workers	Cultivators	Agricultural labourers	Household Industries	Other workers
1	2.	3	4	5	6
1.Tawang	15629	8084	911	49	6585
2. W/Kameng	24526	10615	942	178	<b>1279</b> 1
3. E/Kameng	25088	19234	385	33	5436
4. L/Subansiri	41205	33006	498	59	7642
5. Papum Pare	29086	10717	1245	39	17085
6. U/Subansiri	22736	15457	225	87	6967
7. W/Siang	38638	25069	843	53	12673
8. E/Siang	43539	25213	4325	47	13954
9. D/Valley	19538	7378	3757	22	<b>838</b> 1
10.Changlang	41552	25951	3839	77	11685
11. Lohit	46021	23704	2808	87	19422
12. Tirap	43418	31559	276	11	11572
Arunachal Pradesh	390976	235987	20054	742	134193

Workers participation rate to total population during last three censuses i.e.1971, 1981 and 1991 have shown as 57.60%, 52.69% and 46.24% respectively which registered a gradual decline. This might be due to the penetration of educational system resulting in the rise of number of students who are recorded as non-workers during the census.

#### PARTICIPATION RATE OF WORKERS AND NON-WORKERS TO TOTAL POPULATION IN ARUNACHAL PRADESH DURING LAST THREE CENSUSES: Table No. 2.5

Indicator	Unit	1971 Census	1981 Census	1991 Census
1	2	3	4	5
1. Total workers (including marginal workers)	No.in lakhs	2.69	3.33	4.00
(a) Cultivators	-do-	2.11	2.23	2.36
(b) Agricultural Labourers	-do-	0.05	0.08	0.20
(c) Other than cultivator and agricultural labourers	-do-	0.53	1.02	1.44
2. Total non-workers	-do-	1.98	2.99	4.65
3. Worker participation rate to total population	%	57.60	52.69	46.24
4. Non-worker participation rate to total population	-do-	42.40	47.31	53.76
5. Decadal percentage rise of different category of workers	%Variat ion (+) or		<b>-</b> .	-
(a) Total workers	-do-		+23.79	+20.12
(b) Agricultural labourers	-do-		+60.00	+150.0
(c) Cultivators	-do-		15.69	15.83
(d) Other than cultivators and agricultural labourers	-do-		192.45	41.18

## **CHAPTER – 3** STATE DOMESTIC PRODUCT

State Domestic Product(SDP) popularly known as State Income is one of the most important indicators to measure economic growth of a state. It shows the level of Macro-Economic aggregates of the economic activities of the state valued in economic terms.

The scheme of preparation of the estimates of State Domestic Product in Arunachal Pradesh was started from 1974 and is being annually computed by this Directorate of Economics and Statistics as per methodology and guidelines provided by the Central Statistical Organization (CSO), New Delhi. At the initial stage, the estimates of SDP was based on 1970-71 series and it is available from 1970-71 to 1985-86. Revised series with bench mark year 1980-81 has also been published from 1980-81 to 1995-96. Due to shifting of bench mark year 1980-81 to 1993-94 by the Central Statistical Organisation, New Delhi the latest base year is 1993-94. Now the estimates of SDP is available from 1993-94 to 2000-2001. The estimates of SDP and related aggregates are shown in the following table:

#### STATE DOMESTIC PRODUCT AND RELATED AGGREGATES OF ARUNACHAL PRADESH BOTH AT CURRENT AND CONSTANT PRICES FROM 1997-98 TO 2000-2001

Table No. 3.1

Itoias	At Curs	west bis sces		At Constant Prices			
	1998- 99 (R)	1999- 2000(P)	2000- 2001(Q)	1998- 99(R)	1999- 2000(F)	2000-2001(Q))	
1	2	3	4	5	6	7	
Gross State Domestic Product (GSDP) ( Rs.In Crores)	1527	1598	1783	1031	1032	1111	
Growth of GSDP over Previous year in %	14.23	4.64	11.61	4.03	0.07	7.20	
Per Capita GSDP (In Rupees)	14638	14944	16343	9884	9650	10136	
Growth of per capita GSDP in %	11.38	2.09	9.36	1.44	(-)2.36	5.04	
Net State Domestic Product(NSDP) (Rs. In Crores)	1369	1427	1591	921	917	983	
Growth of NSDP over Previous year in %	14.86	4.24	11.49	4.16	(-)0.04	7.20	
Per Capita NSDP ( in Rupees)	13129	13352	14587	8829	8580	9013	
Growth of per capita NSDP in %	11.99	1.70	9.25	1.56	(-)2.82	5.05	
Per Capita NNP ( in Rupees)	14712	15562	16487	9733	10067	10254	
Growth of per capita NNP	15.2	5.8	5.9	4.8	3.4	1.9	

N.B. R = Revised Estimates, P = Provisional Estimates, Q = Quick Estimates

The above table presents Quick Estimates prepared for the year 2000-2001, revised estimates for the year 1998-99 and provisional estimates for the year 1999-2000. The new bench mark year 1993-94 reveals that the Gross State Domestic Product (GSDP) of Arunachal Pradesh for the year 1999-2000 and 2000-2001 at current prices are Rs. 1598 crores and Rs1783 erore respectively and at constant prices are Rs. 1032 erores and Rs 1111 erore respectively. At current prices, the annual growth of GSDP recorded as4.64% during 1999-2000 and 11.61 % in 2000-2001. At constant price also estimate indicates the economic growth over the previous year as 0.07% in 1999-2000 and 7.20% in 2000-2001.

Net State Domestic Product (NSDP) of Arunachal Pradesh for 1999-2000(P) and 2000-2001 (Q) have been estimated at Rs1427 erore and Rs1591 erore respectively at current price. Rs 917 erores and Rs 983 erores estimated at constant price for the year 1999-2000 and 2000-2001 respectively. Accordingly the annual growth rate of 4.24% and 11.49% at current prices and growth of (-) 0.04% and 7.20% have been recorded at constant prices for the years 1999-2000 and 2000-2001 respectively.

The per capita NSDP (Income) of the State at current prices has been estimated Rs13129.00 during the year 1999-2000 and Rs 13352.00 in 2000-2001. At constant price, the per capita income is Rs 8829 and Rs 8580 during the year 1999-2000 and 2000-2001 respectively

The following table reveals sectoral contribution to Net State Domestic Product of Arunachal Pradesh

#### BROAD SECTORAL CONTRIBUTIONS TO NET STATE DOMESTIC PRODUCT FOR 1999-2000(P) and 2000-2001 (Q)

Table No. 3.2

:1

(Rs in Crores)

		_	SDP crores)		Percentage growth over previous year				
Sector	ctor 1999-2000 (P) 2000-2001 (Q		2001 (Q)	1999	-2000	2000-2001			
	At Current Prices	At Constant Prices	At Current Prices	At Constant Prices	At Current Prices	At Constant Prices	At Current Prices	At Constant Prices	
1	4	5	6	7	6	7	8	9	
1.Primary Sector	558.78	349.21	619.26	372.04	12.84	6.35	10.82	6.54	
2.Secondary Sector	249.30	177.56	290.76	197.82	(-)15.50	(-)16.84	16.63	11.41	
3. Tertiary Sector	619.28	390.43	681.39	413.41	6.87	3.00	10.03	5.88	
TOTAL (NSDP)	1427.36	917.20	1591.41	983.27	4.24	(-)0.04	11.49	7.20	

The Primary Sector's contribution has been recorded at 38.91% at current prices and 33.26% at constant prices in the total NSDP for 2000-2001. The Secondary Sector contributes 18.22% at current prices and 20.12% at constant prices whereas the Tertiary sector shares 42.82% at current prices and 42.04% at constant prices of the total NSDP for the year 2000-2001.

The Quick Estimates indicate economic growth of NSDP by 11.49% at current prices and 7.20% at constant prices during the year 2000-2001 over the previous year.

The sector wise estimates of NSDP in Arunachal Praddesh for the years 1998-99(R),1999-2000(P) and 2000-2001(Q) both at current and constant prices are shown in the following table.

#### GROSS STATE DOMESTIC PRODUCT OF ARUNACHAL PRADESH AT FACTOR COST BY INDUSTRY OF ORIGIN AT CURRENT PRICES

Table No. 3.3	( Rs. in Lakhs )			
Industry	1993-94	1998-99	1999-2000	2000-2001
	(Base)	(Revised)	(Provisional	(Quick)
1. Agriculture	28445	41406	47205	52891
2. Forestry and Logging	9529	7466	<b>78</b> 09	7646
3. Fishing	831	1404	1460	1524
4. Mining & Quarrying	1536	1315	1944	3125
PRIMARY SECTOR	40341	51591	58418	65186
5. Manufacturing	3359	5823	6295	6 <b>8</b> 41
5.1 Registered			a =	**
5.2 Un-registered	3359	5823	6295	6841
6. Construction	17150	21324	16617	19951
7. Electricity,Gas & Water Supply	143	9140	9138	10004
SECONDARY SECTOR	20652	36287	32050	36796
8. Transport , Storage and Communication	2938	8948	9436	9832
8.1 Railways	5	2	2	2
8.2 Transport by other means	2477	7965	8448	8844
8.3 Storage	2	3	3	3
8.4 Communication	454	978	983	983
9. Trade, Hotel & Restaurant	4327	7497	7681	7867
10. Banking & Insurance	1025	2268	2571	2906
11. Real Estate, Ownership of dwellings & Business Services	1877	3235	3574	3969
12. Public Administration	8934	23217	24992	26685
13. Other Services	7326	19628	21028	25059
TERTIARY SECTOR	26427	64793	69282	76318
GROSS STATE DOMESTIC PRODUCT	87420	152671	159750	178300
Population (In lakhs)	9.21	10.43	10.69	10.91
Per Capita Income (In Rs.)	9492	14638	14944	16343
All India				
GNP (Rs.in Crores)	769265	1601065	1740207	1878429
Population (in Crores)	89.20	97.50	100.10	101.90
Per Capita Income (in Rupees)	8624	16421	17385	18434

#### -: 11 :-

#### NET STATE DOMESTIC PRODUCT OF ARUNACHAL PRADESH AT FACTOR COST BY INDUSTRY OF ORIGIN AT CONSTANT PRICES

Table No. 3.4	( Rs. in Lakhs )			
Industry	1993-94	1998-99	1999-2000	2000-2001
	(Base)	(Revised)	(Provisional	(Quick)
1. Agriculture	28057	26859	28591	31099
2. Forestry and Logging	9324	4307	4545	3862
3. Fishing	741	1009	1049	1094
4. Mining & Quarrying	1148	661	736	1149
PRIMARY SECTOR	39270	32836	34921	37204
5. Manufacturing	2536	2937	3095	3262
5.1 Registered	-	-	-	-
5.2 Un-registered	2536	2937	3095	3262
6. Construction	16444	15596	12185	13988
7. Electricity,Gas &	(-)2096	2818	2476	2532
Water Supply				
SECONDARY SECTOR	16884	21351	17756	19782
8. Transport , Storage and	2643	5319	5448	5592
Communication				
8.1 Railways	3	0	0	0
8.2 Transport by other means	2315	4878	4955	5099
8.3 Storage	2	2	2	2
8.4 Communication	323	439	491	491
9. Trade, Hotel & Restaurant	4234	4676	4582	4457
10.Banking & Insurance	989	1805	2035	2481
11. Real Estate, Ownership of	1623	2226	2374	2524
dwellings & Business Services				
12. Public Administration	7814	13104	13535	13756
13. Other Services	5862	10775	11069	12531
TERTIARY SECTOR	23165	37905	39043	41341
NET STATE	79319	92092	91720	98327
DOMESTIC PRODUCT				
Population (In lakhs)	9.21	10.43	10.69	10.91
Per Capita Income (In Rs.)	8612	8829	8580	9013
All INDIA				
NNP (Rs. in Crores)	685912	948982	1007743	1044915
Per Capita NNP (In Rs.)	7690	9733	10067	10254

# **CHAPTER – 4**

### AGRICULTURE

Agriculture is the main occupation of the people of Arunachal Pradesh. It plays a vital role in the economy of the state .It provides direct employment to 67% of the total population of the state as per 1991 census. During the year 2000-2001 more than one fourth of the total NSDP (31.63%) in the state comes from Agriculture sector. The Agriculture depends on monsoons .The state receives adequate rainfall with high degree of humidity. The Table below gives a general picture of the pattern of rainfall in the state.

RAINFALL IN DIFFERENT RAINGAUGE STATIONS OF ARUNACHAL PRADESH

. 4.1			(In mm)				
Rainguage Station	Year						
	1998	199 <b>9</b>	2000				
2	3	4	5				
Tawang	2760.10	2862.10	331.28				
Bomdila	711.40	1538.60	1433.30				
Seppa	2596.00	1444.83	3106.00				
Itanagar	5171.60	3738.20	NA				
Ziro	NA	1007.50	934.88				
Daporijo	NA	1558.40	1437.20				
Along	2608.10	1987.38	2319.30				
Pasighat	5570.60	5591.40	499.65				
Yingkiong	2810.20	2909.60	NA				
Anini (Roing)	NA	3851.00	3212.90				
Tezu	4258.50	3033.50	3207.40				
Changlang	2083.00	3783.40	3789.80				
Khonsa	6208.70	3723.90	4191.20				
	Rainguage Station2TawangBomdilaSeppaItanagarZiroDaporijoAlongPasighatYingkiongAnini (Roing)TezuChanglang	Rainguage Station         1998           2         3           Tawang         2760.10           Borndila         711.40           Seppa         2596.00           Itanagar         5171.60           Ziro         NA           Daporijo         NA           Along         2608.10           Pasighat         5570.60           Yingkiong         2810.20           Anini (Roing)         NA           Tezu         4258.50           Changlang         2083.00	Rainguage StationYear19981999234Tawang2760.10Borndila711.401538.60Seppa2596.00Itanagar5171.603738.20ZiroNA1007.50DaporijoNAAlong2608.10Pasighat5570.60Style2810.20Yingkiong2810.20Anini (Roing)NATezu4258.503033.50Changlang2083.003783.40				

NA = Not available

#### LAND UTILIZATION

The total geographical area of the State is 83743 Sq. kms. Out of which 70% constitutes broad and narrow valleys, 10% foot hills and flat areas and 20% constitutes snow elad peak areas. The agricultural operations are confined to only 5% of the total geographical area. of which 62% to 65% are shifting cultivation (Jhum). Efforts are being made to motivate the farmers to permanent cultivation. Schemes like land development and irrigation facilities for permanent cultivation, impetus to horticulture and conunercial crops are vigorously taken up by the Govt. to divert the attention of the farmers from Jhum cultivation.

Due to sustained efforts made in this direction the net area sown under permanent cultivation has steadily increased over the years. As per Agricultural Census of 1985-86, net area sown was 149 thousand hectares as against 118 thousand hectares in 1980-81. During 1999-2000 the gross and net cropped areas were recorded as 240 thousand and 197 thousand hectares respectively whereas during 2000-2001 the gross and net area slightly increased to 243 thousand and 199 thousand hectares respectively. The following table shows the percentage change of land utilization in 1990-91 over 1985-86 Agricultural Census.

AREA UNDER DIFFERENT LAND USES IN 1985-86 AND 1990-91
AND ITS PERCENTAGE TO TOTAL

SI. No		1985-86	census	1990-91 C	CENSUS	% Change over 1985-86
	Particulars	Area in Hect	% of total	Area in Hect.	% of total	
0	1	2	3	4	5	6
1.	Net area sown	149314	43.38	165616	47.33	(+) 10.95
2.	Area under current fallow	24700	7.18	28463	8.13	(+) 15.23
3.	Fallow other than current fallow	49008	14.24	35823	10.24	(-) 26.90
4.	Other cultivated land excluding fallow land	28655	8.32	44437	12.70	(+) 52.20
5.	Cultivable waste land	44426	12.90	32999	9.43	(-) 25.72
6.	Area not available for cultivation	48129	13.98	42553	12.16	(-) 11.59
	TOTAL	344232	100.00	349891	100.00	(+)1.64

#### **PRODUCTION OF CROPS**

Agricultural programme in the State has always been assigned high priority in Five Year Plan in order to achieve self-sufficiency in food-grain and generation of marketable surplus. Food production at the end of the 7<sup>th</sup> Plan (1989-90) was 2.09 lakh MT. Production of food-grain during 1995-96, 1996-97, 1997-98, 1998-99 and 1999-2000 were 2.20 lakh Mt, 2.00 lakh Mt, 2.04 lakh MT, 1.81lakh MT and 205 lakh MT respectively. During the year 2000-2001 the production of food grain was recorded as 2.02 lakh MT which has decreased by 1.46% over the previous year 1999-2000. The table below shows production of important crops for the years from 1998-99 to 2000-2001 and percentage variation of production in 1999-2000 and 2000-2001 over the previous years.

#### **PRODUCTION OF IMPORTANT CROPS**

Table No 4.3

(Production in' 000 MT)

Si. No.	Crop/Crops group	rops 1998-99	1999-2000	2000-2001	% of variation over previous years			
					1999-2000	2000-2001		
1.	2	5	6	7	8	9		
1.	Rice	114	135	133	(+)18.42	(-) 01.48		
2.	Maize	47	48	52	(+)02.12	(+) 08.33		
3.	Wheat	4	5	6	(+)25.00	(+) 20.00		
4.	Millets	16	17	17	(+)06.25	0		
	Total Food- grains	181	205	202	(+)13.25	(-) 01.46		
5.	Pulse	6	7	7	(+)16.67	0		
6.	Oil seeds	25	27	27	(+)08.00	0		
7.	Potato	32	32	37	0	(+) 15.62		
8.	Sugarcane	15	16	14	(+)06.67	(-) 12.50		

With a view to increase the production of crops, emphasis has been given on area specific activities under food-grains production programme. Under the programme, seeds/plants, production materials and agricultural implements are distributed to the farmers on subsidy basis. Besides efforts are being made to enhance the productivity by introducing compact area project, community nursery demonstration garden on H.Y.V. and encouragement of double and multiple cropping etc. During 2000-2001 altogether 60250 hects. of land were brought under H.Y.V. and production of food-grains recorded 96130 MT under H.Y.V.

#### **AREA UNDER CROPS**

The area under important crops declined by 0.72% during 2000-2001 over the previous year. Total area under important crops during 1999-2000 was 222140 hectares and during 2000-2001 it falls to 220550 hectares. Areas under Rice, pulses, and oil seeds registered a fall by 3.37%, 5.34% and 5.23% respectively during 2000-2001. However area under wheat maize, millet, sugarcane and Potato have been increased by 12.82%, 7.83%, 1.77%, 6.25% and 13.31% respectively during the year 2000-2001 over previous year. The table below shows the picture of increase / decrease of area under important crops during 1999-2000 and 2000-2001

			ANDA		K CKUI					
Tat	le No.4.4							(Area in'	000 Hect.)	
SI. No.	Crops	1999-2000			2	2000-2001			% of variation over previous year	
		Total area	Area under HYV	% of HYV	Total area	Area under HYV	% of HYV	1999- 2000	2000- 2001	
1	2	3	4	5	6	7	8	9	10	
01	Rice	122.74	34.20	27.86	118.60	35.00	29.31	(-)17.34	(-)03.37	
02	Wheat	03.90	03.30	84.62	4.40	3.75	85.22	(-)41.44	(+)12.82	
03	Maize	35.64	20.70	58.08	38.43	21.50	55.95	(-)36.74	(+)07.83	
04	Millet	19.80	-	-	20.15	-	-	(+)10.12	(+)01.77	
05	Pulses	06.55		-	6.20	-	-	(-)09.53	(-)05.34	
06	Oilseeds	27.75	-	-	26.30	-	-	(+)04.80	(-)05.23	
07	Sugarcan	0.80	-	-	0.85	-	-	(+)08.10	(+)06.25	
08	Potato	4.96	-	-	5.62	-	-	(+)02.26	(+)13.31	
	TOTAL	222.14	58.20	16.88	220.55	60.25	27.32	(-)17.35	(-)00.72	

**AREA UNDER CROPS** 

#### **YIELD RATES.**

The average yield of all important crops, except potato showed an increasing trend during the year 2000-2001 as compared to 19992000. The following table shows the comparative picture of average yield rates of important crops for three consecutive years and percentage of increase and decrease over the previous years :-

#### -: 15 :-

Table	No 4.5.			( Yield rate Qntl/Hect)			
SI. No.	Crops	1998-99	1999-2000	2000-2001	Percentage Increase/Decrease over th previous years		
					1999-2000	2000-2001	
1	2	3	4	5	6	7	
1.	Rice	09.88	10.90	10.98	(+)10.32	(+) 0.73	
2.	Maize	12.97	13.50	13.56	(+)04.08	(+)0.44	
3.	Wheat	12.01	13.00	13.01	(+)08.24	(+)0.08	
4.	Millet	08.67	08.60	8.64	(-)00.80	(+)0.46	
5.	Pulses	09.43	10.01	10.12	(+)06.15	(+)7.09	
6.	Oilseeds	09.53	09.80	9.81	(+)02.83	(+)0.10	
7.	Sugarcane	202.31	200.40	200.48	(-)00.94	(+)0.03	
8.	Potato	65.14	65.40	65.39	(+)00.40	(-)0.01	

#### AVERAGE YIELD RATES OF IMPORTAN CROPS

#### HIGH YIELDING VARIETIES (HYV)

Production and Area of all the crops of high yielding varieties have increased during the year2000-2001 over the previous year.

The following tables gives an over all pictures of 199-2000 and 2000-2001 in terms of area and production of Rice, Maize and Wheat crops.

#### AREA AND PRODUCTION OF HIGH YIELDING VARIETIES(HYV)

Tabl	e No 4.6	(Area in' 000 hectares/Production in' 000 MT)							
SI. No.	HY V crops	19	99-2000	20	00-2001	% of variation 1999-2000	n over		
		Area	Production	Area	Production	Area	Production		
1	2	3	4	5	6	7	8		
1.	Rice	34.20	53.25	35.00	55.05	2.34	3.38		
2.	Maize	20.70	30.72	21.50	35.48	3.86	15.49		
3.	Wheat	3.30	4.53	3.75	5.60	13.64	23.62		
	Total	58.20	88.50	60.25	96.13	3.52	8.62		

#### **CONSUMPTION OF FERTILIZERS**

Fertilizers play a very important role in enhancing the agricultural production. It is one of the most essential inputs in the agricultural production in the State. Since introduction of HYV the consumption of chemical fertilizers has been steadily increasing. However, the total consumption during this year has slightly decreased over previous year. The table below reflects the trend of consumption of fertilizers over last 5 years. The level of fertilizer consumption has increased from 470 MT in 1991-92 to 712 MT in 2000-2001

Besides, use of organic plant nutrient as alternative source to chemical fertilizer has also been introduced in the farming process.

Year	Nitrogenous (N)	Phosphate (P <sub>2</sub> O <sub>5</sub> )	Potassic (K <sub>2</sub> O)	Total	( In MT) % of increase/	
			$(\mathbf{K}_2 \mathbf{U})$		decrease over previous year.	
1	2	3	4	5	6	
1991-92	285	136	49	470	-	
1992-93	303	143	53	499	06.17	
1993-94	340	190	15	575	15.23	
1994-95	400	220	50	670	16.52	
1995-96	418	228	49	695	03.73	
1996-97	415	230	50	695	0 0.00	
1997-98	417	231	50	698	(+)00.43	
1998-99	400	205	100	705	(+)01.00	
1999-2000	380	220	100	700	(-)00.71	
2000-2001	387	222	103	712	(+)01.71	

#### **CONSUMPTION OF FERTILIZERS**

Table No.4.7

#### QUALITY SEED PRODUCTION PROGRAMME

The farmers are being encouraged to cultivate/grow commercial crops like Potato, Sugarcane, Oilsceds, Ginger, Turmeric and Chilly by way of supplying quality seeds on subsidy. With a view to produce quality seed, the programme on quality seed production has been taken up in Govt. farms as well as in the progressive farmers field under close supervision of the technical staff to ensure the quality and disease free seeds. The seeds produced in the farms and the farmers field are tested at state seed Testing Laboratory, Sonajuli before sowing. During 2000-2001 improved seeds to the tune of 4815 MT produced/distributed to farmers.

Annual Achievement in agriculture during 1999-2000 and 2000-2001 is shown in table below:

	Indicator	Indicator Unit		ent during
Si.			1999-2000	2000-2001
No.		and the second		
1.	Gross Crop Area	000 Hect.	240	243.00
2.	Net Cropped Area	-do-	197	198.50
3.	Area under Multiple cropping	-do-	043	44.50
4.	Area under plant protection	-do-	036.50	36.70
5.	Area under fertilizers	-do-	022.20	23.00
6.	Area under High Yielding Varieties seeds	-do-	058.20	60.25
7.	Area under permanent cultivation	-do-	088.57	90.14
8.	Irrigated area.	-do-	039.40	43.90
9.	Pesticides used	MT	17	17
10.	Fertilizer consumption	-dv-	700	712
11.	Improved seeds produced	-do-	4545	4815
12.	Improved seeds distributed	-do-	4545	4815

#### **CROP ENTERPRISE**

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The Agriculture Department has come up with a noble scheme through which it is proposed to assist 60 nos. of un-employed educated rural youth one each from each Assembly Constituency by providing infrastructural support.

The selected un-employed youth will take -up a Crop Enterprise and generate his own income. Each crop enterprise was provided with 1(one) no of powertiller. The power tiller will be rented out to the fellow farmers so as to help them in their cultivation, making the tillage facility easily available. This would help farmers of the nearby areas to augment their efforts in intensive as well as extensive cultivation. Besides, each powertiller each beneficiary was given a cash amount of Rs. 1000/= being the initial operational charges

# <u>CHAPTER – 5</u>

#### HORTICULTURE

Arunachal Pradesh with its undulating topography and varied agro-climatic conditions has excellent scope for growing wide variety of tropical and sub-tropical and temperate fruits, vegetables, spices, mushroom, floriculture and other economical crops like medicinal and aromatic plants.

The Directorate of Horticulture has taken up various schemes to uplift the Rural Economy. Some of the important schemes taken up by the Department are as follows:

- 1. Peoples' Horticulture garden
- 2. Compact area plantation
- 3. Plant protection
- 4. Mushroom Development Programme
- 5. Spices development
- 6. Floriculture
- 7. Training and education
- 8. Medicinal, Aromatic Plantation Programme etc

The peoples' horticultural garden schemes are taken up in small holding up to 1 hect. where large and compact areas not easily available. Farmers are provided with inputs and technical guidance to set up horticulture garden. The compact area plantation scheme is aimed at commercialisation of horticulture through establishment of garden in compact area of 2 to 10 hectares with individual or joint holding. Under this scheme the beneficiaries bear the cost of land development, digging of pits, plantation, erection of fencing etc. in the shape of labour. Besides to improve the rural economy of the common masses diversification of horticulture with the introduction of Floriculture, cultivation of spices, cardamom and Blackpepper etc has been introduced.

The area under fruits has gone up from 12175 hectares in 1987-88 to 55388 hectares in 2000-2001 and production rose from 29025 MT in 1987-88 to 133101 MT

The major fruits grown in the state are (a) Apple, (b) Pineapple, (c) Orange and (d) Walnut. The major spices grown in the State is Black-pepper. Two varieties of Mushrooms are grown in the State. These are (a) European or White Button and (b) Tropical Oyster or Dhingri. Keeping in view of its nutritive value in diet, the Department is trying to popularise this crop (mushroom) by taking demonstration units in different districts of the state. This will generate 10 times more income to growers per unit area than other crops as well as supplement the nutritive requirement of the human body. Due to remoteness of fruit growing areas of the State from market and also due to inadequate communication facilities, emphasis is given for production of low volume high value horticultural crops like spices, Cardamom, Ginger, Turmeric, Chilly, Black-pepper, Garlic etc. Area Covered and Production Level of Cardamom and Black-pepper for 1998-99, 1999-2000 and 2000-2001 are appended below.

Table No. 5.1( Area in Hect./.)						uction in MT)
Spices	1998-99		199	99-2000	2000-2001	
	Area	Production	Area	Production	Area	Production
1	2	3	4	5	6	7
1.Cardamom	1891	472	1981	500	2142	507
2. Black-pepper	505	226	555	115	635	117
TOTAL	2396	698	2536	615	2777	624

#### AREA AND PRODUCTION OF SPICES

The estimated area covered and production level of main horticultural crops during last three years i.e. from 1998-99 to 2000-2001 are appended below. During 2000-2001 the total area covered under horticultural crops was 55388 hectares which recorded an increase of 33.14% over 1999-2000. Production of horticultural crops during 2000-2001 recorded 133101 MT which is 24.29% higher than that of 1999-2000. During 2000-2001 production of apple recorded an increase of 3.00% citrus fruits 112.10%, walnut 2.00% and banana 7.58% over previous year but the production of pineapple has neither increased nor decreased during the year.

AREA AND	<b>PRODUCTION OF</b>	'HORTICULTURAL C	ROPS

Tabl	e No. 5.2							/ Production	
SI. No	Name	100	8-99	1999-2	000	2000	-2001	% decrease	increase/ of
110	of	1330	J-JJ	1797-4	000	2000	-2001	Production	
	crops	Area	Produc tion.	Area	Produc tion.	Area	Produ ction.	1999-2000	2000- 2001
1	2	3	4	5	6	7	8	9	10
1.	Apple	6477	15986	6601	8265	6733	8513	(-)48.30	(+)3.00
2.	Citrus	7963	20794	8593	11315	19147	24000	(-)45.59	(+)112.1
3.	Pine-	7270	30170	7314	31980	7329	31980	(+)6.00	0.00
	apple			1					
4.	Banana	3404	11576	3489	12270	3538	13200	(+)6.00	(+)7.58
5.	Walnut	2134	958	2199	50	2285	51	(-)94.78	(+)2.00
6.	Other-	7569	14098	6805	43713	16354	55357	(+)200.52	(+)26.64
	crops								
	4 <b></b>	34817	93582	41601	107093	55388	133101	(+)14.44	(+)24.29
TO	ΓAL								

# CHAPTER – 6

#### VETERINARY AND ANIMAL HUSBANDRY

Livestock is one of the components of the primary sector of the economy. In order to improve the economic status of the local people and to boost up live stock and poultry production, emphasis on the main four aspects of veterinary development programme like (i) livestock production and development, (ii) animal health coverage, (iii) dairy development and (iv) education and training are being continued in five year plan programme. The approved outlay for the Ninth Plan was Rs.4234 lakhs under Animal Husbandry, Veterinary and Dairy Development Sector. The expenditure incurred under Animal Husbandry and Dairy development during the first three years of the Ninth Plan is as follows:

Table No. 6.1

	R	s. i	nLa	khs	)
--	---	------	-----	-----	---

Head of development	Ninth Plan	Actual	Expenditure (P	lan) during
	Outlay	19979-98	1998-99	1999-2000
1	2	3	4	5
1. Animal Husbandry	3003	542.82	501.87	533.27
2. Dairy Development	1231	32.00	10.03	9.91
TOTAL	4234	574.82	511.90	543.18

The total livestock and poultry population in Arunachal Pradesh as per 1997-98 Quinquennial livestock census is given in the table below. From the table it reveals that the livestock population in the state was about11.87 lakhs whereas in the census of 1992-93the livestock population was 9.59lakhs. Thus in the five year period there was an increase of 23.69% in the livestock population of the State. Cattle accounted for the major share in the livestock population. In 1997-98 the cattle population was 4.53 lakhs as compared to 3.47 lakhs in 1992-93. The total number of mithun was 1.06 lakhs in 1992-93 as compared to 1.24 lakhs in 197-98. The total number of poultry of 11.72 lakhs in 1992-93 census increased to 12.19 lakhs in 1997-98 livestock census thereby registering a growth of 3.98%. The population of all types of livestock between two livestock censuses of 1992-93 and 1997-98 registered a growth except yak and sheep population which registered a decline of 7.22% and 13.81% respectively

LIVESTOCK AND POULTRY POPULATION IN A.P.

Fable N	lo. 6.2			(In number)
SI. No.	Category	1992 – 1993 livestock census	1997 – 1998 livestock census	Percentage variation
1	2	3	4	5
1.	Cattle	346535	452920	(+) 30.70
2.	Buffaloes	10241	11550	(+) 12.78
3.	Mithun	105729	124194	(+) 17.46
4.	Yak	9675	8976	(-) 07.22
5.	Sheep	32774	28245	(-) 13.81
6.	Goat	128134	183826	(+) 43.46
7.	Horse & ponies	5818	6678	(+)14.78
8.	Pigs	239197	275372	(+) 15.12
9.	Other livestock	81317	96279	(+) 18.40
10.	Total livestock	959416	1186741	(+) 23.69
11.	Poultry	1172245	1218917	(+) 03.98

Production of livestock products like, Milk, Eggs and Wool is gradually increasing over the years. Total production of milk during 2000-2001 was 46.00 thousand MT as against 45.00 thousand MT during the previous year. Production of eggs was 36.00 million number during 2000-2001 as against 35.00 million number during 1999-2000. Similarly production of Wool was recorded as 59.40 thousand Kg. during 2000-2001 as against 59.20 thousand Kg. of 1999-2000. The table below gives an overall picture of livestock products during 1997-98, 1998-99, 1999-2000 and 2000-2001.

Products	Unit	1997-98	1998-99	1999-2000	2000-2001
1	2	3	4	5	6
1. Milk	'000 MT	44.00	44.50	45.00	46.00
2. Eggs	Million No.	34.00	34.50	35.00	36.00
3. Wool	'000 Kg.	58.60	58.80	59.20	59.40

T-11. XT. 2.3

PRODUCTION OF MILK AND EGG AND WOOL

In the sphere of Animal Husbandry development programme, various schemes under implementation in the state include Cattle and Buffalo development, Sheep/Goat and Wool development, Piggery development, Poultry development, other livestock development Dairy development and fodder development. Under intensive cattle development programme 10 district Cattle Breeding farms and a Central Cattle Breeding farm at Nirjuli (Itanagar) are functioning to enhance production of milk and cross-breed stock. Apart from this, 30 Frozen Semen Bull Stations, 2 Liquid Semen production and Artificial Insemination Centre, 120 Cattle Upgrading centers are functioning under this programme.

Upgradation of local indigenous livestocks through cross-breeding is an important objective of the livestock development programme in the State. Frozen Semen Technology centre was opened at the state capital and efforts are being made to convert al existing 120 cattle upgrading centers to Artificial Insemination centres so that by the end cf the Ninth Plan they become operational to cater the needs of the entire state.

The sheep rearing in the State has also been one of the traditional activities of the people living in the high altitude and border areas. The Regional sheep breeding farm at Sangti (West Kameng) is engaged to improve the local sheep through cross breeding with exotic marino rams. This centre is also imparting training periodically to the interested rural people as well as field personnel. There are 7 sheep and wool extension centers in the State.

Almost every tribal family is engaged in rearing of pigs irrespective of status and position in the society. The piggery development programme emphasises on upgradation of local stock through improved cross breeding with exotic breed such as large white Hampshire. With this objective, following two farms of fairly large size were established:

- 1) Central Pig Breeding Farm at Karsingsa
- 2) Regional Exotic Pig Breeding Farm at Loiliang

In addition, there are 6 general Pig Breeding Farms functioning in the state of which 2 nos big central farms are at Itanagar and 4 nos in the districts which suppy improved varieties of pigs to the interested farmers for cross breeding and enhancing pock production. Under Poultry development programme, 15 Poultry Farms, one Central poultry farm and one central Hatchery at Nirjuli are functioning. The poultry development programme aims at improvement of local breed through scientific breeding so as to enhance production besides improvement of rural economy. Other indigenous livestock like Mithun (BOS-frontalies), Yak and also Rabit are focussed. Considering the importance of Mithun and Yak a Mithun breeding Farm was established at Sagalee in Papumpare district. A sub- Centre of Mithun in Papum pareDistrict along with a community Mithun rearing centre is proposed in Lower Subansiri District. In

order to encourage the Mithun and Yak rearing in the state subsidy scheme has also been intended for progresive farmers.

The department is also maintaining one Central Fodder farm at Nirjuli, one Regional Temperate fodder farm and 10 (ten) District fodder farms to meet the demand of feed and fodder for cattle breeding farms located in different parts of the State. In addition, there are 2 (two) feed Mixing plant located at Nirjuli and Roing to cater to the demand of feed in the state. Feed and fodder development are essential for better livestock production and growth.

Measures on extensive animal health coverage are being carried out in the State by a wide network of veterinary hospital, veterinary dispensaries, aid centers. During 2000-2001 there are 1(one) veterinary hospital at Naharlagan, 93 veterinary dispensaries, 155 veterinary aid centers, 11 district diagnostic laboratories, 3 zonal disease investigation laboratories and 14 mobile veterinary dispensaries functioning in the state. During 2000-2001 altogether 3.93 lakhs of birds and animals treated through these institutions as against 3.90 lakhs during 1999-2000. Vaccination against out-break of various diseases was carried out to 2.50 lakhs animals and birds during 2000-2001. Castration covered 35 thousand numbers of animals during 2000-2001.

Adequate importance was given for training of paraveterinarians to meet the requirement of skilled personnel in the various specialised fields of Veterinary and Animal Husbandry and Dairy. A veterinary training Institute (school of veterinary science) was established at Pasighat in 1980-81 which is presently offering various short term and regular courses for the in-service field assistants and defence personnel who are deputed from all over the country. Special training in wool-grading is imparted at Sangti (Regional Sheep Breeding Farm).

Another important development scheme is being initiated by the Special Area Development Programme under which an individual or a cluster of villages would be identified and adopted by the department to pump in all the essential technical inputs, veterinary aid, subsidiary assistance, training and marketing needs etc. for enhancing production. In all these areas besides progressive farmers and rural educated youths, women beneficiaries would be engaged to take up livestock enterprise for better economic growth and improvement of job opportunities.

## **CHAPTER -7**

#### FISHERIES

Pisciculture has gained acceptability and confidence among the farmers of Arunachal Pradesh and fish farming has become a subsidiary occupation of the farmers for gainful employment to supplement their income from agriculture. Piscicultural activities in the state ensure three basic requirements like generating self-employment, supplementing proteineous food and a source of income.

Being an important economic activity, the Govt. is encouraging various programmes by providing substantial subsidy to the beneficiaries. Subsidy oriented programmes are (I) Rural Aqua-culture, (ii) Paddy-cum-fish culture, (iii) Integrated fish farming, (iv) Trout culture, (v) Training of farmers etc. Apart from this, the Govt. is also supporting commercial fishery projects with bank loan components.

During the first two years of the Ninth Plan an amount of Rs. 351.56 lakhs was utilised for fishery development in the State against the outlay of Rs. 363 lakhs. The approved outlay for 1997-98 and 1998-99 were Rs. 196 lakhs and Rs. 167 lakhs respectively against fishery development in the state.

Upto the end of 2000-2001 an area of 2026 hectares was brought under systematic fish-culture in the state against as much as 7200 hectares of estimated vast potential of culturable water area of the state. Under private fish farming altogether 856 hectares of water area was developed up to 2000-2001. Two Eco hatcheries through private fish farmers and 11 (Eleven) hatcheries through government were developed up to 2000-2001. Paddy-Cum-Fish culture having firm footing in the Apatani Plateau of Lower Subansiri District has been extended to other districts where suitable area for paddy-cum-pisciculture is readily available. During 2000-2001 an area of 228 hectares of water area developed in the state. The cumulative figure upto 2000-2001 is 4052 hectares under this scheme. During 2000-2001 the production of fish was 2500 tonnes under pisciculture. After thorough review it was found that Poly-culture of fishery could not make substantial impact in development of the fish culture. Hence it was dropped in the year 1998-99 in Arunachal Pradesh due to its complimentary effects. Production of Trout (cold water fish culture) has also been increased through stocking of fish-seeds at Mechuka and other streams of West Kameng and Tawang districts besides improvement of existing hatcheries and extending the technology to the farmers level.

Achievement under pisciculture development programme as on 31-3-2001 has been reflected in the following table:-

S1	_		Ac	hievement	during
No	Items	Units Hectares -do- -do- e -do- e -do- Hectares -do- Hectares -do-	19 <b>9</b> 9-2000	2000- 2001	Cumulative Up to 31-3- 2001
1.	Govt. fish farm/ponds	Hectares	-	-	32
2.	Peoples' fish farms/ponds	-do-	81	50.00	856
3.	Other fish farm	-do-	-	-	107
4.	Area under pisciculture	-do-	81	114.00	2026
5.	Area under paddy-cum-fish culture	-do-	65	64.00	1031
6.	Total area developed	Hectares	146	228.00	2026
	(a) Ponds/Lakes	-do-	81	50.00	888
	(b) Beels/Lakes/Swamps	-do-	-	64.00	107
	(c) Paddy fields	-do-	65	-	1031
	(d) Others (pits, ditchs)	-do-	-	-	-
7.	Fingerlings distributed	'000 Nos.	800	850	-

## Pisciculture development Programme in A.P. as on 31-3-2001 Table No. 7.1

Trend of the production of fish and fish-seeds in the State during last three years can be seen from the following table:

1

Tabl	e No.7.2							
S1. No	Items	Units	Base year	1998- 99	1999- 2000	2000- 2001	% of provide the wariation	roduction
			chieve ment 89-90				1999- 200 over19 98-99	2000- 2001 over 1999- 2000
1	2	3	4	5	6	7	8	9
1.	Fish Production	Tonn- es	998	2301	2395	2500	(+)4.09	(+)4.38
	a)Ponds & Tanks	-do-	NA	926	975	1040	(+)5.29	(+)6.66
	b)Beels, lakes, Swamps	-do-	NA	545	550	555	(+)0.92	(+)0.90
	c)Paddy-cum-fish- culture	-do-	NA	220	220	220	0.00	0.00
	d)River, Canals, Streams etc	-do-	NA	610	650	685	(+)6.56	(+)5.38
2.	Fish-seed Production	•						
	a) Fry	Milli on No.	15	24.50	24.40	25.00	(-)0.41	(+)2.04
	i) Private	-do-	-	7.30	7.30	7.50	0	(+)2.74
	ii)Govt.	-do-	-	17.20	17.10	17.50	(-)0.58	(+)2.34
	b) Fingerlings	-do-	-	800	800	850	0.00	(+)6.25

#### FISH AND FISH SEED PRODUCTION IN ARUNACHAL PRADESH

It appears from the above table that fish production in the State has been gradually increasing year after year. During the terminal year (1989-90) of the 7<sup>th</sup> Five Year Plan, total production of fish was 998 tonnes which stood at 2500 tonnes during 2000-2001. Increased production of fish has resulted increase in its share of contribution to the State Domestic Product(SDP).

As evident, Fish production has increased during 2000-2001 by 4.38% over 1999-2000 and by 4.09% in 1999-2000 over 1998-99. Production of Fry has also slightly increased from 24.40 million number in 1999-2000 to 25.00 million number in 2000-2001.ie an increase of 2.04% over previous year's production. Production of fingerlings has also registered an increase of 6.25% during 2000-2001 over the previous year. During 2000-2001 production of fingerlings was 850 million number.

## CHAPTER – 8

#### **ENVIRONMENT AND FOREST**

The socio-economic life of the people of Arunachal Pradesh, in fact, centres round the forest. Most of the population depends directly upon forests for fuel wood, house building materials, timber and other minor forest produce. Therefore 62% of the total forest area of the state is under unclassed forest where the local people exercise their traditional right. Forests in Arunachal Pradesh cover an area of 51,540 Sq. km. and form about 62% of the total geographical area of the state. Nearly, 10178 Sq. km of forest area has been surveyed, demarcated and notified as Reserved forest. Anchal and village reserve forest provides basis for their scientific management and sustainable use. At the end of 8th plan, an area of 7401 sq. km. has been brought under APNAVAN scheme The scheme "Apnavan" and "Decentralised Peoples' Nursery" are also being implemented with the active participation of the people.

So far ten active Wildlife Sanctuaries and two National Parks covering a total protected area of 9483 sq. km. for conservation and preservation, of rich biological diversity of the state has been created. About 500 species of orchid which grow on ground, rocks or on trees and attracting attention with various shapes and brilliant colours have developed for commercial exploitation in peoples sector. Arunachal Pradesh Forest Department has established an Orchid Sanctuary with Research station at Tipi near Bhalukpong under West Kameng District covering an area of 100 sq. km.

Most of the wood based industries like saw Mills and plywood Mills which provided employment to local people are not functioning in the state due to ban of felling of green trees by the Hon'ble supreme court of India.

A state Forest Research Institute at Van Vihar, Itanagar with multidisciplinary staff is engaged in survey/scientific research work in the field of Silviculture ,Forest Botany including medicinal plants, Zoological research, forest genetics etc. for providing developed technology in forestry developmental programmes.

The Arunachal Pradesh Forest Corporation Ltd (APFC Ltd) which came into existence from the year 1977 is being engaged to eliminate the agency of forest contractors and to improve the utilisation of forest produce and to tap institutional finance, develop cultivation of cash crops like coffee, tea etc. Besides, the Namsang-Barduria village forests of Tirap District is being managed by the APFC Ltd. and a portion of the revenue earned through management of the forests being utilised to promote a number of welfare programme in Tirap District. The objective of the forest activities continue to be the restoration of vegetative cover through various plantation scheme and department has made this headway gradually through the Five Year Plans. The approved outlay for 9<sup>th</sup> plan in respect of forestry and wildlife was Rs.6811 lakhs. The revised outlays approved for 2000-2001was Rs 1093.50 lakhs, and actual expenditure was Rs.1060.02 lakhs during the year.

The achievements under various plantation schemes is indicated below: Table No. 8.1

SI	Scheme /indicator	Unit	Achievem	ent during
.No.			1999-2000	2000-2001
1	Forest Area	Sq.K.m	51540	51540
2.	Resource Survey	Sq.Km	1000	1117
3	Area Planted	Hect.	0	1200
4	Area covered under"Apnaban" Scheme	Hect.	840	400
5	Forest Revenue earned	Rs in Lakh	1623	1300
6	Expenditure	Rs in Lakh	NA	1519
7	Forest Road	In Km	0	0

## CHAPTER - 9

SOIL AND WATER COSERVATION

Heavy rainfall almost in every year in Arunachal Pradesh causes heavy soil erosion and devastating flood in the lower region and in the neighbouring State. The programme on soil and water conservation, therefore, is taken up to conserve soil from heavy erosion and to minimise the run off sediment load for moderation of flood discharge in the lower region. Soil conservation works thus include land sloping, contour bunding , bench terracing and protection and preservation of agricultural land by various protective measures under land development scheme. Terrace cutting in the hill slopes along with bunding, shaping etc. are taken up. Reclamation of marshy land is also taken up in low lying areas. Land protection work generally consists of construction of bunds and embarkments, spurs retaining walls, bust walls etc. in the lower regions and engineering structures like brush wood dams, check dams etc. in the higher regions. 46036.09 hacts.of land has been developed and 71208.80 hacts.of land has been protected as on 31-3-2001.

A land use board has also been set-up in the state to co-ordinate activities of the concerned departments for better use and management of land.

The outlay and expenditure on soil and water conservation during the Ninth plan is reflected below:

Table No 9.1

1

(Rs. In Lakh)

Sl.	Name of the 9 <sup>th</sup> plan		Annual Plan Approved out-lay/Expdr.					
No.	Scheme	outlay	1999	-2000	2000	0-2001		
		approved	Out lay	Expdr.	Out lay	Expdr.		
1	2	3	4	58	6	7		
1	Soil and water conservation	7060	561	559	577	576.86		

# CHAPTER - 10

#### **IRRIGATION AND FLOOD CONTROL**

Modernisation in agricultural pattern and shifting from jhuming to permanent type of cultivation calls for creation of irrigation potential in the state. But up-til now the thrust is confined mostly to minor irrigation works since scope of medium and major irrigation projects is limited particularly to cultivable and available patches mainly in the foot hill areas and narrow valleys. However, survey and investigation of a few medium irrigation projects have already been taken up by CWC.

Recent experiments for exploration of ground water at Sonajuli, Kokila, Karsingsa, Nirjuli showed vast potential for ground water. On-going irrigation projects being mostly of surface water with weir dams head works and need constant maintenance.

As per available record, total irrigation potential of 87578 hectare was created at the end of 8<sup>th</sup> Five Year Plan including two single years plan of 1990-91 and 1991-92 out of which nearly 18529 hectare was created during the 8<sup>th</sup> Five Year Plan. Achievement during 1st two years of 9<sup>th</sup> five year Plan ie .for the year 1997-98 and 1998-99 are 4676 hectares and 3215 hectores. The following table shows the achievement under minor irrigation during the last two plan periods:

SI.	Particulars	Unit	Achievement
No			
1	Irrigation potential created up to 7 <sup>th</sup> Plam since inception.	Hect	62224
2	Irrigation potential created during the 8 <sup>th</sup> plan including two Single year plan 1990-91 and 1991-92	Hect	25354
3	Irrigation potential created during Ist four years of 9 <sup>th</sup> Plan		
	(I)1997-98	Hect	4676
	(ii)1998-99	Hect	3215
	(iii)1999-2000	Hect	4453
	(iv) 2000-2001	Hect	4029
4	Total irrigation potential created up to 31-3-2001 since inception	Hect	100331
5	Expenditure incurred (PLAN)	Rs in Lakh	
	(i)1997-98	do	1541.51
	(ii)1998-99	do	1336.55
	(iii)1999-2000	do	1839.00
	(iv) 2000-2001	do	2113.00

#### ACHIEVEMENT UNDER MINOR IRRIGATION

As on 31-3-2001 the main sources of irrigation of the cultivable lands are 3417 Nos of cannals,28 Nos of Tube wells and 132 other sources like lift irrigation etc and net area irrigated 28797.03 hects.

#### FLOOD CONTROL

During monsoon, heavy damages are caused by rains and flood to various types of assets, such as roads and bridges, buildings, water supply installations and damage to land areas and other kind of properties in Arunachal Pradesh. A significant number of human and animal lives are also lost every year. Arunachal Pradesh being in a heavy rainfall zone with loose and sandy soils particularly im lower belt is exposed to seasonal flood caused by the network of its numerous rivers and streams in their courses to the Brahmaputra in Assam. Particularly the lower region i.e. the foothill areas are very much affected by flood. In order to control such colossal damage to various types of assets as well as valuable human lives, the Irrigation and Flood Control Department is identified as nodal agency for flood control programme which essentially formulate flood control schemes including survey and investigation being carried out by the Brahmaputra Board and Central Water and Power Corporation (CWPC).Of course, no major flood control project has yet been taken up in the State.Under flood control, activities in the nature of protection and restoration are taken up to restore damages caused every year by heavy rains and flood.

The following table shows the Achievement for the years 1997-98,1998-99,1999-2000(proposed) and 2000-2001.

#### ACHIEVEMENT AND PROPOSAL UNDER FLOOD CONTROL PROGRAMME IN **ARUNACHAL PRADESH**

S1.	ITEMS	Unit	Achievem	ents during		
No.			1997-98	1998-99	1999- 2000	2000- 2001
1	2	3	4	5	6	7
1	Embankment	Mtr.	100	-	NA	-
2	Guide bund	67	2500	2957	2177	2177
3	Spur	No.	209	350	NA	7
4	Drain	Mtr.	-	205	120	25
5	Other protection	69	3765	4853	504	5704
6	Expenditure(plan)	Rs. in Lakh	376.00	432.75	927.77	405.00

# Table No. 10.2

# **CHAPTER – 11**

#### **RURAL DEVELOPMENT AND PANCHYAT RAJ**

In order to improve the social and economic condition of the rural poor, a number of State and Centrally sponsored poverty alleviation programmes are being implemented in the State. The poverty alleviation programmes are (1) Swarnjawanti Gram Swarozgar Yojana (SGSY) (ii) Jawahar Gram Samridhi Yojana (JGSY) (iii) Employment Assurance Scheme (EAS) (iv) Indira Awas Yojana (v) Integrated Waste land development programe.(IWDP) (vi) Prime Minister's Gram Sadak Yajana.(PMGSY) SGSY

During the Ninth plan Household survey has been conducted in all the bocks to ascertain the number of families below the poverty line. Out of 150131 rural households as per 1991 Census, 80627 families are assessed to be below poverty line which is 53.7%0 Since 6<sup>th</sup> five year plan, IRDP was the only self employment programme.

Subsequently, other allied schemes like, TRYSEM ,DWCRA, Tool-kits to rural Artisans, Ganga Kalyan Yojana and Million Wells Schemes were added as sub-Scheme of IRDP. In spite of all efforts made by the above Scheme the rural people are still in the grip of poverty. The multiplicity of programmes failed to establish desired linkages for sustainable income generation. Thus the Government of India restructured the self employment programme in the year 1999-2000 with the introduction of a single programme called Swarnjawanti Gram Swarozgar Yojana (SGSY) by marger of IRDP and allied schemes in it. The objective is to make the new programme more effective in generating sustainable income at family level through the development of microenterprises, both land based and other wise. In doing so effective linkages have to be established between various components such as capacity building of poor, administration of subsidy and credit, transfer of technology, marketing and programme infrastructure. Under this programe 56 nos of SGH are formed( Self Help Group) with 601 nos of members spending Rs. 179.93 crores during the year 2000-2001.

JGSY The Jawahar Razgar Yojana presently renamed as Jawahar Gram Samridhi Yojna (JGSY) came into existence from Ist April, 1989 by merging the erstwhile programmes of NREP and RLEGP. The primary objective of JGSY is to generate additional gainful employment for the people below the poverty line, both man and woman, in rural areas. The secondary objective is to create and strengthen infrastructure for economic development in rural areas, as well as to create community assets for improvement of overall quality of rural life. The villagers engaged as workers are paid daily wages as per State Govt's Minimum Wage Act, 1994. The Panchayati Raj Bodies will have sole responsibility for planning and implementation of SGSY under the over-all supervision of DRDA. Under this programme 6.59 Lakh mandays of employment were generated during 2000-2001 by incurring expenditure of Rs 508.11 Lakhs.

## <u>E.A.S</u>

Employment Assurance Scheme is also a rural employment programme more or less similar to the JGSY. with the distinction that this programme is to be planned and implemented by the Deputy commissioner as "implementing authority" through the departmental executing agencies without directly involving the panchayat Raj bodies. Also 100 days of employment in a year to at least 2 adult members of a family is assured under EAS during the agricultural season .The works under EAS are open to all rural people who are needy and in search of wage employment. The person above 18 years and below 60 years of age should register themselves as worker in the Gaon Panchayat where they reside. During the year 2000-2001 a total of 20.10 lakh mandays of employment had been generated by investing of Rs 1064.19 lakhs

#### IAY

Indira Awas Yojana (IAY) was launched in the year 1985-86 as component of RLEGP/JRY, by earmarking of 6-10% fund out of it. However 22.57% of allocation of fund under JGSY are ear marked to SC/ ST families.

The independent scheme IAY was introduced for construction of low cost houses for the rural poor within Rs. 22,000/- per unit for coverage of more households to improve their dwellings. The traditional housing pattern will be improved by revamping the existing foundation and providing CGI sheet roofing with adequate ventilation and improved sanitary facilities. During 2000-2001,3087 houses were constructed utilising Rs 724.16 lakhs and 1437 houses were upgraded spending an amount of Rs 151.13 Lakhs. IWDP

The Integrated wasteland Development Progeramme (IWDP) envisages development of non- forest wasteland on micro watershed approach. The Scheme helps to develop wastelands with the active participation of the people i,e user groups, Self Help Groups (SHG) and Panchayat Raj Institutions with the involvement of NGOs. As per proposal of DRDA, the IWDP projects are sanctioned by the Govt. of India and funds are released .The Project Implementing Agency or NGO having adequate knowledge in the field of Watershed management are to implement the schemes under the supervision of DRDA for 5 years. The major activities under IWDP are soil conservation, afforestation, horticulture and agro forestry, fuel wood plantation etc

<u>PMGSY</u>. During the year 2000-2001, the new programme Prime Minister's Gram Samridhi yojana (PMGSY) launched by Ministry of Rural Development is meant for establishing rural roads connectivity by constructing all weather roads to the isolated and socio-economically backward villages.Rural Development is the nodal department to coordinate the programme. The road works will be executed by PWD and RWD departments. Maintenance and upgradetion of existing roads will be taken up by DRDAs. During the year 2000-2001 35 crores was alloted for execution of the works.

#### AREA CUM -C.D.PROGRAMME.

A scheme has been launched since 1990-91 for all round development of villages by adopting an Area-cum-Community Development approach. The outlay under Arei-cum CD programme is under State Plan and meant for providing administrative support at State/District/Block levels, housing for office and staff, building up of rural infristructure and physical facilities for implementation of various programmes in the Blocks. The physical facilities like inter-village link road, suspension bridge, veterinary Aid Centre, Market Yard, Community Centre /Panchayat Ghar, transit camp for staff etc. are being created in the Blocks.Besides, a new innovative scheme has been launched in 1996-97 for development of selected villages as "Model" for village development under Community Development Programme. The new scheme "Model Village Development Scheme" under which 60 villages, one village in each Assembly constituency, will be developed in each year as an ideal village complete with all infrastructural facilities, services and activities. The scheme is being planned and implemented by the Model Village Development Board following the approach of Participatory Rural Appraisal (PRA). Efforts are being made to mate the village self-sufficient and self-reliant in terms of food production, health and education, services and basic amenities, economic activities, social welfare etc. Fund is being poded for various programmes under RD sector for implementation of component schemes included in the Model Village Plan. Apart from this, some departments are taking care of the activities which are not covered by the RD programmes. However the fund @ 2.00 lakhs for selected villages of 1996-97 was provided in the last week of March 1997.Rs 1.50 lakhs per village was provided in 1997-98 and in 1998-99. Govt. has selected 13 Model villages one each in each District for remote sensing and Rs11.25Lakhs @ Rs 86538.00 per village have been provided to state Directorate of remote sensing Itanagar and at the rate of Rs 64583.00 per village for a total expenditure of Rs 38.75Lakhs provided for 60 selected villages to DRDAs against the total allocation of Rs 50.00 lakhs. With this amount only survey and planning as well as small schemes were taken up in selected villages during 1997-98 and 1998-99. In the year 1999-2000, 15 such selected villages were taken up under this scheme spending Rs.4.98 lakhs. No fund has been provided for such scheme during the year 2000-2001.

Total number of blocks/villages /population covered under the programme and extenditure incurred during 1999-2000 and 2000-2001 are shown in the following table:

# ACHIEVEMENT OF COMMUNITY DEVELOPMENT PROGRAMME IN ARUNACHAL PRADESH

Table No. 11.1

Items	Unit	Achieve	ment During
		1999-2000	2000-2001
i) Total Blocks functioning	No.	56	59*
ii Inhabited villages covered	No.	3639	3639
ii) Population served (estimated)	No.	381007	413137
iv) Expdr. On community development programme	Rs. In lakhs	1180.99	1145.65

\* 3 New Blocks have been created during 2000-2001 with HQs at Nafra, Laju and Kanubari.

#### PANCHAYAT RAJ

The Panchayat Raj system was introduced in the State in October, 1968 and had become operative since 1973. It is a three tier system. At the village level the body is known as Gram Panchayat, Anchal Samity at Block level and at the district level, Zilla Parisad. The Gram Panchayat and Zilla parisad are functioning as advisory bodies and the Anchal Samities are vested with some executive and financial powers. The Anchal Samities are generally co-terminus with the CD Blocks and BDOs are the Executive officers and Secretaries of the Anchal Samities. The Zilla parisad functions as District Planning body.

The constitution (73<sup>rd</sup> Amendment) Act 1992 envisages to establish srong, viable and responsible Panchayat at the village, block and district levels. The Ac also envisages to evolve adequate powers, responsibilities and finance upon these bodies sc as to enable them to prepare plans and implement schemes for economic development and social justice.

The last Panchayatraj Election in the state of Arunachal Pradesh was held in sept, 1992 and its term alloted under NEFA Panchayat Raj Regulation , 1967 expired. The Governor has desolved the Panchayat w.e.f. 14<sup>th</sup> sept, 1997 Thus there is no panchayatraj functioning at present in the state of Arunachal Pradesh.

#### CHAPTER - 12 CO-OPERATION

Till 1956 the Co-operative movement in Arunachal Pradesh was nainly confined to the field of consumer goods. Later, it rapidly spread to other fields like transport, agricultural marketing/processing, industry, credit and other functional spheres to achieve the objective of economic growth and social change in the area. The movement plays a significant role in the social and economic development since the economy of Arunachal Pradesh is predominently rural in character. The State had 272 co-operative societies with a membership around 56 thousand at the end of year 2000-2001 as against 60 societies with a membership of 10 thousand at the end of the year 1964-65. At present, there are more than 2000 personnel engaged on regular basis with different co-operative societies in the state.

A summary view of the level of attainment in terms of selected characteristics of co-operative movement in Arunachal Pradesh for last two years is reproduced bebw. It reveals that the number of co-operative societies of all types taken together in the State increased by 5.35 per cent at the end of 2000-2001 in comparison to 1999-2000. The paid up share capital of the coperative societies of all types has increased to Rs 971.60 lakhs turing the year 2000-2001 from Rs 469.76 lakhs in1999-2000 ie highly increased by 106.83 %. The working capital of the societies has decreased to Rs 13955.60 lakhs during 2000-2001 from Rs. 14036.00 lakhs of 1999-2000 ie decreased by 0.57 per cent. No short term or medium term loan was sanctioned during the year under report.

SI. No.	Item	Unit	1999-2000	2000- 2001	%Variation Over previous ycar
1.	Number of co-operative societies.	No.	262	272	(+) 1.55
2.	Number of membership	No.	55943	56461	(+)1.75
3.	Paid up share capital	Rs. in lakhs	469.76	971.60	(+)0.65
4.	Working Capital	Rs. in lakhs	14036.00	13955.60	(-)0.21
5.	Grant of loan (a) Short term loan (Agril)	Rs. in lakhs	-	28.57	-
	(b) Medium term loan	Rs. in lakhs	-	1688.07	-
6.	Marketing of Agril.produce	Rs. in lakhs	50.82	NA	-
7.	Consumer goods sale	Rs. in lakhs	8723.01	5377.26	(-) 38.81
, K	a) Urban co-operative	Rs. in lakhs	3489.02	NA	NA
	b) Rural co-operative	Rs. in lakhs	5233.99	ΝΛ	NΛ
8.	Annual turn over	Rs. in lakhs	16620.68	3329.09	(-)79.97
9.	No. of Co-operative Fair Price Shop functioning.	No.	267	276	(+) 9

IMPORTANT INDICATORS OF CO-OPERATIVE MOVEMENT IN ARUNACHAL PRADESH Table No. 12.1

In the development of co-operative sector, departmental role besides audit and over-checks, is mainly confined to provide financial assistance to the co-operative societies in the form of loan, share capital, subsidies for infrastructural facilities as per pattern of financial assistance approved by the Govt. and participation and strengthening of management. To cater such needs under Ninth Five Year Plan, an outlay of Rs.996 lakhs was approved tentatively and out of which annual plan expenditure was incurred Rs 179.81 lakhs during the year 1999-2001. The main thrust was to diversify the consumers activities so as to make available necessary requirements to the consumers located particularly in remote parts of the State. Thus the growth of consumer co-operatives thus, gained popularity for retail distribution of consumer goods at reasonable rates to cater rising demands of villages and serving personnel.

The Apex Bank and the LAMPS plays significant role in the Socio-economic development of the State. The State Co-operative Apex Bank having 31 branches with the support of 31 LAMPS provides agricultural loans to the farmers. Besides, the Bank also provides procurement loan to the LAMPS and marketing societies for undertaking marketing of agricultural produces as also cash credit to the districts wholesale societies for procurement and distribution of PDS items. The LAMPS in the State provide all sorts of assistance to the agriculturists and also function as main agent of PDS.

In addition to LAMPS, some consumer co-operatives are also involved in PDS. Co-operatives shoulder the principal responsibility for the success of PDS in the State both as wholesaler as well as retailer. The involvement of the societies in the system is so deep that it is difficult to draw any distinguishing line between the Co-operative and PDS. As on 31-3-2001 there are 16 nos of urban co-operatives and 275 nos of rural co-operatives which are the district wholesale nominees in all districts and there are 276 Retail FPS(Fair Price Shop) which are also being run by the co-operatives.

The functioning of co-operative super-market with self service facilities, has been widely appreciated by the consumer of the capital complex. It was set up by the Arunachal Pradesh Co-operative Marketing and Supply Federation Ltd.

### CHAPTER - 13

#### **PUBLIC DISTRIBUTION SYSTEM**

The Public Distribution System is focused as one of the national agenda under Basic Minimum Services. The PDS has spread over the whole of Arunachal Pradesh with a network of 1185 Fair Price Shops to ensure regular supply of essential commodities to the people at an uniform and reasonable price. In addition there are 32 nos petroleum /HSD outlets, 34 SKO outlets and 22 LPG distributors in different location of the State. In the high altitude remote areas bordering International Boundary where surface communication is lacking, the supply system in those areas is maintained by air dropping through 28 CPO Stores. The State Govt. is making all out efforts to bring hitherto uncovered/partially covered areas under PDS and Govt. of India also has extended the existing 6 principal distribution centres under PDS in those areas. During the year 2000-2001, 50 more new fair price shops have been opened to achieve this goal. Mobile Vans/Trucks etc. have been procured with the central assistance and pressed into service to ensure door to door delivery of essential commodities under PDS. Out of the total 1185 FPS by 2000-2001, 1080 are in rural areas and 105 are in urban areas, while 276 FPS are operated by co-operative societies and remaining 909 FPS are operated by Private Entrepreneurs. The following table gives district wise number of FPS in the state as on 31-3-2001

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#### NUMBER OF FAIR PRICE SHOPS IN ARUNACHAL PRADESH AS ON 31-3-2001

District			Rural			Urban		Cu	imbine
	Coop.	Other	Total	Coop.	Other	Total	Coop.	Other	Total
1. Tawang	30	29	59	3			33	29	652
2. W/Kameng	31	38	69	-	7	7	31	45	76
3. E/Kameng	21	31	52	-			21	31	52
4. P/Pare	8	57	65	22	23	45	30	80	110
5. /Subansiri	7	107	114	7	14	21	14	121	135
6.	10	145	155			-	10	145	155
U/Sıbansiri									
7. WSiang	7	208	215	4	4	8	11	212	223
8. J/Siang	25	41	66	3	3	6	28	44	72
9. U/Siang	9	21	30				9	21	30
10. D/Valley	12	30	42	3	1	4	15	31	46
11. Lohit	45	6	51	3	1	4	48	7	55
12. Changlang	12	83	95				12	83	95
13, Tirap	10	57	67	4	3	7	14	60	74
TOFAL :	227	853	1080	49	56	105	276	909	1185

 $\Lambda$  scheme was introduced in 1995-96 for free distribution of 15 kgs of rice, 2 kgs of iodised salt and 1 cake of Lifebuoy Soap for three months during pre-harvesting season to the families below the poverty line and total of 90,000 (approx.) beneficiary families were covered.

At present under BPL scheme Govt. of India has raised the scale of rice from 10 kg. to 25 kg. during 2000-2001.Under this scheme 98,800 BPL families are benefited so far. A new scheme has been introduced called "ANNAPURNA SCHEME" under which 10 kg. of rice will be issued free of cost to the indigent citizens of 65 years of age and above who are not getting old age pension. As many as 4442 people will be benefited under this scheme

Another new scheme called "ANTYODAY ANNA YOJANA" is introduced under which 25 kg. of rice will be issued to the poorest of the poor families @ Rs. 3.00 per kg. Altogether 15100 families will be benefited in Arunachal Pradesh.

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### CHAPTER -14

#### TRANSPORT AND COMMUNICATION

Economic and social development of the people of Arunachal Piadesh depend mostly on efficient means of transport and communication. As scope of wate ways being limited and air transport too costly, road transport is considered as lifeline of the people of Arunachal Pradesh. Accordingly highest priority is accorded for construction of roads and bridges since launching of five year plans. An amount of Rs. 87058 lakhs was provided as approved outlay during the ninth plan (97-2002) for roads and bridges out of which Rs 63983 lakhs provided under PWD and Rs 23075 lakhs provided under RWD. An outlay of Rs.2913.90.00 lakh. including Rs.1081.90 lakhs under PWD and Rs.1832.00 lakhs under RWD was provided during 2000-2001 for the construction of roads and bridges. The Actual expenditure is Rs.2911.90 lakhs during the year. The details of outlay and expenditure during the ninth plan are given below:

OUTLAY AND EXPENDITURE ON ROADS AND BRIDGES

Table No. 14.1	(Rs	. in Lakhs)			
Head of	NinthPlan	1999	-2000	2000	)-2001
Development	Outlay	Outlay	Expdr.	Outlay	Expdr
(i)PWD Roads	63983	8978.00	8832.00	1081.90	1081.9)
(ii)Rural Roads	23075	2495.00	2194.00	1832.00	1830.0)
TOTAL :	87058	11473.00	11327.00	2913.90	2911.9)

It appears from available records that at the end of 2000-2001, total road length in the State was about 15297.67 km of which under APPWD 7237.08 km, under BRO 4742.61 km, under RWD 2258.98 km and under Forests 1059.00 km. The length of National Highways stood at 391.81 km at the end of 2000-2001. At the end of 2000-2001, the road density in the State was 17 Km per 100 Sq. kms as against the all India average of 74.9 km per 100 Sq. kms .as on  $31^{st}$  March 1997.Table below reflects road length in Arunachal Pradesh as on 31-3-2001

#### ROAD LENGTH AS ON 31-3-2001

Table No. 1	4.2					( In Km. )
Road	Particular	Total				
under	National Highway	Black Top	Surface(water bound Maccadom/ Gravalled)	Unsurface	Station colony	Length of Road
1	2	3	4	5	6	7
APPWD	-	1873.96	1102.80	3616.17	644.15	7237.08
BRO	391.81	2247.28	922.89	1180.63	-	4742.61
RWD.	-	51.05	271.87	1936.06	-	2258.98
FOREST	-	-	-	1059.00	-	1059.00
TOTAL :	391.81	4172.29	2297.56	7791.86	644.15	15297.67

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#### ROAD TRANSPORT

Road and rail transport constitute surface transport system. Road transport is still virtually the only means of communication to the people of Arunachal Pradesh. Mechanised mode of the transport such as rail and airways are yet to gain pace up while potential for waterways is negligible in the State. An important achievement under surface transport system is that Arunachal Pradesh has been brought under railway map of India with the opening of Balipara-Bhalukpong metre guage line on 27-1-89.

In Dec, 1975, Arunachal Pradesh State Transport Department started operation of its maiden bus services with two buses initially over the Khonsa-Naharkatia route and then Naharlagun-North Lakhimpur route. The department is at present holding a fleet of 228 buses over 141 routes. This gives 80% fleet utilisation. The total revenue earned during the year 2000-2001 is to the tune of Rs.662 crores. Efforts are made to ensure increasing revenue by minimising losses to vehicle and increasing its fuel efficiency for better mileage.

In order to provide basic amenities to the passangers 12 bus stations and 11 Sub stations arc constructed up to 2000-2001. In addition of above, numbers of waiting sheds have been constructed in various places of the state for the comfort of wayside passengers. For advance reservation in long distance trains to the people of interior places of Arunachal Pradesh, 6(six) Railway Out Agencies are operating at Itanagar (Naharlagan) Along, Pasighat, Bomdila, Seppa and Tawang, two more Railway Out Agencies are proposed to be operated at Tezu and Zero during 2001-2002. The department has also set- up a central workshop at Karsingsa for heavy body and mechanical repairing of buses. The department has got its own tyre retreading plant in the central workshop. With a view to reduce loss and improve efficiency, the department has also taken a few steps like periodical training to the drivers and operational staff so that they can improve their driving habits and are made awate of road safety. Transport department has provided subsidised service to officers/stuffs and students at the rate of 20% and 90% respectively in the capital complex facilitating them timely attendance in offices and institutions in spite of loss of Rs 30 lakhs (Aprox). The principal operational features of the state transport are shown in the following table:

#### OPERATIONAL STATISTICS OF ARUNACHAL PRADESH STATE TRANSPORT Table No. 14.3

Indicator	Unit	Operational Statistics				
		1998-99	1999-2000	2000-2001		
1	2	3	4	5		
Bus route coverage	No	141	141	141		
Distance bus route coverage	Per bus per day	91	95	95		
Total bus km operated .	-do-	70.00	67	68.9		
Strength of bus fleet(No of buses)	Nos	231	228	228		
Seat occupancy ratio	Percent	63.38	63	65		
Traffic receipt	Rs in lakh	538	618	662		
Bus fleet utiliasation	Percent	81	82	80		
Operational Expenditure	Rs in lakh	1387	1564	1601		
Net (operational) loss	-do-	849	846	9 <b>39</b>		
Fuel efficiency	Km per litre	2.88	3.00	3.19		
Tyre efficiency	ln Km	28000	28000	28000		
Bus station ·	In No	12	12	12		
Railway out agency	-do-	6	6	6		
Average daily passengers carried	-do-	-	4800	5479		
Average bus on road on any given day	-do-	187	192	195		
Total passenger carried	No in lakhs	21	21	20		

#### **CIVIL AVIATION**

The state of Arunachal Pradesh did not have a place in the air- map of the country till 1995. In view of remoteness and long distance between capital and district headquarters and other important locations and due to communication bottle-neck in surface communication, there was a long felt requirement to develop the Civil air-communication network in the state. As a first step towards the effort for development of air-communication. the state govt. introduced Civil communication flight services through Pawan Hans Helicopters Ltd. (A Govt. of India enterprise) with effect from 9<sup>th</sup> December ,1995 and the affairs are entrusted with Civil Aviation Department.

In view of economic backwardness of the people of the state, the ministry of Home Affairs, Govt. of India has granted 75% subsidy on the cost of operation.

The passengers flight service was initially started with operation on two routs viz Naharlagan-Guwahati and Naharlagan-Mahanbari and it has been subsequently extended to other locations / district head quarters of the state over the years. At present 12 locations including Guwahati and Mahanbari of Assam are connected from Naharlagan base giving conectivity to 9 districts with optimum utilisation of the sole helicopter and for the fact that the Dauphin helicopter in operation is not feasible to operate in high altitude locations.

The helicopter service is also extended to various lacations on emergent situation like lifting of stranded passengers owing to disruption of road and surface communication due to natural calamities as well as for movement of VIPs to conduct aerial survey of flood affected areas etc.

The Department of Civil Aviation is also looking after the schemes for construction of landing grounds, helipads and repair-maintenance of existing ones. At present there exists 13 nos. of Landing ground and 120 nos. helipads in the state of which 11 nos. L.Gs and 27 nos. of helipads are regularly used for operation of Pawan Hans passengers flight services and IAF ration sorties respectively.

The Civil Aviation Department is extending human services for the benefit of the people in general and for the Govt. in particular by implementing Civil aircommunication flight/services and by constructing & maintaining the helipads/LGs for smooth operation of ration sorties by IAF air crafts for supply of essential ration commodities to the remote administrative centres.

#### POSTAL AND TELECOMMUNICATION SERVICES

Growth of Post and Telecommunication facilities under central sectors appears to be at low pace because of remoteness and inaccessibility of many areas. How ever during the year 2000-2001 number of post offices has been increased from 301 to 303 with the addition of 2 nos. of E.D.P.O in the state. Out of the total of 303 post offices in the State one is Head Post Office with 46 Sub-post office and 256 EDBPO (Extra Departmental Branch-Post Office). Telegraph facilities are provided in 21 post offices. The area served by one post office in Arunachal Pradesh is 276 sq. km as on 31<sup>st</sup> March 2001 whereas the all India average is 22 sq. km (1990-91).

**GROWTH OF POST OFFICES IN ARUNACHAL PRADESH:** 

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Indicator	Unit	Post Offices as on 31 <sup>st</sup> March					
		1998	1999	2000	2001		
1.Post offices	No.	284	294	301	303		
(a) Head post office	No.	1	1	1	1		
(b) Sub-post office	No.	45	45	46	46		
(c)E.D.B.P.O.	No.	238	248	254	256		
2. Telegraph office	No.	20	20	21	21		
3. Population served per post office	Person	3680	3626	3005	3601		
4. Area served by one post office	Sq. km	295	285	278	276		

Telecommunication facilities in the State have been growing steadily over the recent years. The State is now divided into 7 telephone sub-divisions viz. Itanagar, Naharlagun, Bomdila, Tezu, Pasighat, Anini and Khonsa. There are 94 telephone exchanges with total capacity of 62816 connections out of which 39269 working connection have so far been provided as on 31-3-2001. Recently some more facilities have been provided such as 2 nos of Satellite V.T.V with 53 Internet connections and 6 nos of Electronic Key Board. More over 635 Nos of credit cards have been issued with a facility of one massage switching system as on 31-3-2001. The following table shows the growth of Tele-Communication facilities in the state since 1999.

GROWTH OF TELECOMMUNICATION FACILITIES FOR THE PUBLIC FOR LAST FOUR YEARS Table No. 14.5

<b>S1</b> .	Indicator	Unit		As on Marcl	1
No.			1999	2000	2001
1	2	3	4	5	6
1	Telephone Exchange	No.	81	89	94
2	Working Connection	No.	22066	30757	39269
3	S.T.D Facilities	No.	54	61	<b>7</b> 0
4	Total capacity	No.	33700	51732	62816
5	C.C.B connection	No	NA	0	0
6	P.C.O Provided	No	310	421	695
7	Satellite V.T.V	No	0	2	2
8	Internet Connection	No	0	53	53
9	Credit Card issued	No	0	635	635
10	Electronic Key Board	No	6	6	6
11	Massage Switching system	No	1	1	1

Radio Stations are functioning at Tezu, Pasighat, Itanagar and Tawang. Very low power transmitters (VLPT) have been set up almost in every District Headquarter and a low power TV transmitter has been set up in the State Capital at Itanagar.

### CHAPTER – 15

#### POWER

Arunachal Pradesh has been endowed with innumerable natural resources. The total hydro-power potentiality in the state is estimated to be  $1/3^{rd}$  of the entire hydro potential of the country. Arunachal Pradesh though endowed with immense hydel potential, but nothing much could be done to exploit this potential due to its limited resources. During  $8^{th}$  Five Year Plan and subsequent annual plans, emphasis was given on hydel generation and mini/micro hydel schemes.

The total hydro potential of the state is estimated to be 30,000 MW. Even if a part of the available hydro-power potential is explored, the state will not only be self sufficient in meeting the power demand of the state but at the same time it can take care of power demand of the region as a whole. The department of power so far has successfully commissioned 35 numbers of small hydel stations in various parts of the state with an installed capacity of 32.12 MW which are main sources of power in the state. Besides the micro/mini hydel projects, there are also large hydel projects which are either already investigated or in the final stage of investigation in the capacity of about 26565 MW. As the state's financial resource is inadequate for implementation of these large hydel projects, possibility of exploration through Central government agencies or Private power developers are being explored. However, Ranganadi Hydro Electro project with an installed capacity of 405MW is already in the stage of completion by North East Electric Power Corporation.

The present peak demand of power in Arunachal Pradesh is about 75 MW which is partially met from isolated micro/mini Hydel Stations and Diesel Generating sets with an installed capacity of 55.82 MW only and import of state's share from central sector projects in the region and from neighboring states. The generating capacity has been increased to some extent by the end of 8<sup>th</sup> Five Year Plan. To reduce the gap of demand and generation, priority is being given for completion of on-going micro/mini hydel project having total installed capacity of 48.25 MW since the commissioning of major Hydro Electric project would take some time.

Under Rural Electrification Programme, the state has so far achieved 65% of electrification by electrifying 2416 Nos. of villages by the end of 2000-2001 out of 3649 villages as per 1991 census.

The achievement made during 2000-2001 under various items of power sector are indicated in the following table :-

#### ACHIEVEMENT UNDER POWER SECTOR DURING 1999-2000 AND 2000-2001. Table No. 15.1

Sl. No.	Indicators	Unit	Achievemen	t during
			1999-2000	2000-2001
1	2	3	4	5
1.	Installed capacity	MW	66.83	70.51
1.1.	Hydel	-do-	31.83	32.12
1.2.	Diesel	-do-	35.00	23.70
1.3	Stand by	do	14.68	14.69
2.	Annual Generation	MU	62.21	153.82
2.1.	Hydel	-do-	52.10	42.50
2.2.	Diesel	-do-	10.01	11.32
3	Imported from ASEB/Central sector (out side State)	MU	95.89	100.00
4	Annual Consumption	MU	80.95	70.17
4.1.	Domestic	MU	56.43	29.35
4.2.	Commercial	-do-	8.48	4.92
4.3.	Industrial	-do-	4.86	1.51
4.4.	Public lighting and water works	-do-	11.18	5.94
4.5.	Agriculture ( any other category)	-do-	-	28.45
5	Villages electrified during the year	No.	25	35

#### A. INDUSTRY

Arunachal Pradesh is endowed with abundant natural resources like forests, hydropower/water and minerals for industrial development, but lack of infrastructural facilities like roads, bridges, transport, communication and institutional finance stood as hindrance for exploration of the natural resources. Ever since the planning era in the country, the Departmental efforts were mainly confined to the promotion of traditional handicrafts, handloom, village and cottage industries. With the setting up of District Industries Centres (DIC) during 5<sup>th</sup> Five Year Plan, efforts have been made for setting up of forest and mineral based industries. Efforts are also being made for gearing up industrial activities in the state through the establishment/opening of APIDFC, Arunachal Pradesh Khadi and Village Industries Board and Arunachal Pradesh Mines and Mineral Development Trading Corporation limited. Besides, Industrial Policy of Arunachal Pradesh (1994-95) has been announced which is expected to provide a framework for the future development of industries in the State. It is expected that these efforts would push up industrial growth in the state to a considerable extent in near future. The Department of Handloom and Handicrafts was formed during 1995-96 separating from the Industries department. Since then separate funds have been allocated for Handloom and Handicrafts sector.

Outlay and expenditure during last three years since 1998-99 under Industry and Handloom & Handicrafts are shown below :-

**OUTLAY** EXPENDITURE FOR INDUSTRY AND HANDLOOM & AND KHADICRAFT DEPTTS. (Rs. in lakhs)

Table No. 16.1

	199	8-99	1999	-2000	2000-2001	
	Outlay	Expdr.	Outlay	Expdr.	Outlay	Expdr.
Sectors						
1.	2.	3.	4.	5.	б.	7.
1. Village and Small Scale Industries (VSI)	253.00	223.29	238.00	230.50	236.00	235.93
2. Industries (other thanVSI)	260.00	243.00	25.00	17.00	27.00	25.25
3. Labour & labour welfare	52.00	44.18	62.00	52.98	62.00	61.81
Sub- Total	565.00	510.47	325.00	300.48	325.00	322.99
4.Handloom, handicraft and Sericulture	282.00	243.83	278.00	278.00	301.00	288.80
Grand Total	847.00	754.30	603.00	578.48	626.00	611.79

The small scale industries contribute substantially to the industrial production and in generating employment in the state. At present the state is having 18 numbers of registered Medium Scale Industries and 4798 numbers of registered SSI units, in addition to one Mini Cement Plant, a Fruit Processing Plant, a Citronella Oil Industry and one Tea Industry. As many as 15039 persons are employed in these Industries as on 31-3-2001.

In order to start new SSI units and to assist existing SSI units for industrial growth, the State Govt. has taken number of steps such as:-

(a) Local youth being sponsored to MBA and other PG course in industrial management to motivate them to set up different industries. Besides, two number of ITI one at Roing and another at Taborijo are functioning in the State to provide technical education. The Rural Industrial Development Centre (RIDC) at Dirang in West Kameng District has been established in collaboration with the HMT Limited, Bangalore for imparting training to rural youth under Skill Development programme.

Apart from this, 83 number of Craft Centres are also functioning in the State which provides training to different trades such as Weaving, Knitting, Tailoring, Carpet making, Cane and Bamboo, Carpentry, etc. During 2000-2001, total of 170 candidates were admitted for training but only 100 trainees have passed out.

(b) Raw material Banks are opened in all the districts in order to assist small scale and village industrial units to meet up raw materials timely and at reasonable cost.

(c) Due to non-availability of banking facilities in many areas of Arunachal Pradesh, it is very difficult for the entrepreneurs to obtain loan from the bank. Therefore, the Department of Industries has been extending loans to the entrepreneurs for establishment of small projects of their own. APIDFC, owned by the State government is also engaged in development of industries and providing financial assistance under the refinance scheme of Industrial Development Bank of India. So far the corporation has financed 130 Nos. of industrial units in medium and small scale industries with an amount of Rs. 70.00 crores. The number of units financed by the corporation and amount outstanding during 2000-2001 are shown in the following table:-

NUMBER OF UNITS FINANCED BY FINANCIAL CORPORATION AND AMOUNT OUTSTANDING AS ON 31-3-2001.

SI. N <b>o</b>	Type of industries		nt of loa g the year			Amount outstanding as on close of the year2000-2001			
		Sma	ll scale	O	thers	Sma	ill scale	(	Others
		Unit	Amo- unt	Unit	Amo- unt	Unit	Amo- unt	Unit	Amount
1	Manufacturing	-	-	-	-	18	427.20	-	-
2	Cold Storage and manufacturing	-	-	-	-	-	-	-	-
3	Textile	-	-	-	-	-	-	-	-
4	Miscellaneous	16	46.42	-	-	-	-	71	322.23
5	Total	16	46.42	-	-	18	427.30	71	322.23

(d) Industrial Estates provide ready-built sheds to the entrepreneurs to start their own industrial venture at a very nominal rent where-in road communication, power supply and water supply including other required infrastructure are made available. At present there are 13 Nos. of Industrial Estate with 196.48 acres of area acquired in the state.

(e) Four Industrial Areas (earlier indicated as Growth Centre) one at Tezu and remaining three at Dirang, Pasighat and Miao are functioning in the state.

(f) A centrally sponsored Export Promotion Industrial Park (EPIP) at Niglok Ngarlung in East Siang District has been formulated with a view to involve State Government in export efforts.

With a view to develop rich heritage of Handloom/Handicraft items of Arunachal Pradesh, the Department has taken up number of schemes viz. Participation and organising of Exhibition to create awareness amongst the local entrepreneurs and artisans of the state. At present the Department has been running 13 Emporia and 5 nos of show room in the State for marketing the products of Departmental Crafts/production Centres and also to help the poor craftsmen and local artisans by procuring their products for selling through 13 Emporia, In addition there are 2(Two) nos of Emporia functioning at Delhi and Calcutta More over the Department has already acquired a plot of land in New Mumbai for establishment of a Guest house and a Emporia of Arunachal Pradessh to project the state traditional craft out-side state.

#### ARUNACHAL PRADESH KHADI AND VILLAGE INDUSTRY

The Arunachal Pradesh Khadi & Village Industries Board is a statutory body of the Govt. of Arunachal Pradesh working under the administrative Control of the Department of Textile & Handicrafts. This statutory Board is created by an Act of Legislature viz, the A. P. Khadi & Village Industries Board Act, 1989. The Act was further amended during the year 1998 as per Govt. of India's directives. This has interalia, ensured the state Govt's exclusive control over the administrative affairs of the Board

The objective behind constitution of the Board ,which is purely a promotional body, is to plan, organise and develop Khadi and Rural Industries in the State.

The Board has started its function since 1991 and till 1999-2000, the total fund provided by the State Govt. amounts to Rs. 87.86 lakhs being establishment expenses. During the year 2000-2001 total expenditure inccured was Rs 19.00Lakhs. For developmental activities total fund received from KVIC amounts to Rs 337 lakhs which includes subsidy component Rs 144.29 lakhs. Till time the Board has financed 248 rural industrial units to the local entrepreneurs with the above fund. The Board has also implementing KVIC's margin money scheme through Banks, for which subsidy @30% of project cost are provided by the KVIB. Other than this, the KVIB has also been implementing central sector scheme on beekeeping with funding from :Ministry of Agriculture, Govt. of india.

Under the Boards' training programme the local youths are sent to 54 different training institutes of KVIC. Expenditures for such training are borne by the G.O.I./KVIC.

The following table reflects the Physical achievement of Hand loom/ Handicraft/ Sericulture industries and craft training centres during 1999-2000 and 2000-2001

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#### PHYSICAL ACHIEVEMENT OF HANDLOOM/HANDICRAFT/ SERICULTURE INDUSTRIES AND CRAFT TRAINING CENTRES DURING 1999-2000 AND 2000-2001 Table No. 16.3

S1.	Indicator	Unit	Achiev	ement
No.			1999- 2000	2000- 2001
1	HANDLOOM INDUSTRY		2000	2001
1.1	Production of cloth	000 mtr.	1,50,000	1,50,000
1.2	Persons employed	No	7,000	7,000
2.	HANDICRAFT & OTHER VILLAGE INDUSTRY			
2.1	Value of Production	Rs in Lakhs	90.00	97.50
2.2	Persons employed	No	600	600
3.	CRAFTS TRAINING-CUM PRODUCTION			
3.1	Crafts production /training centre	No	88	88
3.2	Persons trained	No	673	540
3.3	Value of Production	Rs. In lakhs	NA	23.00
3.4	Annual sale proceed	-do-	36.00	39.60
4.	SERICULTURE INDUSTRY			
4.1	Sericulture Centre	No	25	25
4.2	Village rearers	No	5113	5113
4.3	Plantation area	In Hect.	NA	1183.50
4.4	Production of Row Silk	Kg	1300	2961
4.5	Production of Eri cocoons	Kg	NA	2700
4.6	Production of Muga Cocoons	No	NA	15000
4.7	Production of Oak Tasar Cocoons	No	NA	1200000
4.8	Persons Employed	No	2700	113000

#### B. MINING

Arunachal Pradesh is the least explored area from the geological point of view. However, preliminary investigation by Geological Survey of India and other organisations like oil India Ltd., Mineral Exploration Corporation Ltd. etc. have indicated presence of rich mineral resources in the State. Detail Survey of potential mineral resources could not be taken up due to the absence of infrastructure, difficult terrain and thick forest growth. However, Survey and Investigation carried out so far has established presence of economic deposit of coal, crude oil and natural gas in Chanlang District. The oil is also concentrated in Kharsang and Khumchai area while coal deposit have been found in Namchik-Namphuk area of the district. Some investigations in small areas in West Kameng District and Lohit District have also confirmed economic deposits of very good quality dolomite limestone.

Presently crude oil is being extracted from Kharsang field on small scale by M/s. Oil India Ltd. and M/s.Geo Empro Petrolium Ltd., a consortium of private and foreign industries. The proposal is now to carry out development of Namchik – Namphuk trough APMDTCL The table below shows the Production of Crude Oil / Natural Gas.

# STATEMENT SHOWING PRODUCTION OF CRUDE OIL AND NATURAL GAS DURING THE YEAR 1998-99, 1999-2000 AND 2000-2001 Table No. 16.4

Sl. No	Item	Unit	1998-99	1999-2000	2000-2001
1	2	3	4	5	6
A	Crude Oil	MT	64341	77719	78409
В	Natural Gas	"000" Std. Cu.Mtrs.	24069	22443	27032

For exploitation of mineral resources, the State Govt. has created a Department of Geology & Mining in the year 1995. The Department is now functioning with a small contingent of staff and has engaged itself for the development of Mineral resources.

### CHAPTER – 17

#### EDUCATION AND HUMAN RESOURCES DEVELOPMENT

Education and Human Resources Development is of paramount importance to improve the socio-economic status of people. In this respect, till independence, Arunachal Pradesh lagged extremely behind with only 4 primary schools and literacy less than 1%. A modest beginning, however, could be made right from the first Five Year Plan despite formidable constraints like inaccessibility of territory, peoples' unawareness of the need of education and traditional dependence on children for domestic and field work. With increasing emphasis through successive plans, commendable progress could be made over the past few decades. The census record reveals progressive growth of literacy as 7.23% in 1961, 11.29% in 1971, 20.79% in 1981 and 41.59% in 1991. As per 1991 census data, male and female literacy rate in Arunachal Pradesh is 51.45% and 29.69% respectively as against All India rate of 64.13% and 39.29% respectively. Also, by the end of the fourth year (2000-2001) of 9th Five Year Plan (1997-2002), the number of general educational institutions has risen up to 1879 excluding college and university with enrolment of about 291 thousand.

Efforts were made for providing facilities for primary education to achieve the constitutional objective of universalisation of elementary education. The 9<sup>th</sup> Plan strategies also made in such a way so as to achieve the national objective of universalisation of elementary education, complete eradication of illiteracy among the people of age group 15-35 years, expansion of vocational education and youth service facilities to reduce dropout rates. Besides, efforts are being continued on higher and university education with qualitative improvement at all levels. The 9<sup>th</sup> Plan outlay and year-wise financial achievement under education are reflected in the following table

Table No.17.1				(Rs. inLakh)		
Head of development	9 <sup>th</sup> Plan agreed outlay	Achievement(Actual Expenditure) during the year				
	(1997-2002)	199 <b>8-</b> 99	1 <b>9</b> 99-2000	2000-2001		
GENERAL EDUCATION	46138.00	6144.23	6159.58	6643.76		
181. Secondary education	N.A	N.A	2467.26	1962.13		
(i) Elementary	NA N.A	NA N.A	NA 151.99	4500.07 93.10		
(.ii) Adult education (iii)Vocational education	N.A	N.A	NA	20.35		
(iv) S.S.P.Education	NA	NA	50.71	7.68		
2.Sport and youth service	1250.00	181.49	NA	NA		
Total	47388.00	6325.72	NA	NA		

PLAN OUTLAY AND EXPENDITURE UNDER GENERAL EDUCATION le No 17 1 (Rs. inLak

#### -: 47 :-

The trend of growth of educational institutions in the state over the last four years is reflected in the table below:-

Table No.17.2				( In nu	mbers)		
Type Educational Institutions	At the end of 8 <sup>th</sup> Plan	During last four years of 9 <sup>th</sup> Plan					
	(1996-97)	1997-98	1998-99	1999- 2000	2000- 2001		
1. Pre-primary schools	137	95	46	46	58		
2. Primary schools	1256	1264	1277	1289	1303		
3. Middle schools	309	311	326	328	333		
4. Secondary schools	92	93	103	109	116		
5. Higher Secondary schools	68	69	. 69	68	68		
6. College	6	7	7	7	7		
7. University	1	1	1	1	1		
8. School for Handicapped	-		-	I	1		

**GROWTH OF EDUCATION INSTITUTION** 

Note :- No. of Pre-primary schools decreased due to merger with other type of institutions.

It appears from the above table that there is a steady growth of educational institutions in the state over the years. In addition to above institutions, there are one Teachers' Training School and one school for Handicapped persons functioning in the state. With a view to provide educational facilities in the habitations below 200 population, one Community school to each such locations are established in phase manner since 1990-91. Till 1994-95, 266 such community schools were opened. In Community schools, preschooling, primary education from class I, non-formal education and adult education are being provide. No regular teacher is appointed against these community schools. Each community school is run by an educational worker on honorarium basis. The educational worker is being appointed from locally available youths on the basis of recommendation of the Village and Block Education Committee. The trend of enrolment of students during last few years is shown in the table given below:-

ENROLMENT OF STUDENTS AT DIFFERENT STAGES

Table No.17.3			( In' 00	0 numbers)
Stage	1998-99	1999-2000	2000-2001	%
				increase
				over
				previous
				year
1. Pre-primary	33	36	37	2.78
2. Elementary(I – VIII)	201	210	216	2.86
3. Secondary (IX – X)	20	21	22	5.00
4. Higher Secondary (XI -XII)	8	9	10	11.11
5. Graduation	3	5	5	0.00
6. Post graduation	0.5	0.5	0.5	0.00
A. Total Enrolment	265.5	281.5	290.5	3.20
B. Enrolment of students belonging	183	NA	193	NA
to AP scheduled tribes				
C. Percentage of APST enrolment to	69.01	NA	66.44	NA
total enrolment				

The enrolment of students during last three years indicates a growth from 281.5 thousand in 1999-2000 to 290.5 thousand in 2000-2001 registering a 3.20 percent rise of total enrolment over the previous year.

The number of teachers and enrolment of students in the institution during 1999-2000 and 2000-2001 are reflected below.

Table No.17.4	····					
Type of	Number of Teachers		Enrolment of		Teacher pupil Ratio	
educational			Students	5		
institution			in thous	and		
	1999-	2000-2001	1999-	2000-2001	1999-	2000-
	2000		2000		2000	2001
1 Pre primary	3229	3344	194	200	1:60	1:49
and Primary						
School						
2.Middle School	2630	2666	52	53	1:20	1:20
3.Secondary ,,	1664	1847	21	22	1:13	1:12
4.Higher	1794	1804	9	10	1:5	1:1
Secondary "						
5. Degree	183	181	5	5	1:27	1:28
college						
6. University	68	68	0.5	0.5	1:7	1:7
Total	9568	9910	281.5	290.5	1:30	1:26

TEACHER-PUPIL RATIO IN EDUCATIONAL INSTITUTIONS able No. 17.4

Adult Education Programme has received the special attention in the state at the instance of National Literacy Mission to cover illiterates in the age group of 15-35 years with thrust on literacy, social awareness and functional literacy. The achievement of physical target under Adult Education is moderate. Efforts are continued to be made to give higher emphasis on area approach rather than centre based programme under Adult Education Programme.

In respect of technical education, Arunachal Pradesh is yet to have institutional facilities except the lone Regional Institute of Science and Technology( NERIST) with limited seats for the state. There is no college for study in medicine, veterinary, forestry, agriculture, fishery etc. and hence students are sent to study these disciplines in the institutions of other states of the country. On completion of their courses most of these students return to the state catering Technical Manpower needs in various fields. The table below shows the total number of students sent for Medical, Veterinary and Engineering colleges outside the state from 1995 onwards.

Table No. 17.5

Year	Medic	ine		Agri- culture	Veterinary	Horti- culture	Engineering		Pisci- culture	Handloom Technology and Sericulture
	MBBS	S BDS B	HMS	BSC (Agri)	B.V.SC	Degree course	Degree	Diploma	Degree course	Degree course
1995	32	5	3	45	14	-	130	108	3	1
1996	31	5	3	25	9	1	131	123	1	5
1997	<b>3</b> 6	5	2	-	11	-	131	126	-	4
1998	39	5	3	25	7	-	142	132	1	3
1999	41	6	4	10	6	1	150	161	-	4
2000	34	5	5	13	10	4	154	158	-	3
2001	34	5	4	10	8	4	150	162	-	-

In addition, the North Eastern Regional Institute of Science and Technology (NERIST) established in the state in 1986 has also started producing Engineering Diploma holders from 1990 and Degree holders from 1992. As such, Engineering Manpower to meet the need of government departments appears to be enough in the state as some of the passedout Engineers could not be absorbed in government job as on date.

As regards drop-out rates in educational institutions, there has been high rates of drop-out at various level. The following table shows drop-out rates in the the state for last 16 years.

		<b>WISE D</b>	ROP-OU	T RATI	ES AT V	VARIOU	S LEVE	LS	
Table No 17.	r	1 1/2 +			4 4/7 7				• (* * * * )
Year	Primary	level(I-V	<u></u>	Middle	level(I-	<u>VIII)</u>	Second	lary leve	l(1-X)
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1984 <b>-8</b> 5	67.46	63.57	66.14	81.49	80.33	81.13	85.92	85.70	85.86
1985-86	60.74	63.15	65.45	79.23	79.15	79.20	86.75	87.79	87.08
1986-87	65.55	62.56	64.46	38.06	75.53	77.25	83.43	85.23	83.99
1987-88	58.05	58.43	58.19	75.20	75.91	75.44	83.03	85.75	83.92
1988-89	62.33	61.49	62.00	75.88	73.91	75.17	82.76	84.29	83.25
1989-90	61.61	60.60	61.20	76.49	76.00	76.34	80.49	81.83	80.94
1990-91	60.71	60.78	60.74	75.97	75.84	75.92	79.10	82.49	80.22
1991 <b>-</b> 92	58.76	60.66	59.53	73.78	76.65	74.91	78.45	82.37	78.88
1992-93	50.72	60.02	60.54	66.82	69.94	60.07	77.74	80.02	78.60
1993-94	50.10	61.09	60.52	64.62	67.44	67.72	77.59	79.11	78.52
1994-95	54.97	55.22	55.07	63.08	66.69	64.88	76.43	78.93	77.68
1995-96	55.49	52.46	54.19	61.49	66.30	63.78	75.96	78.74	77.11
1996-97	53.73	48.59	51.54	67.87	66.64	67.34	NA	NA	NA
1997-98	51.26	46.98	49.41	14.21	11.86	13.20	6.67	13.05	9.20
1998-99	51.74	46.69	49.50	11.80	13.02	12.34	-	-	-
1999-2000	49.16	50.82	50.23	14.97	14.74	14.83	-	-	-
2000-2001	48.50	50.40	49.35	63.47	60.28	62.09	75.88	78.89	77.17

<b>EARWISE DROF</b>	<b>P-OUT RATES AT</b>	VARIOUS LEVELS
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From the above table, it is evident that drop-out rates are gradually decreasing in the state. The probable reasons of drop-out at various levels of education in Arunachal Pradesh are summarised below:-

- i. Topographic and demographic situation.
- ii. Socio-cultural heritage.
- iii. Lack of providing proper infrastructure facilities to the schools
- iv.

In order to reduce the drop-out rates, the Department of Education has been taking a number of incentives/schemes like free supply of text books up to class VIII and at 25% subsidised cost from class IX onwards, free supply of school uniforms from class I-VIII, stipend in lieu of ration, providing hostel facilities etc.

### **CHAPTER-18**

#### MEDICAL AND PUBLIC HEALTH

India being a signatory of the Alma Ata declaration, is committed to the goal of "Health for All" by the year 2000 A. D. With a view to fulfill this commitment, the State Government is providing comprehensive health care services to its people. Improved health care facilities have made significant changes on public health over the years as noticed in the following changing public health indices.

#### BIRTH AND DEATH RATE IN ARUNACHAL PRADESH

Table No.18.1

S1.	Indicator	Unit		1999		2000		
No			Rural	Urban	Total	Rural	Urban	Total
1.	Birth Rate	Per thousand	23.2	13.5	22.3	23.2	13.5	22.3
2.	Death Rate	-do-	6.4	1.9	6.0	6.4	1.9	6.0
3.	Infant Mortality Rate	-do-	45	10	43	45	10	43
4	Natural Growth rate	-do-	16.7	11.6	16.3	16.7	11.6	16.3

The health care services are extended to the people through a wide net work of various type of Health and Medical Institutional facilities particularly 3 General Hospitals, 13 District Hospitals, 6 Health Units, 30 Dispensaries, 25 Community Health centres, 67 Primary Health Centres and 350 Health Sub-Centres. Besides, 3 Institutions on Ayurvedic system of Medicine and 30 Homeopathic Institutions are also functioning as on 31<sup>st</sup> March, 2001. In addition to above, there are 43 other institutions such as VD/STD/HD/T.B etc. functioning for specialised treatment on the line. Apart from this, Voluntary Organizations like R. K. Mission, Donyi Polo Mission and Sankar Deb Mission are playing considerable role by extending Institutional Medical facilities for treatment of the sick. The number of beds available in Medical Institutions is 2218 in 2000-2001. It appears that Doctor-Population ratio is 1:1909 (excluding Dental Surgeon) and Hospital bed – population ratio is 1:3117 in Arunachal Pradesh. The detail net work of various types of Health and Medical Institutions in Arunachal Pradesh as on 31<sup>st</sup> March, 2001 is given in the following table:

#### DISTRICT-WISE NUMBER OF HEALTH INSTITUTIONS AND BEDS IN ARUNACHAL PRADESH AS ON 31-3-2001 Table No. 18.2

la	ble No.18.2									<u>(In Nur</u>	nber)
Sl	District/	Hos	Comm-	Prim	Health	Dis	Health	Other	Ayur	Hom	Bed
No	State	pital	unity	ary	Unit	pens	Sub-	institu	vedic	eopat	avaib
		(Gen/	Health	Health		ary	Centre	ti-ons	dispe	hic	le
		Dist.)	centres	Centre				VD/	nsary	dispe	
			(CHC)	(PHC)				SDT/		nsary	
								HD/			
								TB etc			
1	2	3	4	5	6	7	8	9	10	11	12
1.	Tawang	1	2	3	-	1	15	4	-	3	54
2.	W/Kameng	1	-	2	-	-	29	2	-	1	143
3.	E/Kameng	1	1	7	-	1	18	3	-	2	140
4.	P/Pare	2	1	5	-	1	19	-	1	3	362
5.	L/Subansiri	1	4	7	-	1	59	7	-	2	162
б.	U/Subansir	1	1	5	-	1	29	5	1	3	114
	i										
7.	W/Siang	1	5	7	-	-	35	6	-	4	237
8.	E/Siang	1	2	9	1	-	22	4	-	2	221
9.	U/Siang	1	-	3	1	-	14	-	-	1	78
10	D/Valley	1	3	3	2	11	15	1	-	1	130
11	Lohit	1	3	8	1	6	35	3	-	4	225
12	Changlang	1	1	4	1	8	26	3	1	2	135
13	Tirap	1	2	4	-	-	32	5	-	2	187
Arun	achal	13	25	67	6	30	350	43	3	<b>3</b> 0	2218
Prad	esh										

In order to run the hospitals, Primary health centres and other health care institutions the current strength of health man power consist of 63 Specialist and 464 Medical Officers of which Medical Officers 389 allopathic, 37 Homeo and 2 Ayurvedic Doctors including 36 dental surgeons, 158 staff nurse, 359 midwives and numbers of other technical /Non technical staffs. Accordingly it appears that Doctor – Population ratio is 1:2352 (Excluding Dental surgeon) and Nurse - Population ratio is 1:6906 ( as per 2001 Census Provisional population)

#### FAMILY WELFARE PROGRAMME

As many as 17 Family Welfare Centres/Clinics are functioning of which 11 Family Welfare Centres/Clinics are in urban areas and 6 Family Welfare Centres/Clinics in rural areas. From the available information of Medical Department, it reveals that 1755 cases of Sterilisation and insertion of 2396 Nos. IUD and 190 OP were performed during 2000-2001.

As part of polio eradication effort, India establishes National polio surveilance project in 1997 in collaboration with WHO. Accordingly India launches Intensified PULSE POLIO Immunization from 24<sup>th</sup> Oct.1999 on recommendation by Global technical consultative Group(TCG) to eradicate polio by the global target date (2000AD). Arunachal Pradesh also launches National Immunization Days along with rest of the country from December 1995 immunizing 96 to 100 percent children (0-5 years) The following table depicts year wise immunization of children :

#### IMMUNIZATION OF CHILDREN (0-5 YEARS) BY PPI CAMPAIGN IN ARUNACHAL PRADESH SINCE DECEMBER 1995

Table No.18.5

YEAR	CHILDREN IMMUNIZED (No.)
1995-96	102727
1996-97	154832
1997-98	168830
1998-99	179392
1999-2000	205001
2000-2001	71669

During the year 2000-2001 all total 18947 children were given TTp/w10 years and 16 years, 13586 BCG,11499 DPT,11749 Polio, 6204 DT and 9674 Measles vaccine spending Rs.2.50 Lakhs.

### CHAPTER – 19

#### WATER SUPPLY AND SANITATION

The newly created Public Health Engineering Department (PHED) has taken over all water supply schemes both under urban and rural areas during the last part of 1995 from Public Works Department(PWD) and Rural Works Department (RWD). The following works are being looked after by Public Health Engineering Department.- (i) Rural Water Supply both under MNP and ARWSP, (ii) Rural Sanitation both under MNP and ARWSP and (iii) Urban Water Supply. The Physical and Financial achievement for last two years under Water Supply and Sanitation are given below:-

ACHIEVEMENT OF WATER SUPPLY AND SANITATION PROGRAMMES Table No.19.1 (Rs. in lakh)

Head of Development	1999-20	000	2000-2001		
	Physical	Financial	Physical	Financial	
1	2	3	4	5``	
1. Rural Water Supply (MNP)	NC to FC=07 PC to FC 23	2086.21	NC to FC=4 PC to FC=15	1653.87	
2. Rural Water Supply (ARWSP)	NC to FC = 150 PC to FC = 120	2979.46	NC to FC =33 PC to FC =74	2163.45	
3. Sanitation MNP CRSP	163	9.36	16 166	12.50	
5. Urban Water Supply	300kld	575	250kld	675.00	
4. Filtration and Treatment	2	20.00	0	1.00	

NC= Not covered. FC= Fully Covered

PC=Partly covered

Under the Rural Water Supply and Sanitation, two main programmes viz Minimum Need Programme(MNP) and Accelerated Rural Water Supply Programme (ARWSP) are being implemented by the Department. These schemes are also duly supported and backed by Filtration programme.

The State has 3649 Villages and 216 other habitation (hemlets)) as per 1991 Census and 624 hamlets as per the survey conducted by the department. Thus, total 4298 habitations are to be provided with drinking water supply facilities. As per status position as on 1-4-2001, there are as many as 385 NC (Not covered), 995 PC (Partially Covered) and 2918 FC (Fully Covered) habitations. During the year 2000-2001 total 4 NC (Not covered) and 15 nos of PC habitation have been provided with water supply facilities under MNP. Similarly 33 NC habitation and 74 habitations have been turned to FC habitation under ARWSP during the year 2000-2001. Augmentation and improvement of Water Supply in 10 Urban Centres (Towns) are also being taken up. During the year 2000-2001 no urban habitation has been provided with water supply facilities.

In last two decades, there has been a phenomenal growth of population in all districts both in Rural and Urban areas in Arunachal Pradesh. The existing water supply system which were installed in 1960s and 1970s are not in a position to cater the need of water supply to the inhabitants particularly in township areas. Considering the degree of deficiency of existing water supply system, the various strategies/plans have been taken up by the Department of PHED to take up the comprehensive water supply systems with elaborate arrangements for treatment of water to be supplied to the consumers. Besides, the department has taken up some more schemes like- Low Cost Sanitation Programme, Garbage Clearance Programme, Slum Improvement Programme particularly in some township areas, liasioning with the Urban Development Department.

### CHAPTER – 20

#### SOCIAL WELFARE

Various social welfare schemes are being implemented in the State by the Directorate of Social Welfare. Welfare of physically handicapped, Welfare of destitute people in the society, Welfare of Women etc., Old age pension, Welfare of Weaker section of the society and other welfare measures are the primary responsibilities of this Department. Drug addiction, opium addiction, drinking of alcohol, Child Marriage and other social evils are to be removed from the society by relentless persuation through publicity and organization of seminar and conferences.

Arunachal Pradesh State Social Welfare Board (APSSWB) is implementing various social welfare schemes in the state through 10 Project Implement Committee (PICs)under border area projects in each district of the State. Rs. 60.00 Lakhs has been spent under this Scheme during the year 2000-2001.

The following schemes are being implemented in the State:

#### 1. Old Age Pension and Natiuonal old age pension scheme.

The Old Age Pension scheme has been introduced to help the old people of the society above 60 years of age who are provided Rs.150/- per month and under National Old age Pension Scheme introduced by the Govt. of India the old people of above 65 years of age and below are porovided Rs. 75/- per month.

#### 2. Resettlement and Rehabilitation of Handicapped Persons.

The Department proposes to re-settle and rehabilitate those people in the society who are physically handicapped and are unable to make out their living.

1

#### 3. Children in need of care and protection.

Destitute children are helped with the above Schemes. Besides, voluntary organizations in the State are being given grants for maintenance of Destitute Children and for attainment of their proper education at free of cost.

#### 4. Working Womens' Hostel and Juvenile Home

Working Womens' Hostel have been constructed in the State to meet the requirement of working women, working away from their homes. Construction of Juvenile Home at Pasighat has been taken up with 50% central share for delinquents.

During the year 2000-2001 an amount of Rs 40.50 lakhs has been utilised for implementation of all the above 4 (four), Schemes.

#### 5. Special Nutrition Programme(SNP).

This is a continuing scheme, It is essentially linked up with ICDS programme and is implemented in ICDS projects.

The scheme is basically concerned with child heath and nutrition and the beneficiaries of this scheme are in the age group of 0-6 years and pregnant and nursing, mothers. Provision of Rs 1146.00 lakh has been made for beneficiaries in 2339 centres in the state during the year 2001-2002. The Scheme is also pertaining to women and child development programme like (a) Immunisation (b)Pre-School education (c)Health check-up and (d)Referral services through out the state in ICDS projects of all the CD Blocks

Apart from all the above activities, the Department releases grants-in-aid to the different voluntary organisations scattered all over the state which are imparting formal education to the children of the poor and low income groups.

### CHAPTER – 21

#### MANPOWER AND EMPLOYMENT

Utilization of manpower is closely related with developmental plans and programmes. Before the planning era, no high or middle level manpower was available in Arunachal Pradesh (erstwhile NEFA). As a result, at the initial stages of development, manpower had to be brought from outside the state for administrative and development work. But with the passage of time, in the successive plan periods, the number of educational institutions has increased considerably and thereby sufficient number of educated manpower was created during the past three decades. The out-turn of students in Board/University examinations from the institutions in Arunachal Pradesh during the last few years is shown in the table given below:-

Year	Matric (X)	H.S.S./P.U.	Graduation	Post graduation
1	2	3	4	5
1960-61	31	-	-	-
1965-66	47	14	-	-
1970-71	54	49	15	-
1975-76	60	53	43	~
1984-85	584	1092	92	-
1989-90	1679	1031	73	10
1995-96	1871	1757	422	28
1996-97	2316	1106	440	109
1997-98	2478	1287	560	34*
1998-99	1879	1789	737	159
1999-2000	1748	2013	843	157
2000-2001	2560	2185	NA	NA

OUTTURN OF STUDENTS OVER THE YEARS

A good number of students of the state are sent every year for higher studies in technical courses like Engineering, Medicine, vety, Agril, etc. to colleges located outside the state. Book grant and stipend are also offered to tribel students studying in to Technical Degree and diploma courses. On completion of courses, these students use to fill up the vacuum of technical manpower need of the state and almost all the technical graduate are absorbed by the Govt. Deptts. Therefore the number of students sent outside for studying Medicine need to be increased to meet the need until a medical college is opened up in the state. The out turn of Engineering graduates to employment market in the state is surplus as the NERIST passed outs are also competing with the passed-outs coming from institutions out side the state. Employment avenues in private and corporate sectors need be developed to stop wastage of skilled Engineers. The production oriented industries gradually growing up in the state which would reduce the waiting time for absorption in job to the Engineers.[

#### **EMPLOYMENT**

As per 2001 Census, about 44 per cent of the total population of Arunachal Pradesh are classified as worker and 56 per cent as non-workers. Out of these total workers, main workers constitute 86 per cent and marginal worker constitute only 14 per cent.

In Arunachal Pradesh the progress of planned development started late. However, within a short period significant changes have taken place in the labour market. Spread of education and exposure to modern ways of living added another dimension in the social changes. The introduction of various employment programmes, such as IRDP, JRY, Swarnajayanti Rojgar Yojana, EAS, PMRY have resulted in providing gainful and productive employment to the people of the state. Development programmes on agriculture, horticulture, livestock, industry and construction etc. also need both skilled and unskilled labour force both in rural and urban areas. The employment assistance to job seekers is rendered through 13 District Employment Exchanges.

The consolidated number of job seekers as per live Register is given below for the past few years:

NUMBER OF JOB SEEKERS BY EDU	JCATIONAL LEVEL
------------------------------	-----------------

SI.	Educational level	1993	1994	1995	1996	1997	1998	1999	2000	2001
No										
1.	Below Primary	225	168	90	99	88	64	65	190	50
2.	Below Middle	476	362	272	307	412	255	160	665	508
3.	Under Matric	690	772	565	724	1107	572	720	2189	2200
4.	Matric	945	841	555	489	680	1032	1033	2606	1625
5.	P.U/H.S.S.L.C.	770	487	521	563	723	1148	817	1869	1058
6.	B.A./B.Sc./B.Com.	127	133	110	125	160	366	515	651	174
7.	M.A./M.Sc./M.Co	19	31	14	26	12	40	47	37	47
	<b>m</b> .									
8.	B.Ed/M.Ed	9	18	20	32	16	2	25	04	6
9.	Engg. Trade	71	28	63	47	48	31	32	57	44
	Licence									
10.	Degree holder in	16	31	28	34	64	31	61	23	36
L	Engineering etc									

Table No.21.2

In Arunachal Pradesh, the State Govt. is till now, almost the sole authority for employment due to fact that private sector has not yet come up here to a reasonable extent. This situation will continue for some more years till more and more public sector and private sector enterprises are established in this State.

### CHAPTER-22

#### **URBAN DEVELOPMENT**

In Arunachal Pradesh, the urban population is increasing at a much faster pace than the rural population and almost all this increased population is being accommodated in new human settlements. Simultaneously, existing urban areas becoming over crowded and congested, thereby putting tremendous stress on the urban infrastructure facilities. The growth rate of urban population in Arunachal Pradesh ( as per 1991 census ) is 167% against a national figure of 36.09% during the same period. At the present rate, a time shall come soon, when this State may have to face some of the problems being faced by urban areas in other parts of the country .It is, therefore, desirable to promote an integrated and holistic approach towards development of such new settlements. This approach should trigger, augment and accelerate the urbanisation process in a healthy and balanced direction which is complementary with the existing development This will facilitate improvement of quality of life for all, in terms of suitable development. At present, there are 17 (Seventeen ) census towns which includes thirteen district headquarters, two other census towns and twin Capital towns of Itanagar and Naharlagun which are growing in haphazard and un-planned manner as no Town Planning Measures like, Master Plan, Zonal Development Plan Building Bye-laws or Zoning Regulation exists.

The functions and objectives of the urban planning process are as follows-:

- (i) To evolve policy for urbanisation in Arunachal Pradesh.
- (ii) To prepare and implement Urban Development controls like Master plan, Zoning Regulation and Bye-laws so as to monitor and check uncontrolled and haphazared development
- (iii) Implementation of Urban Development schemes in various towns of Arunachal Pradesh
- (iv) Allocation of land in accordance with proper Master Plan of various towns.
- (v) Implementation and monitoring of Centrally Sponsored Schemes like SJSRY(Swarna Jayanti Shahari Rozgar Yojana), IDMST and Balika Samridhi Yojana.

During the year 1999-2000 an amount of Rs 218.92 Lakhs has been utilised for implementation of the schemes such as UD, NSDP and SJSRY.

### CHAPTER – 23

#### **BANKING AND INSTITUTIONAL FINANCE**

Banks and Financial Institutions are of vital importance in the modern process of economic development. But in extreme under-developed condition, Arunachal Pradesh obviously got late to have Institutional Financing facilities. It is only in1970-71 that the State Bank of India started a branch here realising the urgency for deposits and credit mobilisation. The Government has since been endeavouring for popularisation and expansion of banking facilities in the State. Number of branches of different Banks thus could be raised to 88 at the end of Seventh Plan and to 99 by 2000-2001.

The total deposit under current and fixed accounts was Rs 62446 lakhs during 1999-2000 which raised to Rs.70231 lakhs during 2000-2001 registering a growth of 12.47 per cent. The amount of total loans and advances granted was Rs.13048 lakhs during 1999-2000 which increased to Rs.14847 lakhs during 2000-2001 showing a growth of 13.79%. Bank-wise position of deposits and advances as well as credit- deposit ratio as on 31<sup>st</sup> March, 2000 and 2001 are reproduced here under for closer view.

#### DEVELOPMENT OF BANKING AND INSTITUTIONAL FINANCE IN ARUNACHAL PRADESH Table No. 23.1 (Re in Lakhe)

Table N	0.23.1						(Rs in I	.akhs)
Bank		1999-2000	)		2000-2001	Credit deposit ratio(%)		
	No.of	Total	Advances	No. of	Total	Advances	1999-	2000-
	branches	Deposit	granted	Branches	Deposit	granted	2000	2001
· 1	2	3	4	5	6	7	8	9
1. SBI	42	43969	4733	42	47393	5462	10.76	12.00
2. UBI	2	694	160	. 2	764	152	23.05	20.00
3. UCO	2	1539	268	2	1629	290	17.41	18.00
4.VI-	2	5234	959	2	6084	962	18.32	16.00
JAYA								
5. C.B.I	1	658	131	1	812	207	19.91	25.00
I.Sub-	49	52094	6251	49	56682	7073	12.00	12.00
total								
(National								
ised								
banks)								
Arunacha	19	2475	2771	19	3088	3296	112.00	107.00
1 Banks								
a) APRB b) AP	31	7877	4026	31	10461	4478	51.11	43.00
Co-op.	51	/0//	4020	51	10401	4478	51.11	45.00
Apex								
bank								
П.Sub-	50	10352	6797	50	13549	7774	65.66	57.00
Total (AP							02.00	2
Banks)								
Grand	99	62446	13048	99	70231	14847	20.89	21.00
Total						1		
(I + II)								

Evidently, credit- deposit ratio in aggregate is 21 percent. The position is extremely poor in case of Nationalised Banks being only 12% Arunacal Pradesh Rural / Coop Apex Banks the ratio is about 66% during 2000-2001. The Nationalsed Banks have to endeavor for improving the Credit- Deposit ratios for due services to the state.

### CHAPTER – 24

#### **BUDGET AND PUBLIC FINANCE**

The overall Budgetary position of 2000-2001 shows a surplus revenue budget of Rs14315 lakhs similarly the revised estimate for 1999-2000 also shows a surplus revenue budget of Rs.13510 lakhs, whereas the capital budget shows a deficit of Rs 17873 lakhs during 2000-2001. Similarly the revised estimate for 1999-2000 also shows deficit capital budget of Rs. 101691 lakhs.

Thus Overall budgetary position for 2000-2001 shows a deficit budget of Rs. 3558 lakhs and Fiscal deficit is Rs. 15357 lakhs.

Tal	ble No. 24.1		()	Rs. in lakhs )
SI. No	Items	Receipts	Expenditure/ Disbursement	Surplus(+) Deficit (-)
A.	Revenue Account	99802	85487	(+)14351
В.	Capital Account	11939	3226	(-)20322
a).	Public Account	214825	211459	(+)3366
<b>b</b> ).	Internal Dept of State Govt.	6010	3674	(+)2336
c)	Loans & advances from central Govt.	1316	2004	(-)688
d)	Capital Expenditure out-side Revenue Acct.	-	26679	(-)26679
e)	Loans for state plan scheme.	4473	336	(+)4137
C.	Appropriation of contingency fund.	-	-	-

#### **OVER-ALL BUDGETORY POSITION: 2000-2001**

#### **RECEIPTS ON REVENUE ACCOUNT**

The total receipt on Revenue Account for 2000-2001 is estimated as Rs. 99802 lakhs wherein Tax revenue is Rs. 5345 lakhs, Non-Tax Revenue is Rs.9271 lakhs and under the head "Grant-in-Aid and Contribution from centre" is Rs. 85186 lakhs.

(Do in lathe)

#### **RECEIPT ON REVENUE ACCOUNT**

Table No.24.2

<u>1 ad</u>	e No.24.2				(Rs. in lakhs)
SI. No	Items	1998-99(A)	1999- 2000(RE)	2000- 2001(BE)	2000- 2001(% to total)
1.	Tax Revenue	3594	4206	5345	5.36
a)	Tax on income & Expdr.	2465	2953	2954	2.96
b)	Tax on property and capital transaction	183	204	227	0.23
c)	Taxes on commodities and services	946	1049	2164	2.17
2.	Non-Tax Revenue	6454	7445	9271	9.29
a)	Interest receipts Dividends & profits	610	618	667	0.67
<b>b</b> )	Other non-tax revenue	5844	6827	8604	8.62
3.	Grant-in-aid & contribution from centre	82310	89126	85186	85.35
4	Total receipts on Revenue Account (1+2+3)	92358	100777	99802	100.00

#### CAPITAL RECEIPTS AND DISBURSEMENT

Table No. 24.3				(Rs. inLakhs)
Items/Particulars	1998-99(A)	1999- 2000(RE)	2000-2001	2000-2001(%)to total)
Capital Receipts				
a) Public Debt	11050	12258	11799	5.20
b) Public Account	293928	20610	214825	94.80
c)Capital Disbursement	28710	34446	32693	13.39
d)PublicAccount Disbursement	296989	202993	211459	86.61

#### DETAILS OF CAPITAL EXPENDITURE OUTSIDE REVENUE ACCOUNT

Capital Expenditure outside Revenue Account is divided into two parts. These are (I) Development Expenditure and (ii) Non-Development Expenditure. The Gross Capital Expenditure outside Revenue Account during 2000-2001(BE) is estimated as Rs 32723 Lakhs and after adjusting a recovery of Rs.336 lakhs, it is Rs. 32387 lakhs (Net). An amount of Rs. 25065 lakhs was proposed for Development Expenditure whereas Rs.7658 lakhs has been kept for Non- Development expenditure.

Table No.24.4			( <b>R</b> s	s. in lakhs)
Item/Particulars	1998- 99(A)	1999- 2000(RE)	2000- 2001(BE)	2000-2001 (% to total)
I. Development Expenditure (a+b)	22058	27549	25065	77.39
a) Social Services	2883	4412	4322	13.34
b) Economic services	19175	23137	20743	64.05
II. Non-development expdr.(a+b)	6652	6951	7658	23.65
a) General services	1523	1644	1644	5.08
b)Public dept loan and advances	5129	5307	6014	18.57
III Capital expenditure outside revenue account (I+II)	28710	34500	32723	101.04
Less recoveries	154	313	336	1.04
Total Expenditure (Net)	28556	34187	32387	100.00

### Details of Capital Expenditure outside Revenue Account

Note:- (a) = Actual Account, (RE) = Revised Estimate, (BE) = Budget Estimate Per-Capita Receipt And Expenditure on Revenue And Capital Budget

The per-capita receipts on Revenue Account during 2000-2001(BE) is estimated at Rs. 9106 while it was Rs. 9427 and Rs. 8855 during 1999-2000(RE) and 1998-99(a) respectively.

The per-capita receipts on Capital Account during 2000-2001 (BE) is estimated at Rs. 20690 while it was Rs. 20440 and Rs. 29254 during 1999-2000 (RE) and 1998-99(a) respectively. The per-capita total receipts (Revenue + Capital) during 2000-2001(BE) is estimated as Rs. 29769 while it was Rs. 29867 and Rs. 38109 during 1999-2000(RE) and 1998-99(a) respectively.

The per-capita expenditure (Gross) on Revenue Account during 2000-2001(BE) is estimated at Rs. 7800 while it was Rs 8163 and Rs.7158 during 1999-2000(RE) and 1998-99(a) respectively. The per-capita expenditure on Capital Account outside Revenue Account during 2000-2001(BE) is estimated at Rs.22237 While it was Rs. 22177 and Rs.31194 during 1999-2000(RE) and 1998-99(a) respectively.

The per head total expenditure (Revenue + Capital ) is estimated at Rs.30037 during 2000-2001(BE).

#### CAPITA RECEIPTS AND EXPENDITURE ON REVENUE AND CAPITAL BUDGET

T able No.24.5			(In Rs.in Lakhs)		
Particulars	1998-99(A)	1999- 2000(RE)	2000-2001(BE)		
i. Receipts on Revenue Account	8855	9427	9106		
ii. Receipts on Capital Account	29284	20440	20690		
iii. Total Receipts (i + ii)	38100	29867	29767		
iv. Expenditure on Revenue Account	7158	8163	7800		
v. Capital Expenditure	31194	22177	22237		
vi. Total Expenditure (iv + v)	38352	30340	30037		

Note:- (a) = Actual Account, (RE) = Revised Estimate, (BE) = Budget Estimate

### **CHAPTER -25**

#### EONOMIC CENSUS – 1998

The Fourth Economic Census was carried out in Arunachal Pradesh during February-March, 1998 with joint endeavour of Central Statistical Organisation(Economic Census Division), Govt. of India, New Delhi and Directorate of Economics & Statistics, Govt. of Arunachal Pradesh. Similar to first Economic Census conducted in 1977, the Fourth Economic Census was carried out independently and not along with Population Census as was the case with other two censuses conducted in between. The Economic Census is the official count of all entrepreneurial units located in the geographical boundaries of the state, involved in any economic activities of either agricultural (excluding crop-production and plantation) or non-agricultural sectors of the economy, engaged in the production or distribution of goods or services not for the sole purpose of own consumption. Enterprises with at least one hired employment (establishment) and those without any hired employment (own account enterprise) formed the target of Economic Census. Information on nature of operation, type of operation, type of activity, ownership, social group of the owner. employment with hired component, employment by sex etc. have been collected. The result of Economic Census provides basic entrepreneurial data for the purpose of planning, development, administration and for improving the estimation of National Income and related aggregates.

Selected tables from the Final results of Fourth Economic Census with illustrations have been given below :-

### NUMBER OF ENTERPRISES AND EMPLOYMENT THEREIN

SI. No.	Type of Enterprises	RU	RAL	UR	URBAN		INED
	•	Number	%	Number	%	Number	%
1	2	3	4	5	6	7	8
		AGRI	CULTUR	AL ACTIV	ITY		
	No.of Enterprises	181	90.05	20	09.95	201	100.00
1	a) OAE	105	96.33	4	03.67	109	100.00
	b) Establishments	76	82.61	16	17.39	92	100.00
	Persons usually						
	working in	652	88.95	81	11.05	733	100.00
2	enterprises						
	a) OAE	222	96.94	7	3.06	229	100.00
	b) Establishments						
	i) Total		504	100.00			
	ii) Hired	397	85.19	69	14.81	466	100.00
		NON-A	GRICULT	RUAL ACT	IVITY	<u> </u>	
1	No.of Enterprises	14364	70.09	6129	29.91	20493	100.00
	a) OAE	6973	69.26	3095	30.74	10068	100.00
	b) Establishments	7391	70.90	3034	29.10	10425	100.00
2	Persons usually						
	working in	51429	64.44	28374	35.56	<b>798</b> 03	100.00
	enterprises						
	a) OAE	9948	69.69	4327	30.31	14275	100.00
	b) Establishments						
	i) Total	41481	63.30	24047	36.70	65528	100.00
	ii) Hired	39333	64.26	21873	35.74	61206	100.00
	AGRICU	ULTURAL	& NON-A	GRICULT	URAL AC'	ΓΙVITY	
1	No.of Enterprises	14545	70.29	6149	29.71	20694	100.00
	a) OAE	7078	69.55	3099	30.45	10177	100.00
	b) Establishments	7467	71.00	3050	29.00	10517	100.00
2	Persons usually						
	working in	52081	64.67	28455	35.33	80536	100.00
	enterprises			F			
	a) OAE	10170	70.12	4334	29.88	14504	100.00
	b) Establishments						
	i) Total	41911	63.47	24121	36.53	66032	100.00
	ii) Hired	39730	64.42	21942	35.58	61672	100.00

1) Number of enterprises and total persons employed in agricultural and nonagricultural sectors.

As per the report a total of 20,694 agricultural and non-agricultural enterprises are there in the state. Only 201(0.97%) are engaged in agricultural activities while remaining 20,493 (99.03%) are engaged in non-agricultural activities.

A total of 20694 enterprises are having 80,536 persons usually working including 61,672 (76.58%) hired persons. Out of the total of 80,536 persons usually working 60,072 (83.28%) are male, 12,966 (16.10%) are female and the rest 498 (0.62%) are child workers. In agricultural sector there are 733 persons usually working of which 656 (89.49%) are male and 74 (10.10%) are female. Besides, 3(0.41%) child workers are also engaged. In non-agricultural sector a total of 79,803 persons are working of which male participation is 66,416 (83.23%) and female participation is 12,892 (16.15%) and the rest 495

(0.62%) being children. Rural and urban participation of enterprises with number of persons engaged have been shown clearly in the table.

#### 2) Activity (major) -wise distribution of non-agricultural enterprises.

The table 25.1 reveals that out of the total of 20,493 non-agricultural enterprises rural portion occupies 70.09% whereas rest 29.91% are in urban areas. So far activity wise participation of enterprises is concerned the highest participation is in the activity group retail trade i.e., 9191 (44.85%) followed by the activity group community, social & personal services having 6672(32.56%) numbers. The lowest participation is in the activity group mining and quarrying being 3 (0.11%) only. Of the total 79,803 persons engaged in non-agricultural sector 51,429 (64.44%) are engaged in rural areas and remaining 28,374 (35.56%) persons are working in the enterprises located in urban areas. It is observed from the result of Economic Census that the largest number of persons are usually working in the activity group retail trade employing 16,463 (20.63%) workers, the employment figure registered by the activity group mining and quarrying is 240 (0.30%) workers. It may be mentioned that activity group "Others (unspecified)" has no enterprise in both sectors.

#### 3) Selected characteristics of Agricultural Enterprises

#### a) Agricultural own-account enterprises :-

There are 109 agricultural Own Account Enterprises (OAEs) of which 105 (96.33%) enterprises and 4 (3.67%) enterprises are located in rural and urban areas respectively. Of total agricultural OAEs, 5 (4.59%) are seasonal in nature and of which 3 (2.75%) and 2 (1.83%) are located in rural and urban areas respectively. About 36 (33.03%) agricultural OAEs with the break-up of 97.22% in rural areas and 2.78% in urban areas are operating without any premises. 100% enterprises of the total agricultural OAEs are running their enterpreneurial activities without using power/fuel. About 25 (22.94%) agricultural OAEs are owned by STs and 10(9.17%) are owned by SCs.

#### b) Agricultural Establishments

(Table no. 1 & 4) There are 92 agricultural establishments of which 76 (82.61%) are located in rural areas and and 16 (17.39%) establishments are located in urban areas. Only 1 agricultural esttt. is found seasonal in nature, which is located in rural area. A total of 22 (23.91%) agricultural establishments are operating without premises and these are located in rural areas. It is noticed that 77 (83.70%) establishments.

Out of the total of 92 agricultural establishments are operating without using power/ fuel of which 65 (84.42%) in rural areas and 12 (15.58%) in urban areas. As many as 49 (53.26%) and 4 (4.35%) agricultural establishments are under the ownership of private (Pvt. NPI + Pvt. Others) and co-operative respectively. 20 (21.74%) out of total agricultural establishments are owned by STs, 1(1.09%) by SCs, whereas OBCs owned only 3 (3.26%) estts.

#### 4. Selected Characterstics of Non-agricultural Enterprises

#### a) Non-agricultural Own-account enterprises

In all there are 10,068 non-agricultural own-account enterprises in Arunachal Pradesh of which 6973 (69.26%) are in rural areas and 3095 (30.74%) are in urban areas. The maximum number of non-agricultural OAE i.e., 6164 (61.22%) falls in the activity group retail trade followed by the activity group community, social & personal services which constitute 1703 (16.91%) enterprises. Only I enterprise is in the activity group mining & quarrying. There are 14,275 persons usually working in these non-agricultural OAEs. It is observed that 8592 (60.19%) of the total working persons are employed in the activity group retail trade. The activity group which ranks next is community, social & personal services having total employment of 2542 (17.81%) persons. The activity group mining & quarrying provides the lowest employment of only 1 persons.

# A total of 10,068 non-agricultural enterprises are running their enterprises without any hired workers (OAE) of which a total of 6973 (69.26%) are in rural areas, and remaining 3095 (30.74%) are in urban areas. Of the 10,068 non-agricultural OAE, 278 (2.76%) are seasonal, 929 (9.23%) enterprises run without premises, 3349 (33.26%) enterprises are owned by STs, 493 (4.90%) are owned by SCs, 7942 enterprises (78.88%) are being run without using power/fuel.

# It appears from the Economic Census result that out of the total of 10,068non-agricultural own-account enterprises, the largest number of 6164 (61.22%) own-account enterprises are in the activity group of retail trade. The second and third largest percentages are in the activity group community, social & personal services (16.92%) and manufacturing (13.62%) respectively The remaining activity groups constitute below per cent.

# The Economic Census 1998 reveals that 278 (2.76%) non-agricultural OAE are seasonal out of which 169 (60.79%) are in the activity group retail trade, followed by manufacturing 57(20.50%), Community, social & personal services (8.99%).

# A total of 929 (9.23%) non-gricultural OAEs are carrying out their entrepreneurial activities without any fixed premises, of which the maximum number is in the retail trade activity (59.10%). The second largest activity is community, social & personal services 15.39%, followed by the transport sector (12.81%), manufacturing (7.10%).

# Out of the total 10,068 non-agricultural OAE, 3349 (33.26%) are owned by STs. The largest of such enterprises owned by STs is in the retail trade activity (56.58%), followed by manufacturing (28.84%), Community, social & personal services (6.75%).

#### b) Non-agricultural Establishments

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There are 10,425 non-agricultural establishments of which as many as 7391 (70.90%) are located in rural areas as against 3034 (29.10%) are located in the urban areas of the State. A total of 65,528 persons (including 61,206 hired workers) are usually working in these non-agricultural establishments. Rural and urban participation of total employment are 41,481 (63.30%) and 24,047 (36.70%) respectively.

# It has been found that out of 10,425 non-agricultural estts. The maximum no. 4969 (47.66%) establishments are there in the activity group of community, social & personal services, having employment of 41,843 (63.86%) persons. This is followed by 3027 (29.04%) under the activity retail trade having employment of 7871 (12.01%) persons followed by 840 (8.06%) establishments under the activity group restaurants & hotels, which provide employment to 3003 (4.58%) persons followed by 640 (6.14%) establishments under manufacturing with employment of 8058 (9.24%) persons.

# As many as 417 non-agricultural establishments are running their entrepreneurial activities without premises of which the maximum percentage i.e., 37.41% falls in the activity group transport. This is followed by the activity group community, social & personal services (23.98%) and retail trade (17.99%) etc. The percentages in other groups are very insignificant.

# From a total of 10,425 non-agricultural establishments, 355 (3.41%) belong to Private NPI, 5148 (49.38%) to private others, 242 (2.32%) to co-operative and 4680 (44.89%) to Govt. sectors. Out of the total of 5148 (pvt. Others) establishments 2769 (53.79%) of the establishments are engaged in retail trade, this followed by 821 (15.95%) in the activity groups community, social & personal services, 598 (11.62%) establishments are engaged in restaurants and hotels. The activity group mining & quarrying and electricity, gas and water supply occupy the lowest percentage having 1 enterprise each.

# Under the social group of owner, 1750 (16.79%) non-agricultural establishments are owned by scheduled tribes and 194 (1.86%) establishments are owned by scheduled castes and 179 (1.72%) establishments are owned by OBCs. 799 (45.66%) establishments owned by Scheduled tribes are in the activity group retail trade. The second largest number of establishments owned by scheduled tribes is in the activity group manufacturing with 256 (14.63%), followed by the activity group community, social & personal services with 244 (13.94%). While scheduled tribes owned non-agricultural establishments are in 10 activities, the scheduled caste owned 9 non-agricultural activities.

# It appears that out of 10,425 non-agricultural establishments, 8472 (81.27%) are running without using power/fuel. The highest per centage for running the enterprises without using power/fuel is in the activity group community, social & personal services with 4547 (53.67%), followed by retail trade (33.39%) and manufacturing (2.96%).

It appears that out of 10,425 non-agricultural establishments, 8472 (81.27%) are running without using power/fuel. The highest per centage for running the enterprises without using power/fuel is in the activity group community, social & personal services with 4547 (53.67%), followed by retail trade (33.39%) and manufacturing (2.96%).

## 100) Inter-district comparison of concentration of enterprises with respect to population and areas.

The comparative picture of inter-district concentration of enterprises is given below able No.25.2

	District		Population as per 1991 Census		Concentration of total ente					50 S			
	according to Area	Total	% sharc	Ag	ricult	ure	Non	agricult	ural	Total Enter-	% sharec of entration of enterprises		
SI. No.	(in sq. km)	(rank)	of total popula -tion	OAE	Estt.	Total	OAE	Estt.	Total	prises	% sharec of oncentration of enterprises		
1	2	3	4	5	6	7	8	9	10	11	12		
1	Tawang (2172)	28,287 (12)	3.27	2	7	9	331	218	549	558	2.70		
2	Tirap (2362)	85508 (8)	9.89	20	8	28	595	712	1307	1335	6.45		
3	Papum- pare(2875)	72811 (9)	8.43	1	7	8	1488	1201	2689	2697	13.03		
4	East Kam- cng (4134)	50395 (6)	5.83	1	0	1	240	527	767	768	3.71		
5	Changlang (4662)	95530 (5)	11.05	12	8	20	1204	1054	2258	2278	11.01		
6	East Siang (4687)	71864 (10)	8.31	51	8	59	669	1179	1848	1907	9.22		
7	Upper Siang (6188)	27779 (3)	3.21	0	1	1	287	277	564	565	2.72		
8	Upper Subansiri (7032)	50086 (7)	5.79	2	1	3	338	479	817	820	3.96		
9	West Kameng (7422)	56421 (13)	6.53	1	18	19	776	959	1735	1 <b>7</b> 54	8.48		
10	West Siang (7643)	<b>89936</b> (11)	10.40	0	3	3	1602	1107	2709	2712	13.11		
11	Lower Subansiri (10135)	<b>83167</b> (1)	9.62	0	3	3	521	785	1306	1309	6.33		
12	Lohit (11402)	109706 (2)	12.69	19	23	42	1526	1398	2924	2966	14.33		
13	Dibang Valley (10329)	43068 (4)	4.98	0	5	5	491	529	1020	1025	4.95		
Pra	unachal Idesh 743 sy. km)	864558	100.00	109	92	201	10068	10425	20493	20694	100.00		









