

THE STATE OF INDUSTRIAL DEVELOPMENT IN ARUNACHAL PRADESH

5.1. GROWTH AND PERFORMANCE OF THE PUBLIC SECTOR

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In the light of our discussion in the preceding Chapter about the development planning for the backward hill areas and the state policy towards industrialisation, we shall now pay attention in this Chapter to comprehend the pattern of industrial development

in Arunachal Pradesh. In order to delineate the role of the State and the response of the market forces, the whole discussion here is conveniently divided into three separate sections one each to deal with public, private and co-operative sectors respectively. While such sectoral typology itself manifests a pattern based on ownership and management of the existing industrial enterprises, an attempt has also been made to typify them according to their products in order to highlight the comparative advantage of the territory. Besides enumerating the industrial pattern, efforts have also been made to review the performances of different sectors on the basis of limited data that were available for the purpose.

5.1. GROWTH AND PERFORMANCE OF THE PUBLIC SECTOR

The public sector here includes all industrial enterprises run directly by the government, government companies and their subsidiaries, and other schemes undertaken by the government in order to render direct assistance to the manufacturing units in the State. The beginning of the public sector in Arunachal may be traced to the revival and re-organisation of the traditional crafts during the early 50s which have already been referred to. The Government efforts towards industrial development of the State along modern lines have started with the incorporation of APIDFC and APFC during the 70s. The extension of the programmes of IE and DIC have encouraged the development of the small scale sector. Moreover,

projects that require heavy investment as well as long gestation period and also those that can be categorised as public utility like hydro-power generation have also been undertaken by the State. The public sector in Arunachal is, by and large, confined to these four areas and each of them will be taken up separately for discussion.

CRAFT TRAINING CUM PRODUCTION CENTRE (CTPC)

During 1953-54, 10 CTPCs were established in the administrative centres that were being opened up within the territory after Independence to train the local people in different crafts, to produce necessary manufacturing articles using the locally available raw material, and to provide subsidiary job opportunities to the local tribals of Arunachal. Out of these 10 CTPCs, 3 Centres were established in the then Kameng Frontier Division—one each at Bomdila, Tawang and Sepla; 2 in Subansiri Frontier Division—one each at Ziro and Daporijo; 2 in the Siang Frontier Division—one each at Tezu and Dambuk, and the remaining one at Namsang in the Tirap Frontier Division. In all the five Divisions common crafts like weaving, knitting, tailoring, soap-making, cane and bamboo works, sawing, blacksmithy and pottery had been introduced. A few other crafts like carpet making, bee-keeping, wood-carving and painting were introduced exclusively in the Kameng Frontier Division as the Monpas have the traditional expertise in most of these crafts.

In order to encourage the local people for undergoing such training 388 stipends of various categories had been awarded initially. A section of the passed-out trainees were usually employed in the production units of the respective centres and various government engineering departments. Those who could not be accommodated in any gainful work were offered a set of tools and small amount of raw material on the basis of 50 per cent subsidy. The recovery of 50 per cent cost of the equipments issued to them were made in easy instalments either in cash or in kind in the form of labour or finished products supplied by them within a period of 3 years from the date of issue of the equipments. There were about 2620 passed-out trainees, and 1916 of them accepted the tools and equipments to practise the crafts in their villages till the end of March, 1966¹.

The number of CTPCs has gone up from 10 in 1953-54 to 64 in 1988-89². The average number of trainees trained annually in these centres comes to 269 persons in different crafts since inception till 1982-83 (Table-5.1). It may be noted that all the crafts introduced in different CTPCs were not equally preferred by the local people. A few crafts were introduced for trial and were withdrawn immediately following the poor response on the part of the trainees. For example, Bee-keeping was abandoned since 1956 after two years of initial trial. Soap making was stopped since 1959.

Similarly, Masonry was introduced only for one year and then withdrawn. Pottery section was closed down since 1965. A few crafts like Silversmithy, Bell metal, Mask making, Blanket making, Bamboo carving, and Sawing cum Carpentry were introduced during the early sixties. Many of them failed to draw the interest of the local people and were discontinued after a few years. All these indicate that the NEFA Administration was not always judicious enough in introducing new crafts keeping the local need and the background of the local people in mind. As a result new crafts had been introduced and offered to the trainees without considering their practical utility for them. While visiting the Bomdila Craft Centre in 1961, Rustomji observed that "we must also be much more firm in the matter of discontinuing crafts that are completely uneconomic, as their continuance may be even harmful to the trainees who are taken away from their village homes to learn something that is useless to them, and they find difficulty, subsequently, in returning to their villages and settling down to their former way of life"³.

Though the success of such training programmes largely depends on timely follow-up actions, the Administration appears to have never been serious about the latter. There is hardly any systematic follow-up information about the passed-out trainees. Rustomji not only found 'inordinate delay' in providing equipment to

TABLE - 3.1

Craft-wise Distribution of the Passed-out Trainees during 1954-55 to 1981-82.

Sl. No.	Name of Craft	No. of Passed-out Trainees during 1954-55 to 1981-82
1.	Bee-Keeping	5
2.	Soap making	52
3.	Weaving	2815
4.	Carpentry	1021
5.	Cane & Bamboo works	328
6.	Tailoring	237
7.	Masonry	3
8.	Leather works	17
9.	Blacksmithy	478
10.	Sawing	535
11.	Wood-carving	332
12.	Knitting	162
13.	Carpet making	498
14.	Painting	178
15.	Pottery	28
16.	Silversmithy	117
17.	Bell metal	99
18.	Mask making	38
19.	Blanket making	31
20.	Bamboo carving	3
21.	Sawing cum Carpentry	19
Total		6988

Source : (i) NEFA Administration, *Cottage Industries Department and its Activities, 1962-63.* (ii) NEFA Administration, *Statistical Outline of NEFA, 1967.* (iii) NEFA Administration, *Statistical Hand-book of NEFA, 1970-71.* (iv) Govt. of A.P., *Statistical Hand-book of A.P., 1972-73 to 1982-83.*

Notes : The total number of passed out-trainees for the years 1978-79, 1979-80, and 1982-83 were 258, 272, and 291 respectively for which Craft-wise break-up were not available and hence were not included in the table. The figures for the years 1973-74, 1975-76, 1977-78, and 1980-81 were related to the undertrained trainees.

the trainees of Bomdila Craft Centre in 1961 but also felt that the officers took very little interest to ensure the practise of the crafts by them⁴.

However, in spite of all these drawbacks the CTPCs have been instrumental in training up a sizeable segment of the local manpower particularly in Weaving, Carpentry, Sawing, Carpet making, Blacksmithy, Cane and Bamboo works, Wood-carving, etc. Many of the passed-out trainees were absorbed in various Government departments like Public Works Department (PWD), Rural Works Department (RWD), etc., where semi-skilled workers are needed in large numbers. In fact, these training centres have played an important role in reshaping the future economy by giving birth to both semi-skilled work force as well as household entrepreneurs.

Production of different craft goods were taken up since 1957-58 besides the training activities in all the craft centres except the mobile training units. Most of the centres have been engaged in weaving and manufacturing of various types of cloth which are used mainly for making apparels for the local people. In some centres, Tibetan refugees settled in NEFA are producing carpets of Tibetan design and styles. In the carpentry section, wooden furniture like chairs, tables, racks, almirahs etc. are being produced and supplied to various government departments. Apart from

producing furniture, wood carving products like human images, flower vase, bowls, trays and other decorative articles are also being produced. Agricultural implements like daos, axes, Khurpis, sickles, etc. are being produced by the blacksmith section. Sheet metal articles like bokharies and bell-metal articles like dev ghanti which are very popular among some of the local people are also being produced.

TABLE-5.2

Statement Showing the Number of Craft Centres and Out-Turn in A.P.

(Rs. in lakhs)

Year	No. of Craft Centres	Out-turn	Average Out-turn Per Centre
1957-58	10	0.56	0.05
1960-61	10	1.82	0.18
1965-66	15	3.73	0.25
1970-71	20	6.61	0.33
1975-76	21	5.97	0.28
1980-81	30	7.30	0.25
1985-86	64	14.42	0.23
1988-89	64	10.64	0.29

Source: (i) NEFA Administration, Cottage Industries Department And Its Activities, 1962-63 and 1965-66, Shillong. (ii) NEFA Administration, Statistical Hand-book of NEFA, 1970-71, Statistics Department, Shillong. (iii) Govt. of A. P., Economic Review-1977, Directorate of Economics & Statistics, Shillong. (iv) Govt. of A. P., Statistical Hand-book of Arunachal Pradesh 1980-81, Directorate of Economics and Statistics, Shillong. (v) Govt. of A. P., Statistical Abstract 1986, 1989, Directorate of Economics & Statistics.

Note: (i) Out turn for the year 1957-58 includes sale proceeds. (ii) Data relating to 1980-81 excludes the number and out turn of the centres in Lower Subansiri and East Siang districts.

The annual out-turn of the craft centres since 1957-58 along with the number of such centres operating during the reference years are shown in Table-5.2.

A fluctuating trend is observed in annual out-turn of these centres. The average out-turn per centre has increased from Rs. 5 thousand in 1957-58 to Rs. 33 thousand in 1970-71 which has then dropped to Rs. 23 thousand in 1985-86. However, the average annual out-turn per centre is too insignificant to contribute any substantial amount to the state exchequer after meeting their expenses. Since no systematic data relating to annual expenditure of these craft centres are available, so their economic viability can not be discussed. Of course, apart from production activities, their importance in training the local people in different crafts cannot be undermined.

The products of these craft centres are being sold through the sale counters or emporia in each centre as well as central emporium at capital town Itanagar. Different government departments also procure a substantial part of these craft goods. Moreover, defence personnel are also reported to procure some of the craft goods particularly in the border areas. Table-5.3 presents data on annual out-turn and sale proceeds for the five years from 1984-85 to 1988-89. It is to be noticed that during 1984-85 and 1988-89 sale

proceeds even do not cover the annual out-turn of the respective years. However, the average annual out-turn during these five years comes to Rs. 18.99 lakhs while the average annual sale proceeds amounts to Rs. 20.05 lakhs indicating a marginal incentive for higher production.

TABLE - 5.3

Statement Showing Annual Out Turn and Sale Proceeds
During 1984-85 -- 1988-89.

(Rs. in lakhs)

Year	Total Annual Out-Turn	Annual Sale Proceeds
1984-85	25.85	21.85
1985-86	14.42	17.41
1986-87	16.51	20.28
1987-88	19.52	23.67
1988-89	18.64	17.05

Source :Govt. of A.P. *Statistical Abstract 1984-89*, Directorate of Economics & Statistics, Shillong.

Apart from these selling counters and emporia, the North Eastern Handicrafts and Handlooms Development Corporation Ltd. (NEHHDC), a central government enterprise, has been floated in 1977 to look after the promotion and development of the handicrafts and handlooms of the NER including Arunachal Pradesh. The NEHHDC provides marketing assistance through procurement of the products from the producers and selling them through exhibitions and emporia. The Corporation has opened six emporia one each at Shillong, Guwahati, Calcutta, Madras, Bombay and Bangalore. But the

organisation lacks competitiveness and also is not equipped enough to provide effective marketing assistance which has been one of the prime factors of industrial retardation of the states of north east. The authorised share capital of the Corporation was only Rs. 2 Crores of which Rs. 1 crore had been paid-up fully subscribed by the central government as on 31.3.1990. During the reference year, the corporation had a total strength of 163 personnel to take up this huge challenge. During the year 1989-90, it incurred a net loss of Rs. 17 lakhs⁵.

Thus, the programmes launched about 40 years back in order to revive the traditional handicrafts have created an important sector in Arunachal economy. But the failures of the state sponsored agencies in marketing and popularising the craft products have been felt to be the major hindrance for the future development of the craft centres.

GOVERNMENT COMPANIES

(At present, there are 3 holding Government Companies and 5 subsidiary Companies in Arunachal. Chronologically Arunachal Pradesh Forest Corporation Limited first came into existence. It was incorporated in 1977 under the Companies Act, 1956, with the objectives to look after, promote, and to facilitate the gainful use of State's rich forest resources. Another wholly-owned Government

Company, viz., Arunachal Pradesh Industrial Development and Financial Corporation Limited was created in the next year (1978) in order to promote industrial development of the State. Apart from these two holding Companies, Arunachal Pradesh Mineral Development and Trading Corporation Limited was floated recently (1991) for the exploration and exploitation of available mineral resources in the State. *As* it has just started functioning it would be immature to review its role in industrial development of the State. However, the industrial activities in the State under the public sector took a new dimension with the creation of the earlier two institutions. Hence a brief review of the working of these two Companies would reveal the performance of the public sector industries in the State.

ARUNACHAL PRADESH FOREST CORPORATION LIMITED (APFC)

Initially APFC was registered with an authorised capital of Rs. 120 lakhs divided into 1,20,000 equity shares of Rs. 100 each. Later in 1982, the amount of authorised capital was raised to 620 lakhs divided into 6,20,000 shares of Rs. 100 each. The paid up capital of the Company wholly contributed by the Government of Arunachal was Rs. 270 lakhs as on September, 1986 which was raised to Rs. 340 lakhs in 1988 and further to Rs. 399.72 lakhs in 1991. At present APFC has 80001.92 hectares of forest area under its jurisdiction which is only 1.6 per cent of the total forest area of the State.

Between 1978-79 and 1985-86, the Company received a grant of Rs. 13.33 lakhs from NEC for the development of nurseries and subsidies of Rs. 19.31 lakhs and 4.54 lakhs from the Tea Board and the Coffee Board respectively for the development of tea and coffee plantations in the State.

Immediately after its birth the Company decided to set up a saw mill at Namphai in Tirap district in 1978. The unit with initial annual installed capacity of 2,400 cubic metres on one shift basis started production in the next year. During the later years, the operation of the unit was extended by adding another veneering section having annual installed capacity of 47.22 lakhs square metres of veneer in one shift of 8 hours.

In 1982, the Company started another wood-based industry at Banderdewa in Lower Subansiri and subsequently expanded it by introducing plying and veneering facilities along with sawing operations. The annual installed capacity in 3 shifts of 8 hours each was 9000 cubic metres of sawn timber for the saw mill, 60,000 square metres of veneer for the veneer section and 1,20,000 square metres of plywood for the plywood mill.

But both the units were reported to have been running under loss. The provisional working results of these wood-based

industrial units revealed a net loss of Rs. 1.76 lakhs in the year 1981-82 for Namphai Saw & Veneering mills and a total net loss of Rs. 7.32 lakhs in 1982-83, Rs. 24.75 lakhs in 1983-84, Rs. 26.91 lakhs in 1984-85 and Rs. 18.62 lakhs in 1985-86 for both the units⁶. The utilisation of installed capacities in both the units were very low. In case of Namphai Saw & Veneering mills, percentage of utilisation of installed capacity varied between 18.91 and 62.83 during 1979-80 to 1985-86 in saw milling section and between 13.92 and 28.36 during 1984-85 and 1985-86 in veneering section. In Banderdewa Saw mill & Plywood Industries, percentage of capacity utilised varied between 13.79 and 16.91 during 1982-83 to 1985-86 in the case of saw mill, and between 1.58 and 3.04 in 1983-84 and 1984-85 in the case of veneer section. The same for plywood mill in 1985-86 was 48.21 only⁷.

Apart from these two, Nocte Timber Company (NTC) Limited, at Deomali, Tirap, which was incorporated as a private limited Company in 1962, became a subsidiary of APFC since 1981. At the end of March 1988 the authorised capital of NTC was Rs. 10 lakhs divided into 60,000 equity shares of Rs. 10 each and 40,000 preference shares of Rs. 10 each. The paid up capital as on 30th September 1987 was Rs. 10 lakhs. A review of the working of NTC for the five years of its operation from 1982-83 to 1986-87 revealed the following features⁸:

(i) The Company could not utilise the full installed capacity in any of the 5 years, and production indicated a declining trend during the last three years.

(ii) An increasing trend was observed in the accumulation of closing stock from year to year.

(iii) Profit had declined during 1985-86 and 1986-87 despite increase in sales.

The financial position of NTC for the years 1980-81 to 1986-87 is presented in Table-5.4. It is observed that both capital invested and capital employed show an increasing trend over the years. But this smooth increasing trend is not visible in case of return on them due to the fluctuations in profit. Moreover, in percentage terms, the rate of return on both capital invested and capital employed has never reached the base year's peak level. In fact, the former has come down to 17.77 per cent in 1986-87 from 40.1 in 1980-81, and similarly the latter has dropped to 17.99 per cent in 1986-87 from 54.9 in 1980-81 indicating a sharp decline in profitability.

Thus, out of three wood-based industries under APFC, two were found running under loss upto 1985-86 and in the other profit rate was found to be on the decline upto 1986-87. However, an audit review of provisional data, in 1986, revealed that during 5 years of its operation from 1981-82 to 1985-86 APFC earned a total profit of Rs. 531.26 lakhs from timber operation allowed by the government

TABLE - 5.4

Statement Showing Summarised Financial Results of Nocte Timber Company Ltd. (1980-81 to 1986-87)

(Rs. in lakhs)

Sl. No. Particulars	1980-81	81-82	83-84	84-85	85-86	86-87
1. Total Capital invested at the end of the year of accounts	51.68	67.61	107.70	148.13	185.85	222.18
2. Profit (+) Loss (-)	(+) 28.72	(+) 17.51	(+) 21.60	(+) 44.56	(+) 48.22	(+) 39.48
3. Total interest charged to Profit and Loss accounts	0.72	1.57	2.19	0.25	-	-
4. Total return on capital invested	28.72	17.51	21.60	44.56	48.22	39.48
5. Capital employed	39.02	61.78	110.44	144.57	181.17	219.58
6. Total return on capital employed (3+4)	21.44	19.08	23.79	44.81	48.22	39.48
7. Percentage of total return in capital invested	40.1	25.9	20.86	30.88	21.64	17.77
8. Percentage of total return on capital employed	54.9	30.9	21.54	31.0	22.20	17.99

Source: Govt. of A.P., CAG Reports, 1982-83 to 1988

Notes: (i) Capital invested includes Paid-up Capital Plus free reserve (ii) Capital employed includes net fixed assets plus working capital (iii) Year ending September.

from conservation oriented forestry but it incurred a total loss of Rs. 149.92 lakhs jointly in its two wood-based industry and cash crops programme.

The financial results of the Company for the years 1978-79 to 1981-82 and 1984-85 presented in Table-5.5 are not at all encouraging. The Company earned a profit of Rs. 38.22 lakhs during the year 1978-79 which had declined to Rs. 23.23 lakhs during 1979-80 and during 1980-81 it incurred a loss of Rs. 5.34 lakhs. During the next year, i.e., 1981-82, it had improved its position by making a profit of Rs. 9.58 lakhs. The fluctuation in profit during the first four years of its operation is observed to be very high severely narrowing down the percentage return on both capital invested and capital employed in the Company in spite of a steady rise in both types of capital over the years.

However, since inception the Company has earned a net profit of Rs. 122.37 lakhs as on 31st March, 1987, the period for which final financial accounts have been prepared. The provisional figures for the years from 1987-88 to 1990-91 show a positive profit margin reflecting however a high degree of fluctuation for all the years.

TABLE - 5.5

Statement Showing the Summarised Financial Results of Arunachal Pradesh Forest Corporation Ltd. For the Year 1978-79 to 1984-85 (Provisional)

(Rs. in lakhs)

Sl. No.	Particulars	1978-79	79-80	80-81	81-82	84-85
1.	Total capital invested at the end of the year of accounts	45.75	78.00	87.47	122.11	142.35
2.	Profit (+) Loss (-)	(+) 38.22	(+) 23.23	(-) 5.34	(+) 9.58	(+) 8.14
3.	Total return on capital invested	38.22	23.23	(-) 5.34	9.58	8.14
4.	Capital employed	38.63	79.30	81.66	94.46	200.64
5.	Total return on capital employed	38.22	23.23	(-) 5.34	9.58	8.14
6.	Percentage of total return on capital invested	66.00	29.78	0.00	7.85	3.36
7.	Percentage of total return on capital employed	78.20	29.29	0.00	10.14	4.06

Source: Govt. of A. P., CAG Reports, 1983-84 to 1988.

Notes: (i) Capital invested includes paid up capital plus free reserve. (ii) Capital employed includes net fixed assets plus working capital. (iii) Year ending September.

Thus, the overall performance of the Company in case of industrial activities is disheartening. While APFC is supposed to play a catalytic role particularly in the field of wood-based industries in such a forest rich State, due to the lack of proper planning between the level of production and market demand, installed capacity and raw material availability, and above all due to the roundabout bureaucratic decision making process and interlocking of politics, trade, commerce and industrial interest in the hands of a microscopic section of the local people who are heading the private sector which cannot mutually flourish with the public sector in the same line--it seems that the Company could not utilise the potential it has in the State.

However, apart from setting up of wood-based industries, the Company is also gradually exploring the plantation potentials of the territory. Though the experimentation with rubber, cardamom and coffee have met with failure, the Company has successfully ventured into tea plantation in some parts of the State. It has already started two tea estates one at Kanubari in Tirap and the other at Medo in Lohit district--bringing a total of 190 hectares under tea plantation and another 600 hectares are proposed to be brought during the Eighth Plan (1992-97).

**ARUNACHAL PRADESH INDUSTRIAL DEVELOPMENT AND FINANCIAL
CORPORATION LIMITED (APIDFC)**

APIDFC was registered in August, 1978, with an authorised capital of Rs. 50 lakhs which had later been raised to 6 crores. The paid-up capital of the Company wholly subscribed by the State Government stood at Rs. 92.5 lakhs as on March, 1991.

The Company is acting as the agent of the government and is performing multifarious functions in order to promote industrial development of the State. It acts as the financier to the small entrepreneurs, as the supplier of scarce raw materials to the small scale units and as the promoter of production units. It is also supposed to organise various training programmes to develop entrepreneurial skill among the local people and to undertake feasibility studies in order to identify potentials for new industries. It also helps the small producers in marketing their products. Thus its prima ballerina role is, no doubt, instrumental for the development of industries in the State. In 1979 APIDFC was declared by the Government of India as a financial concern in terms of the IDBI Act, 1964 which enabled the Company to get refinance facilities from IDBI. The Company entered into an agreement with IDBI in 1982 to avail the refinance facility up to 90 per cent of the term loans for transport and 100 per cent against other term loans disbursed upto Rs. 90 lakhs per unit with an overall limit of

Rs. 150 Lakhs. Small and medium scale industries and transporters are only eligible to get the loan facilities from the Company.

A review of the activities of APIDFC since inception reveals the following facts :

(i) At present the Company owns 6 production units including two subsidiary companies, viz., Parasuram Cement Limited at Tezu in Lohit district and Arunachal Pradesh Horticulture Processing Industries Private Limited at Nigmoi in West Siang district. Among others, there are one television assembly unit, one printing press, and one furniture unit at Naharlagun in Lower Subansiri district and one light roofing sheet production unit at Pasighat in East Siang district. The sheet production unit was established by the Government, and later, in 1981, it was handed over to APIDFC. Similarly, the cement producing unit was sponsored by NEC and was installed by NEITCO. The Central Food Technological Research Institute (CFTRI), Bangalore, was entrusted with the consultancy and design engineering services for the horticultural processing unit. The television assembly unit was started in collaboration with Electronic Trade and Technology Development Corporation (ETTDC), New Delhi. Moreover, APIDFC also entered into an agreement with the Indian Tourism Development Corporation (ITDC), New Delhi, in order to float a hotel project in the capital town Itanagar. Thus the Company is mobilising the national and regional

level institutional trade and technical experiences in order to industrialise the State.

(ii) Lack of proper planning in commissioning the production units is reported to have escalated both the installation cost and cost of production. For example, the site of the horticultural processing unit was first selected at Basar which was later shifted to Bagra and then again to Nigmoi. Some expenditure was incurred in these different places for the development of the plant site before the site was abandoned leading to a rise in the cost of the project to 67.64 lakhs from 43.24 lakhs. Similarly, the cement plant at Tezu was established with a capacity of 30 tonne per day (TPD). But after the installation, it was found economically non-viable because of which the management then advocated to raise the capacity to 60 TPD to ensure its economic viability. Though the detailed information about the financial positions of these two subsidiaries are not available with APIDFC, it is learnt that both of them are running under loss. The experiences of the other units are also the same. The sheet production unit was closed down on account of recurring losses. A study of the provisional annual financial data of the production units directly run by APIDFC shows that during the period from 1985-86 to 1990-91 the printing unit incurred a net cumulative loss of Rs. 18.74 lakhs in spite of a positive trend in its annual turnover (Table-5.6). For the same

TABLE - 5.3

Statement Showing Annual Turnover & Profit or Loss of the Production and Trading Units directly run by APIDFC During 1985-86 to 1990-91 (Provisional)
(Rs. in lakhs)

Sl.No. Particulars	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	Total
1. Printing Press							
i) Turn over	0.99	7.78	9.28	10.55	15.22	15.06	59.88
ii) Profit (+)							
Loss (-)	(-) 4.47	(-) 0.97	(-) 2.07	(-) 0.87	(-) 4.18	(-) 6.18	(-) 19.36
2. T.V. Assembly							
i) Turn over	8.84	4.25	14.84	13.80	17.70	9.75	69.18
ii) Profit (+)	(+) 0.10		(+) 1.05				(+) 10.95
Loss (-)		(-) 0.04		(-) 4.35	(-) 0.82	(-) 6.89	
3. Furniture Unit							
i) Turn over	3.54	3.05	2.69	49.43	5.94	5.42	70.07
ii) Profit (+)	(+) 0.34		(+) 0.07	(+) 8.00			(+) 3.98
Loss (-)		(-) 0.48			(-) 2.18	(-) 1.27	
4. Raw Material Bank							
i) Turn over	18.16	5.24	0.86	1.19	4.20	11.93	41.58
ii) Profit (+)	(+) 1.39						
Loss (-)		(-) 0.69	(-) 0.38	(-) 0.08	(-) 0.38	(-) 0.70	(-) 0.84
5. Trading Centre							
i) Turn over	7.13	4.14	18.7	22.64	19.21	8.26	80.08
ii) Profit (+)	(+) 0.89			(+) 5.85	(+) 2.18		(+) 3.82
Loss (-)		(-) 0.61	(-) 3.90			(-) 0.59	
6. APIDFC							
i) Turn over	24.02	30.76	44.68	36.98	41.96	46.92	225.32
ii) Profit (+)	(+) 8.36	(+) 2.56					
Loss (-)			(-) 15.87	(-) 11.81	(-) 25.29	(-) 40.37	(-) 172.42

Source: APIDFC, Itanagar.

period, the television assembly unit incurred a net loss of Rs. 10.95 lakhs (Table-5.6) and the furniture unit earned only a small profit of Rs. 3.98 lakhs (Table-5.6).

(iii) An enquiry into the causes of recurring losses in the public sector units has disclosed the managerial problems being the prime factor behind it. Most of the officials deputed to run the production units accord more importance to bureaucratic interest than their commercial competitiveness. One of the important causes of cumulative loss incurred by the television assembly unit is the almost non-existence of marketing network. Except one selling counter at Naharlagun, little attempt has been made even to explore the State's internal market. Moreover, all the public sector units are found to be over-staffed. Many a workers employed in these units do not have necessary technical expertise and hence the labour-output ratio seems to be very low.

(iv) Since inception upto 31st March 1991, the Company disbursed Rs. 385.96 lakhs out of a total sanctioned amount of Rs. 551.03 lakhs as industrial loans to 88 private entrepreneurs. The details of industry-wise distribution of industrial loans by the Company is shown in Table-5.7. It can be seen that the lion's share of Company's loan assistance has gone to the wood-based units (46 per cent). Next comes the hotel industry. The food processing

units have received about 15 per cent of total disbursed amount by the APIDFC. As the commercial banks usually finance the road transport sector, APIDFC did not emphasize on it. The spatial distribution of loan assistance has been observed to be highly skewed. Only two districts, i.e., Changlang and Lower Subansiri, have received more than 72 per cent of the total disbursed amount. It may be noted that Changlang is one of the centres of wood-based industry and Lower Subansiri being the district having state capital in it has special commercial importance. Apart from these two, West and East Siang districts also have attracted reasonable size of investment from APIDFC. Except these four, the percentage share of industrial loan to other districts is negligible. Not even a single unit has been financed in the westernmost district of Tawang and East Kameng. Thus, while the pattern of finance by the APIDFC distinctly reflects the emerging needs of the urban sector as well as resource-based industries in the economy, its role in promoting industries in the relatively more backward areas of the State is not at all encouraging.

(v) An audit review⁹ of the activities of APIDFC found a number of irregularities in connection with the sanction of loans. For example, out of 25 cases of loans amounting to Rs. 116.27 lakhs taken for check-up studies, it was found that in 3 cases loans of Rs. 3 lakhs in total was disbursed for which no application was

TABLE - 5.7

Statement Showing Industry wise Distribution of
Industrial Loans by APIDFC During 1988-89 to 1990-91
(Rs. in lakhs)

Sl. No.	Particulars	Amount of Loan	
		S	D
1.	Food Manufacturing	58.20	58.20
2.	Road Transport	19.52	19.52
3.	Hotel	175.99	72.26
4.	plywood/Veneer/Saw Mill	176.35	176.35
5.	Others	120.97	59.63
	Total	551.03	385.96

Source: APIDFC, Itanagar.

Note: S-for sanction,

D-for disbursement.

found, in 6 cases involving a total of Rs. 6.73 lakhs no loan agreements were executed, in 11 cases where a total of Rs. 8.62 lakhs were disbursed no mortgage deeds executed, project appraisals were not found in 11 cases involving a total loan of Rs. 10.63 lakhs and in 22 cases of loans amounting to a total of Rs. 113.27 lakhs applications were not routed through District Loan Advisory Committee (DLAC). However, this review was conducted during 1984-85 and since then situation has changed considerably. In spite of early disorderliness, the Company has shown a healthy trend in loan recovery. Upto March 1991, 80 units have been financed by the APIDFC, of them, 38 had already repaid the full amount with interest, and, excepting one, all were reported to be functioning units.

(vi) APIDFC started the Raw Materials Bank Scheme in 1980. During 1980-81 to 1984-85 the Company procured raw materials worth of Rs. 60 lakhs and sold about 85 per cent of the same for Rs. 50.82 lakhs. The articles mainly procured and sold were ISI sheet, M.S. channel, G.P. sheets, H.R. coil, C.R. sheet, M.S. wire, denatured spirit, cotton yarn, paraffin wax, knitting wool, carpet yarn, white printing paper, mutton tallow, commercial plywood, and palm fatty acid. A total of 331 beneficiaries were served of whom 93 were government beneficiaries like District Industries Officers who were to sell the material to local units and the rest 238 were private beneficiaries. During 1985-86 to 1990-91, the Company incurred a net loss of Rs. 0.87 lakh in this scheme (Table-5.6).

(vii) APIDFC started marketing of handloom and handicraft products of the SSIs in 1980. Accordingly the Company set up 2 sales emporia, one at New Delhi and the other at Guwahati, and also started participating in India International Trade Fair (IITF) since 1980. But due to recurring losses, the Company closed both the emporia in 1984. The total sales in New Delhi emporium upto 1983-84 amounted to Rs. 0.54 lakhs against expenses of Rs. 1.70 lakhs, and sales at Guwahati emporium was 1.33 lakhs against expenses of Rs. 2.25 lakhs. Similarly, against an expenditure of Rs. 17.78 lakhs incurred for the participation in 4 IITF during 1980-83, the sales were of the order of Rs. 1.25 lakhs. The Company stopped

participating in IITF since 1984 due to huge losses. In 1985, the Company started its Trading Centre mainly to procure raw material for the production units directly run by it. During the period 1985-86 to 1990-91, it earned a profit of Rs. 3.82 lakhs from trading activities (Table - 5.6).

(viii) The financial results of the Company for the year 1979-80 finalised during 1988-89 revealed that it earned a profit of Rs. 0.01 lakh in that accounting year¹⁰. According to the provisional figures for the years 1980-81 to 1984-85, the Company incurred a loss of Rs. 0.29 lakh in 1980-81, Rs. 1.57 lakhs in 1981-82 and Rs. 0.50 lakh in 1983-84. It earned a profit of Rs. 0.97 lakh each during 1982-83 and 1984-85¹¹.

For the years 1985-86 to 1990-91, the Company incurred a net loss of Rs. 72.42 lakhs (Table-5.6). It is observed that the magnitude of losses incurred annually tended to mount up during the later years. The prime cause of this loss is attributed by the Company to the fact that due to the small amount of paid-up capital it has to borrow capital from the State Government at a high rate of interest. As on March, 1991, the Company borrowed more than Rs. 5 crores at 11 per cent rate of interest from the State Government for which it has to pay a huge amount as interest on loan. The Board of Directors have already proposed to the Government to convert the

loan amount into equity share so that the Company can overcome the financial crisis.

CENTRALLY SPONSORED PROGRAMMES/SCHEMES FOR INDUSTRIAL DEVELOPMENT

The Government of India had launched from time to time various programmes/schemes exclusively for industrial development of the country in general and for the backward areas in particular. We shall now review the achievements and effectiveness of such central programmes/schemes which have been implemented in Arunachal. So long Arunachal was a Union Territory all the centrally sponsored programmes were wholly financed by the Centre as per the Government norms. After her attainment of statehood in 1987, State Government has to bear 50 per cent share for the implementation of some of these programmes along with the Centre.

INDUSTRIAL ESTATE (IE) PROGRAMME

This programme was introduced in India during the close of the First Five Year Plan, i.e., in 1955. Initially it aimed at rapid development of small scale industries and industrialisation of the backward and rural areas. Later, shifting the small scale industries from congested areas to industrial estate premises was also undertaken with a view to increasing their productivity, achieving decentralized industrial development in small towns and large villages, and assisting the growth of ancillary industries in

townships surrounding major industrial undertakings. Apart from these, P.C.Alexander, former Development Commissioner, Small Scale Industries, had described the concept of IE as "Group of factories constructed on an economic scale in suitable sites with facilities of water, transport, electricity, steam, bank, post office, canteen, watch and ward and first aid and provided with special arrangements for technical guidance and common service facilities"¹². Thus, the programme intends to provide common infrastructural facilities to the small entrepreneurs who otherwise would have to face a lot of difficulties to procure all these infrastructural inputs with their limited resource.

Though the programme was initiated during the First Plan, it got momentum since the Second Five Year Plan. In the early years industrial estates were established mainly in the big urban areas which went against the declared objectives of rural and backward area development. From the Third Five Year Plan Government took a conscious effort to direct the programme towards rural and backward areas¹³.

The programme was extended to Arunachal only during the Fifth Plan. At this time, there were 656 sponsored industrial estates in India of which 469 were functioning as on 31st March, 1975. Of the functioning estates, there were only 9 estates in the

NER of which 6 were in Assam, 1 in Nagaland, and 2 in Tripura. Rest of the north-eastern states including Arunachal had no industrial estates¹⁴.

The first estate was established in Arunachal in 1977-78 at Naharlagun, the second in 1979-80 at Deomali, the third in 1980-81 at Pasighat and the fourth in 1984-85 at Ganga. There are 13 sanctioned estates in the State as on 31.3.1991. A detailed description of their location, area, cost of construction and number of sheds developed and allotted is presented in Table-5.8. and Table-5.9.

TABLE - 5.8

Industrial Estates and Area Developed in Arunachal Pradesh as on 31.3.1991.

Sl. No.	Name of District	No. of IE	Location of IE	Industrial area (in acres)
1.	Tawang	1	Tawang	10.11
2.	West Kameng	1	Bomdila	15.00
3.	East Kameng	1	Bhalakpong	17.00
4.	Lower Subansiri	2	(a) Naharlagun (b) Ganga	20.00 10.75
5.	Upper Subansiri	-	-	-
6.	West Siang	1	Bame	50.00
7.	East Siang	1	Pasighat	10.00
8.	Dibang Valley	1	Roing	10.00
9.	Lohit	1	Namsai	4.00
10.	Chanaglang	2	(a) Changlang (b) Miao	2.62 5.00
11.	Tirap	2	(a) Khonsa (b) Deomali	15.00 10.00
Arunachal Pradesh		13		179.48

Source: Govt. of A. P., Directorate of Industries, Itanagar.

It can be seen that 9 sites have been developed in 7

districts at a cost of Rs. 143.20 lakhs. Four estates—one each in West Kameng, East Kameng, West Siang and Tirap district are under progress, and only one district, i.e., Upper Subansiri is yet to be covered under this programme. Three of 11 districts which are relatively industrially advanced have got 2 IE each. A total of 54 sheds/plots have been developed and allotted for use to the entrepreneurs. But formal official allotment does not necessarily mean that these are actually being used by the allottee.

A check-up study was done by the author of the two IEs of Lower Subansiri district during 17-31 January 1992, in order to assess the achievements of the programme.

TABLE - 5.9

Particulars of Industrial Estates in A.P. (As on 31.3.1991)

Sl. No.	Name of District	No. of IE	Industrial Plots		Cost of Construction (Rs. in lakhs)
			Developed (in no)	Allotted	
1.	Tawang	1	1	1	2.40
2.	West Kameng	1	(Under Construction)		10.56
3.	East Kameng	1	- do -		1.06
4.	Lower Subansiri	2	34	34	64.75
5.	Upper Subansiri	-	-	-	0.00
6.	West Siang	1	(Under Construction)		10.63
7.	East Siang	1	2	2	3.90
8.	Dibang Valley	1	3	3	4.10
9.	Lohit	1	2	2	3.12
10.	Changlang	2	6	6	19.60
11.	Tirap	2	6	6	23.00
Arunachal Pradesh		13	54	54	143.20

Source: Govt. of A. P., Directorate of Industries, Itanagar.

The IE of Naharlagun, the old capital, is located about one kilometre away from the township by the side of the National Highway which connects both the capital towns with the plains of Assam. Its location has accelerated the growth of a number of small industries in the surrounding area. The IE of Ganga is rather situated in a bit isolated area, though well communicated, at Chandan Nagar about 2 kms. away from the main market centre at Itanagar, the new capital township. Unlike the former, it has little impact upon the surrounding area. A few particulars which have been collected in course of spot study are presented in Table-5.10.

In the industrial estate of Naharlagun, 5 sheds have been allotted to APIDFC to run 3 production units and Raw Materials Bank Scheme. One shed is being used by them for official purposes. Of the remaining 18 sheds which have been allotted to the private small entrepreneurs, 50 per cent were found to be functioning. The total number of workers engaged in all the regularly functioning units amounted to 207. As the entrepreneurs are found reluctant to supply data on annual turnover, the same could not be collected. An interview with an entrepreneur who occasionally runs his fabrication unit has revealed that lack of sufficient demand is the prime cause of irregularities in running the unit. The unit depends largely on the government orders. But with the rise in the number of fabrication units in the vicinity, the flow of government order has

dwindled during the last few years. Whenever the entrepreneur manages to obtain an order for the supply of goods, he hires a few workers and gets the work done. An attempt was made to unearth the reasons behind the non-functioning of some of the units. One entrepreneur is reported to have purchased one truck after getting loan from a commercial bank and engaged himself in transport business closing down his furniture unit. In another two cases, it is reported that misunderstanding between the real entrepreneurs who are non-tribals and the official allottees as also the trading permit holders who are local tribals have led to the closure of the units.

TABLE - 5.10

Statements Showing the Particulars of Industrial Estates of Naharlagun and Ganga (as on 31.1.1992)

Industrial Estate	No. of Sheds		No. of Units Functioning			No. of defunct Units	No. of workers employed
	Deve- loped	Allo- tted	Regu- lar	Occa- sional	Total		
Naharlagun	23	23	11	1	12*	9	209
Ganga	11	11	5	1	6	5	47
Total	34	34	16	2	18	14	256

Source: Field Survey

* 2 sheds are used by APIDFC for other purposes.

In the IE of Ganga, 6 out of 11 units were found to be functioning. A total of 47 workers are employed in 5 regularly functioning units. One unit which functions occasionally is owned by an entrepreneur who is also running another well-established

printing unit at Itanagar. As the entrepreneur looks after the latter unit, he hardly could pay any attention to the fabrication unit located within the IE. Irregular power supply is generally reported to be the main hindrance in the way of smooth functioning of all the existing units.

DISTRICT INDUSTRIES CENTRE (DIC) PROGRAMME

Following the Industrial Policy Resolution of 1977 declared by the Janata Government, which proposed to provide a new orientation by emphasizing the small-scale sector, the District Industries Centre Programme was launched on 1st May 1978, as a centrally sponsored scheme to assist the small-scale industries including tiny, cottage, and village industries in the country. The programme envisaged that the DICs would undertake economic investigation of the potential for development of the district including its resource base, supply machinery, equipment, and raw materials, credit facilities, assist in marketing and provide entrepreneurial training to the SSIs. The DICs were also to be an operational machine for according sanction and other facilities for setting up industries in the rural areas and ensuring their continued viable operation by developing close linkage with the rural development blocks on the one hand and with the specialized and developmental institutions on the other¹⁵. Thus the programme attempted to provide all necessary assistance to the SSIs from a

single window at the district level which would have otherwise been very much troublesome on the part of the small entrepreneurs to obtain all by themselves from different state departments mostly concentrated at the state capitals. As per the approval of the National Development Council (NDC), the programme is being financed by both the Central and State Government on 50:50 basis. In case of the Union Territories, 100 per cent assistance is provided by the Central Government.

During the first year of the programme 263 DICs were approved in the country as on 31st January, 1979. Of them 26, i. e., about 10 per cent of the total approved DICs in the country were sanctioned for the north eastern states. Out of these 26 DICs, 5 each went to Assam and Arunachal Pradesh, 6 to Manipur, 4 to Nagaland, 3 to Tripura, 2 to Mizoram and 1 to Meghalaya¹⁶.

The first 5 DICs approved for Arunachal in 1978 were distributed one each at the then five district headquarters, viz., Bomdila of Kameng, Along of Siang, Ziro of Subansiri, Tezu of Lohit, and Khonsa of Tirap district. As the number of districts has increased to 11 in the State in subsequent years, 6 branch DICs were set up at the headquarters of these newly created districts.

DICs in Arunachal with their nucleus structure comprising one Deputy Director of Industries subsequently re-designated as

General Manager, two Technical specialists, later re-designated as Assistant Director, one Planning cum Survey Officer subsequently re-designated as Assistant Director, one economic Investigator and four Extension Officers for each of them exercise the following powers :

- (i) Sanction of Seed/Margin money upto a limit of Rs. 5000/-;
- (ii) Assessment of the requirement of all scarce raw materials of industrial units and also to verify utilisation ;
- (iii) Allotment of sheds in the Industrial Estates within the districts ;
- (iv) Selection of entrepreneurs for training ;
- (v) Assessment and arrangement of credit needs for both existing and new industries ;
- (vi) Dissemination of marketing intelligence and offering direct marketing assistance ;
- (vii) Issue of production certificate to SSI units for availing various facilities and concessions ;
- (viii) Recommendation for scarce and indigenous raw materials for village and small scale industries.
- (ix) Recommendation for registration of small scale industries and de-registration.
- (x) Sanction of--
 - (a) Contingent recurring expenditure upto Rs. 1000/- per annum in each case.
 - (b) Contingent non-recurring expenditure upto Rs. 5000/- in each case.
 - (c) Miscellaneous recurring expenditure upto Rs. 100 per annum.

TABLE - 5.11

Statement Showing the Progress of DICs in North-Eastern States
During 1978-79 to 1982-83 (Average per DIC)

Name of the State/UT	New Units established (Nos)		Credit flow from financial Institutions		Additional Employment generated (No. of persons)	
	1978-79	1982-83	1978-79	1982-83	1978-79	1982-83
Arunachal Pradesh	49	21	-	-	87	155
Assam	45	402	0.01	0.22	238	1559
Manipur	-	145	-	0.20	-	532
Meghalaya	74	47	-	0.05	2500	190
Mizoram	-	84	-	-	-	426
Nagaland	9	87	-	0.08	24	450
Tripura	191	205	0.10	0.59	490	3869

Source : Govt. of India, "Report of Sub Group IV of the working group of small scale Industries for the Seventh Five Year Plan 1985-90", in *Reports of Sub-Groups Constituted by the working Group on Small Scale Industries for the Seventh Plan 1985-90*, Ministry of Industry, Department of Industrial Development, Vol. II, pp. 104-30, New Delhi.

(d) Miscellaneous non-recurring expenditure upto Rs. 500 in each case.

(ki) Implementation of Self Employment of Educated Unemployed Youth (SEEUY) programme¹⁷.

The activities of the DICs are looked after by the Directorate of Industries, Itanagar. Thus, the State Industries Department works through DICs and APIDFC for the overall industrial development of the State. The performance of the DICs in Arunachal and a comparative picture of the same for other north-eastern states are shown in Table-5.11. It can be noticed that the average number of new industrial units established under DICs in Arunachal decreased from 49 in 1978-79 to 21 in 1982-83, while the same had increased in all other states except Meghalaya. DICs could not mobilise institutional finance in any of the reference years in Arunachal, while except Mizoram, DICs in other states had succeeded in mobilizing the same to some extent. In case of employment generation, DICs in Arunachal utterly failed to make any headway in comparison with the other north eastern states.

During 1978-79 to 1990-91, the Government of India provided a total of Rs. 58.00 lakhs to finance the existing SSI units for expansion of their activities and to extend loan to the new entrepreneurs in the State under the DIC programme. The details of funds received from the Government of India and disbursement of loans made thereof are shown in Table-5.12.

It is observed that only about 66 per cent of the total

fund received from the Government of India was utilised. Out of Rs. 5.82 lakhs that had been utilised upto 1985-86, Rs 2.32 lakhs were advanced as loans by the DICs to 50 beneficiaries during 1983-84 to 1985-86 and Rs. 3.50 lakhs were advanced to the APIDFC for advancing seed/margin money to the entrepreneurs indicating the inefficiency of the DICs in advancing industrial loan at the district level. This shortcoming has to a large extent been overcome during the later years. However, the Department of Industries is reported to have attributed this high percentage of non-utilisation of fund to non-availability of applications for loans from the entrepreneurs¹⁰.

TABLE - 5.12

Statement Showing Assistance Received and Loan Disbursed Under DIC Programme Since Inception
(Rs. in lakhs)

Year	Assistance received from Govt. of India	Amount of loan disbursed	Amount not utilised
1978-79	7.75	0.00	7.75
1979-80	2.50	0.00	2.50
1980-81	0.00	0.00	0.00
1981-82	3.50	3.50	0.00
1982-83	5.00	0.00	5.00
1983-84	1.75	0.00	0.95
1984-85	0.80	0.60	0.20
1985-86	1.00	0.92	0.08
1986-87	1.00	1.00	0.00
1987-88	0.50	0.40	0.10
1988-89	15.50	12.36	3.14
1989-90	5.50	5.30	0.20
1990-91	6.00	5.70	0.30
Total	58.80	38.58	20.22

Source: Govt. of A.P., Directorate of Industries, Itanagar.

The DIC-wise performance in disbursing loans for the years 1983-84 to 1987-88 is presented in Table-5.13. It is evident from Table-5.13 that the total amount of loan disbursed declined in 1984-85 over the previous year and then steadily increased with a spurt in 1987-88, the year in which Arunachal attained Statehood. But increase in the amount of loan disbursement does not necessarily imply the establishment of new industrial units and thereby progress in industrial development. In course of test checking regarding the use of industrial loan, it has been found in a number of cases that the amount was not utilised for the purpose it was drawn. For example, the Deputy Director of Industries, West Siang district, Along, disbursed Rs. 1.38 lakhs as industrial loans to 9 entrepreneurs during the period from March 1971 to May 1981 (before launching the DIC programme Deputy Director of Industries had a separate section in the Office of the Deputy Commissioner in every district). But they had neither established any industry nor refunded the loan with interest inspite of several reminders made by the district authorities (August 1986)¹⁹. In Lower Subansiri district two such cases have been found where in one case Rs. 8.96 lakh was paid to 9 units as industrial loan during the period from 1971 to 1978. But all these units were de-registered between 1976-1982. No action was taken by the authority to realise the amount of loan²⁰. In another case, Deputy Director of Industries Ziro, disbursed Rs. 6.84 lakhs between July 1969 and December 1979

to 33 new entrepreneurs for setting up small scale industries. But not a single unit was found to have come up till 1989²¹.

TABLE - 5.13

Statement Showing the Performance of DICs in Disbursing Loans from 1983-84 to 87-88 in A.P.

(Rs. in lakhs)

Sl. No.	Name of DIC	1983-84	1984-85	1985-86	1986-87	1987-88
1.	DIC, Bomdila	0.12	0.05	0.10	0.10	0.99
2.	DIC, Along	0.00	0.05	0.10	0.17	0.19
3.	DIC, Tezu	0.00	0.00	0.10	0.00	0.10
4.	DIC, Khonsa	0.15	0.10	0.10	0.10	1.00
5.	DIC, Ziro	0.23	0.10	0.10	0.00	1.00
6.	Br.DIC, Seppa	0.10	0.00	0.00	0.00	0.09
7.	Br.DIC, Pasighat	0.10	0.10	0.10	0.23	0.50
8.	Br.DIC, Tawang	0.10	0.10	0.10	0.10	0.40
9.	Br.DIC, Roing	0.00	0.05	0.07	0.07	0.50
10.	Br.DIC, Changlang	0.00	0.00	0.05	0.05	0.25
11.	Br.DIC, Daporijo	0.00	0.05	0.10	0.10	0.50
Total		0.80	0.60	0.92	1.00	6.40

Source: Govt. of India, State Profile, A.P., Br. SISI, Ministry of Industry, Itanagar, p. 50.

In sum, the Department of Industries provided term loans to the entrepreneurs amounting to Rs. 68.90 lakhs during the period from 1956-57 to 1986-87. Besides this amount, working capital/fixed capital loans amounting to Rs. 35.34 lakhs were granted by the Director of Industries to 304 beneficiaries of 10 districts upto 1985-86 for the establishment of small industrial units. But how many of them have actually come up and are functioning and also other necessary particulars are not found with the department. Even

the loan-ledger maintained by the Director of Industries did not indicate the year-wise amount of loan sanctioned and disbursed to the beneficiaries. No follow-up action was taken to ascertain the utilisation of the loans for the purpose for which these were sanctioned (August, 1986)²². Under the Self-Employment of Educated Unemployed Youth (SEEUY) programme, introduced by the Government of India in 1983-84 to provide industrial loan to the educated unemployed youths for setting up small scale industries, Task Force of DICs recommended 416 applications out of a target of 458 beneficiaries of which 265 cases have been sanctioned by the banks during 1983-84 to 1988-89²³. The department, however, had no information regarding the utilisation of the loans by the beneficiaries. No follow-up action was taken to ascertain the production, employment, earnings, or even the setting up of industries by the unemployed youths who were granted loans.

A careful scrutiny of available facts and data leads to the observation that the government machineries for the development of industries in the State including the DICs concern more with the fulfilment of annual targets than the actual achievements in terms of project feasibility and entrepreneurial ability. There is virtual non-existence of interdepartmental linkage as well as mutual linkage between the department of industries and other promotional and funding agencies at the state level on the one hand, and the DICs

and other agencies operating at the district level on the other. The account presented above does not reveal any appreciable role played by the DICs in industrialising the State, even though a final verdict must await a more comprehensive study of all the units everywhere in Arunachal that have received the patronage of the DICs in one form or the other.

24

CENTRAL INVESTMENT SUBSIDY SCHEME (CISS)

The CISS was introduced in August, 1971, as an incentive to industrial units set up in the backward areas of the country. According to the scheme industrial units of the selected backward areas are entitled to get subsidies at the rate of 10 per cent (maximum of Rs. 5 lakhs) on fixed capital investment including land, building and plant and machinery. The rate of subsidy was raised to 15 per cent in 1973, and to 20 per cent in 1981. The whole scheme was again modified in 1983 and differential rates were fixed following a three-tier classification (viz. 'A', 'B' and 'C') of the backward areas of the country. It has already been referred to in Chapter-IV (Section 4.2) that for the 'A' category districts wherein included all the districts of Arunachal, the rate of subsidy was fixed at 25 per cent with a ceiling of Rs. 25 lakhs.

A total of 101 industrial units were taken into consideration for CIS during 1982-83 to 1988-89. A sum of Rs. 243.15

lakhs was sanctioned by the State Level Committee (SLC), which is the sanctioning authority in the State, for providing subsidy to 101 units. The details of the scheme is shown in Table-5.14. It may be noted that there were 21 medium and 80 small industries in the list. While the share of the medium industries amounted to Rs. 143.63 lakhs, the same for the small industries was Rs. 99.52 lakhs.

TABLE - 5.14

Central Investment Subsidy in A.P.

(Rs. in lakhs)

Year	No. of Units receiving the Subsidy	Amount Sanctioned by Govt. of India	Amount disbursed to Units	Amount not utilised
1982-83	9	3.57	3.18	0.39
1983-84	6	16.06	16.06	0.00
1984-85	44	62.60	62.53	0.07
1985-86	-	0.00	0.00	0.00
1986-87	14	84.06	84.06	0.00
1987-88	23	22.44	22.44	0.00
1988-89	5	48.40	0.00	48.40
Total	101	237.13	188.27	48.86

Source: Govt. of A.P., CAG Report, 1989, p. 58.

Note: The unutilised amount of 1988-89 was disbursed in the next year.

It has been observed that 21 per cent of the units that include the medium industries had received 59 per cent and 79 per cent of the units consisting of small industries had got only 41 per cent of the CIS (sanctioned). Due to the lack of information it cannot be said in definitive terms as to how many recipient units are functioning or defunct. Though the scheme required the recipient

units to submit annual progress reports for a period of 5 years after they start production, no such progress report was received from any unit till June, 1989, by the Director of Industries.

25

CENTRAL TRANSPORT SUBSIDY SCHEME (CTSS)

The CTSS was introduced by the Government of India in July, 1971. The Scheme was implemented in Arunachal after 13 years, i.e., in 1984-85. The rate of subsidy under CTSS was fixed initially at 50 per cent. Later in 1983 it was raised to 75 per cent and was further increased to 90 per cent for the NER in 1986. According to this scheme industrial units in Arunachal are entitled to get subsidy on the transport cost incurred for movement of raw materials and finished goods from the designated rail-head, Siliguri, up to the location of the units, and vice versa.

During 1984-85 to 1988-89, a total of Rs. 314.89 lakhs was sanctioned by SLC to 21 industrial units in the State. The details of CTS is shown in Table-5.15.

It may be noted that only a few units had availed the benefits of the CTSS and they were mostly the medium scale wood-based industries. Small entrepreneurs procuring their raw material from different urban centres in the Assam plains including

Guwahati could hardly be benefitted by the scheme. As the territory

TABLE -5.15

Central Transport Subsidy in A.P.

(Rs. in lakhs)

Year	No. of Units receiving the Subsidy	Amount sanctioned by Govt. of India	Amount disbursed	Amount not utilised
1984-85	1	2.85	2.85	0.00
1985-86	2	4.26	4.26	0.00
1986-87	-	0.00	0.00	0.00
1987-88	15	83.33	83.33	0.00
1988-89	3	119.00	72.02	46.98

Source: Govt. of A.P., CAG Report, 1989, p. 59.

Note: Rs. 46.98 lakhs was disbursed in May 1989, hence the amount is shown as unutilised during the 1988-89 financial year.

of Arunachal is still lacking in sufficient modes of surface transportation, the transportation cost forms a significant part in the cost structure of local production. This scheme, if implemented with care could render substantial help to the producing units located within Arunachal.

CENTRAL INFRASTRUCTURAL ASSISTANCE SCHEME (CIAS)

The CIAS was introduced in April, 1983, in order to assist the states to take up infrastructural development in the 'no industry district' in the form of development of 'Growth Centre'. Though the Government of India approved 4 Growth Centres one each at Itanagar, Pasighat, Dirang and Miao till March 1989, but no central

assistance has been received till June, 1990.

INFRASTRUCTURE INDUSTRY

Due to its geographical location, Arunachal has a huge hydel potential in comparison with the other states of the country. The Central Water and Power Commission (C.W. & P.C.) has estimated in 1965 the hydel potential of the country to be about 84,000 M.W., of which Arunachal alone accounts for about 27,000 M.W. i.e. more than 32 per cent of the total potential of the country, that can be brought to use from the various tributaries of the Brahmaputra like Kameng, Ranganadi, Subansiri, Siang, Lohit and other rivers through the installation of hydel power projects.

In view of the huge gap between demand and supply of power in the country which has been considered as one of the prime structural factors behind the industrial stagnation, the Government of India had put a special emphasis on the development of the power sector since the Fifth Plan. Naturally the regions full of hydel potentials like Arunachal have attracted the attention and efforts have been made to tap these potentials for the benefit of both the region/state concerned and the power deficit regions.

As per the Central planning, development of the power sector has also been emphasized in the state plan of Arunachal since the Fifth Plan by earmarking about 7 per cent of the plan outlay for

water and power development. This outlay has been raised to about 13 per cent during the Sixth Plan and in the Seventh Plan the combined head of 'Water and Power Development' has been segregated and more than 9 per cent of total plan outlay was allotted exclusively to develop the power sector. Apart from State Plan, North Eastern Electric Power Corporation Limited (NEEPCO) has been floated in 1976 as a central organisation in order to plan, promote, organize, investigate, survey, design, generate, transmit, operate and maintain power stations in the entire NER. Besides NEEPCO, Central Water Commission (CWE) and Brahmaputra Board are also engaged in promoting the power sector in the region including Arunachal.

As the whole territory is segregated into many parts by the turbulent rivers flowing in the north-south direction and peculiar arrangement of the hills and mountains, no east-west communication could be developed in Arunachal till now. Moreover due to the scattered population habitat, it appears to be much costly to bring them under common transmission network. As a result, the strategy of power development has been worked out at two levels. At one level it is proposed to develop micro-hydel schemes at the isolated centres of habitation wherever such potentials exist for the benefit of the local people. Even though per unit cost of generation by the smaller schemes is higher, the ultimate landed cost of transmission and the line losses is thought to be quite

competitive. Accordingly in the state plans development of micro (01 MW and below), mini (1 to 2 MW), and small (3-15 MW) hydro-projects having high potential, low gestation period and low cost are emphasized. At another level, multi-mega hydel projects which involve huge amount of investment are proposed to be developed by the central organisations for the benefit of the State and the country as a whole.

The development of hydro-electric projects in Arunachal had made a modest beginning during the Fourth Plan (1969-74). The Kalaktang micro-hydel scheme with an installed capacity of 10 KW was sanctioned post facto in April, 1974, at an estimated cost of Rs. 1.42 lakhs to supply electricity to Kalaktang town. This was the first hydel scheme in Arunachal and was commissioned in September, 1971²⁶. At the end of the Fourth Plan the capacity for power generation in the territory was 1,199 KW of diesel power and 860 K.W. of hydel power. Out of 2,973 villages, only 55 villages i.e. about 2 per cent had been electrified²⁷.

The power situation in the State, at the end of the Seventh Plan has improved considerably. The present position of the exploitation of hydel power is shown in Table-5.16.

However, though there has been an improvement of hydel

power generation from 0.86 MW in 1974 to 16.45 MW in 1991, the State

TABLE - 5.16

Position of Existing Micro-Hydels in Arunachal as on 31.3.91

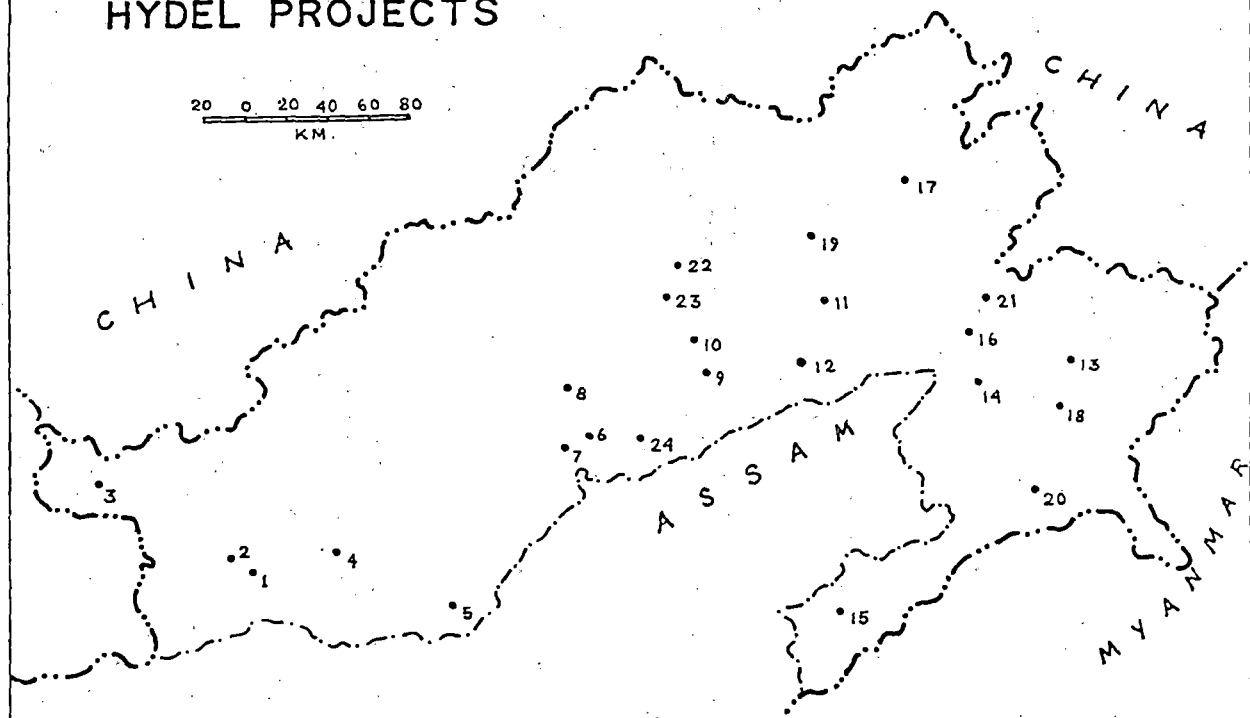
Sl. No.	Name of Scheme	Name of District	Installed Capacity	Firm Capacity	Year of commissioning
1	2	3	4	5	6
1.	Tawang	Tawang	1500	1000	1977-78
2.	Dirang	West Kameng	2000	1500	1977-78
3.	Rahung	"	750	500	1972-73
4.	Seppa	East Kameng	300	300	1980-81
5.	Itanagar	Lower Subansiri	750	500	1979-80
6.	Mai Phase-I	"	2000	1500	1977-78
7.	Mai Phase-II	"	1000	750	1982-83
8.	Daporijo	Upper Subansiri	400	300	1981-82
9.	Mechuka	West Siang	100	50	1989-90
10.	Igo Ichi	"	400	300	1987-88
11.	Basar (Pagi)	"	100	50	1972-73
12.	Along	"	100	100	1975-76
13.	Yingkiong	East Siang	150	100	1980-81
14.	Tuting	"	100	50	1984-85
15.	Yambung	"	2000	1500	1984-85
16.	Pasighat	"	200	100	1974-75
17.	Deopani	Dibang Valley	750	500	1986-87
18.	Anini	"	150	100	1984-85
19.	Abhapani	"	450	350	1984-85
20.	Ampani	Lohit	500	250	1989-90
21.	Duranallah	"	400	300	1976-77
22.	Tafragram	"	250	250	1984-85
23.	Tissue	Changlang	400	300	1986-87
24.	Charju	Tirap	400	400	1984-85
25.	Khonsa (Tiratajo)	"	1000	750	1978-79
Total		25	16150	11800	

Source: Govt. of A. P., *Renewable Energy Utilization, 1991.*

is still now a power-deficit one. The present peak demand is 55 MW which is estimated to go up to 60 MW by the end of 1992-93 and 100

ARUNACHAL PRADESH HYDEL PROJECTS

20 0 20 40 60 80
K.M.



POSITION OF HYDEL PROJECTS

- | | | | |
|-------------------|---------------|---------------|--------------|
| 1. RAHUNG | 7. MAI Ph-JI | 13. ABHAPANI | 19. TUTING |
| 2. DIRANG | 8. DAPORIJO | 14. TEZU | 20. CHARJU |
| 3. KITPI (Tawang) | 9. BASAR | 15. KHONSA | 21. DEOPANI |
| 4. SEPPA | 10. ALONG | 16. YAMBUNG | 22. MECHUKA |
| 5. ITANAGAR | 11. YINGKIONG | 17. ANINI | 23. EGO ECHI |
| 6. MAI Ph-I | 12. PASIGHAT | 18. TAFRAGRAM | 24. TAGO |

MW at the end of Eighth Plan (1992-97)²⁸. Against peak demand of 55 MW, only 11.70 MW of firm power is generated from various micro-hydel stations having an installed capacity of 16.45 MW (Table-5.16). The gap is filled partly by 55 diesel power stations having an installed capacity of 45.75 MW.

Apart from these mini and micro hydel schemes, 5 multi-mega hydel projects have been identified by the central agencies. The particulars of these projects are furnished in Table-5.17.

TABLE - 5.17

Centrally Sponsored Hydro Electric Projects in A.P.

Sl. No.	Name of the Project	Installed capacity (MW)	Name of Agency
1.	Ranganadi Hydro Electric Project	405 MW	NEEPCO
2.	Kameng Hydro Electric Project	600 MW	CWC/NEEPCO
3.	Subansiri Hydro Electric Project	4,500 MW	CWC/Brahmaputra Board
4.	Dihang Hydro Electric Project	20,000 MW	"
5.	Dimwe Hydro Electric Project	1,000 MW	NEEPCO
Total		26,505 MW	

Source: (i) Govt. of A.P., Renewable Energy Utilization, 1991.
(ii) NEEPCO, North Eastern Electric Power Corporation Limited (a booklet), 1989, Shillong.

Of these five multi-mega hydel projects, construction

activities have already been started for Ranganadi and Kameng projects. The former is sponsored by NEC and is being implemented by NEEPCO which involves an estimated cost of Rs. 312 crores.

Two professional organisations namely Asian Techs Progressive Construction and Gammon India Limited have been engaged for construction of the project which is expected to be completed latest by 1997. The task of construction of the latter is also officially entrusted to NEEPCO in 1989. NEEPCO has already taken up various modalities in this regard. The total cost of the project as estimated in 1989 amounts to 865.70 crores which has gone up to 1100 crores as per the revised estimates in 1990-91. The project has been included in the national power plan during the Eighth Plan and is expected to be completed by the early part of Ninth Plan.

Thus in near future Arunachal is expected to be made a power surplus State so much so that in the absence of any substantial home demand it would only earn by exporting power to the power hungry industrially developed region. It may be worthwhile to point out here that the proposal to bring all the regional power transmission centres under one umbrella i.e. national grid, has created a bitter sensation in all the north-eastern states. Some sections of people have interpreted this central step as a colonial machination against the ever neglected India's north-east.

THE ROLE OF NORTH EASTERN COUNCIL (NEC)

The objectives behind the creation of NEC have already been pointed out in the preceding Chapter-IV. Since inception, the Council has emphasized on the infrastructural development of the region. In addition to that, it also looks after the other sectors of the economy in order to achieve balanced development of the NER. As most of the hill states of the region not only suffer from poor investible fund and skilled manpower but also from lack of scientific and technical expertise, the advisory role of the NEC has much relevance for them. So far as the industrial development of Arunachal is concerned, it was the NEC that initiated the establishment of a 30 TPD cement manufacturing unit at Tezu. And the mega hydel projects mentioned above which have been undertaken by NEEPCO (Table-5.17) in the State are also planned by the NEC. Though, apart from these two areas, the direct NEC assistance to the industrial sector of the State is minimal, its contribution to the development of the State in general and infrastructural development in particular cannot be overlooked²⁹.

INDUSTRIAL TRAINING

For the development of industrial activities particularly under the private sector in a state like Arunachal the role of

technical education and industrial training cannot be minimised. As the movement and property rights of the non-Arunachaleese are subject to the Inner Line Regulations, the mobility of labour and entrepreneurs between Arunachal and the rest of the country is limited. This necessitates a speedy development of skilled and local manpower capable of undertaking entrepreneurial as well as productive activities in the State.

But until 1971, there were hardly any provision to train up the local manpower along modern technical lines. In fact, except the Craft Training cum Production Centres that have been referred to earlier, there were no institutional facilities for technical training in Arunachal. The establishment of an Industrial Training Institute (ITI) at Roing in 1971 has been the first attempt to introduce modern technical education in the State. The Institute started with three trades, i.e. motor mechanics, carpentry and plumbing courses having an enrolment of 20 trainees³⁰. During the later years, both the intake capacity and the number of trades have been increased. The Institute produced a total of 534 passed-out trainees in different trades till 1988-89 (Table-5.18). The average annual out-turn amounts to 30. No study has been undertaken regarding the placement of the passed-out trainees in the State. In view of the growing demand for modern technical services in various sectors of the economy of the State it appears that the passed-out

trainees would hardly face any trouble to employ themselves gainfully.

Apart from the ITI at Roing, the NEC has established the North-Eastern Regional Institute of Science and Technology (NERIST) at a place near the old capital town, Naharlagun during the Sixth Plan. The NERIST provides training in agricultural engineering, veterinary science, chemical engineering, food technology, electronics and telecommunication etc., at the degree as well as diploma levels.

TABLE - 3.18

Trade-wise Out-turn of ITI Trainees in A.P.

Sl. No.	Trade	No. of passed-out trainees during 1971-72 to 1988-89
1.	Motor Mechanic	158
2.	Plumber	82
3.	Carpentry	44
4.	Electrician	87
5.	Wireman	68
6.	Draughtsman	57
7.	Fitter	24
8.	Welder	7
9.	Others	7
Total		534

Source: (i) Govt. of A.P., *Statistical Abstract, 1984-89*.
(ii) Govt. of A.P., *Statistical Handbook of Dibrang Vally District, 1986-87*.

Note: Figures for the year 1985-86 relate to undertrained trainees during 1984-85.

Another institute, viz., The Rural Industrial Development

Centre (RIDC) has been established at Dirang in West Kameng District during 1991-92 in collaboration with the Hindustan Machine Tools (HMT) Ltd., Bangalore. The purpose of the RIDC is to provide vocational training to the rural youths particularly to the school drop-outs under various skill development programmes. The RIDC is viewed to be a multipurpose centre to synchronize different activities like training, servicing, manufacturing and trading.

Apart from these formal institutional facilities, a number of central institutions and other professional organisations also conduct various training courses in order to develop the technical manpower and entrepreneurial talent in collaboration with the financial organisations and Department of Industries of the State.

Institutions like Small Industries Service Institute (SISI), North-Eastern Industrial and Technical Consultancy Organisation (NEITCO), National Institute of Small Industry Extension Training (NISIET) and Entrepreneurship Development Institute of India (EDII) launch from time to time different Entrepreneur Development Programmes (EDPs) to train the local manpower according to the needs of the local economy. The SISI and NEITCO also undertake various feasibility studies and survey works for the interest of the local entrepreneurs.

During 1985-87, EDII, Ahmedabad, conducted 3 EDPs in Arunachal--two at Itanagar and one at Khonsa. All of them were general EDPs. A total of 70 trainees had been trained by EDII-- 45 at Itanagar and 25 at Khonsa. It is learnt that no follow-up action has been undertaken, and no information is available with the Department of Industries as to how many of the trainees have actually opted in real life in favour of production activities.

During 1985-91, NEITCO launched 13 EDPs at various places in the State. The details of these programmes are shown in Table-5.19 and Table-5.20.

TABLE - 5.19

Entrepreneurial Development Programmes by NEITCO in A.P.

Year	EDP Centre	Target Group	Total No. of trainees participated
1985-86	Khonsa	General	20
1986-87	Along	General	24
1987-88	(a) Bomdila	General	25
	(b) Pasighat	General	25
1988-89	(a) Tezu	General	27
	(b) Daporijo	General	21
1989-90	(a) Khonsa	General	21
	(b) Itanagar	Women	23
	(c) Changiang	General	20
	(d) Pasighat	Women	24
1990-91	(a) Along	Women	25
	(b) Basar	General	25
	(c) Ziro	General	28
Total			308

Source: Branch Office, NEITCO, Itanagar.

In addition to these 13 EDPs, during 1991-92 the NEITCO conducted 4 EDPs in Arunachal for which details are not yet made

available. It is learnt that the total number of trainees participating in all the 13 EDPs as has been shown by the NEITCO is misleading. Since some of the participants are reported to have attended more than one EDPs, the total number of participants does not match the total number of beneficiaries. More than 50 per cent of the trainees are found in such avocations that are not in consonance with their calling.

TABLE - 5.20

Particulars of NEITCO's Entrepreneurial Development Programmes in A.P.

Year	Total No. of Participants	No. of Trainees				
		Started Units	Making Progress	Found Job	Not interested	Could not be contacted
1985-86	28	14	2	1	-	3
1986-87	24	12	-	2	8	2
1987-88	58	7	1	3	4	35
1988-89	48	14	7	9	-	18
1989-90	88	18	15	4	38	21
1990-91	78	-	62	2	14	-
Total -	308	57	87	21	64	79

Source : Branch Office, NEITCO, Itanagar.

Moreover, the figures relating to the trainees setting up their own production units cannot be judged at their face-value. It is learnt that the NEITCO undertakes the task of preparation of project reports for the willing and trained entrepreneurs for which it charges a significant amount as fees. Generally, this fee for the preparation of project report is borne by the sponsoring agencies. There is also provision for the entrepreneurs to get 80 per cent of

the cost of preparation of project reports from the state Department of Industries. However, once project report is prepared, entrepreneurs have to apply for registration. The registration is essential for approaching the banks in turn for finance. No sooner an entrepreneur gets his unit registered, then the NEITCO counts him with as one who has begun his production. But having a registration does not imply that the unit has actually come up. Moreover, it is alleged that in many cases new units are registered with some ulterior motives, e.g., to get industrial loans either from the Government or from other funding agencies and channalising the same for other purposes. As a result, such statistics generated not only by the NEITCO but also by other similar agencies are inadequate to judge the efficacy of their endeavours.

Further, the efforts undertaken in order to impart the technical and industrial training to the local people in the State are not sufficient in overcoming their age-old feeling of exclusiveness which is one of the key psychological barriers of industrialisation. In the conflict between 'psychology and industry', 'it is the industry that suffers and surrenders'³¹. Though a section of the local people have come out of their tribal moorings and social prejudice to join the various technical and entrepreneurial training programmes, their participation in the spheres of industrial production and management leaves much to be desired.

1.2 PRIVATE SECTOR

The Private Sector here includes industrial units owned and managed by private individuals with or without state assistance and also irrespective of their scale of operation. It may be noted that systematic classified data for privately run units are not available for all the districts as well as for all the industries in Arunachal. Due to the non-existence of authentic data on annual out-turn, installed capacity, value added, employment, ownership pattern, etc., no overambitious attempt can be made. This section has been worked out mainly on the basis of data collected from the Directorate of Industries (DI), Itanagar, and from the Office of the Registrar of Companies, Shillong. As a result our discussion is mostly confined to the units registered with the above two offices.

It may also be pointed out that the DI and the DICs working under them did not follow the conventional classification of the industrial units in terms of investment on fixed assets. While issuing registration to small-scale units, no distinction is made among the tiny, small, and ancillary units. As a result, the discussion in this section suffers from the same limitations. Irrespective of the investment criterion, we are therefore constrained to focus our attention to all such units in the small scale sector that are registered either with the DI or DICs.

In fact, there is no way to have information regarding

the unregistered units other than to carry on a complete census on them. Till now, three Economic Census have been undertaken in Arunachal in 1977, 1980 and the latest in 1991. The report of the latest Economic Census is not yet made available. Though the previous two reports are available, these are also not very useful in understanding the true picture of the manufacturing sector as they had adopted only a two-fold classification of 'enterprises' viz. agricultural enterprise and non-agricultural enterprise. As a result any attempt to examine the pattern and growth of the manufacturing sector from the above mentioned census data on non-agricultural enterprises will not carry us too far. Unless a fresh classified enumeration is undertaken, any complete picture of the manufacturing sector is less likely to emerge.

STATE OF INDUSTRIAL DEVELOPMENT TILL THE EARLY SEVENTIES

The history of the growth of modern industries in Arunachal may be traced to the establishment of the Assam Saw Mill and Timber Company at Murkong-selek in the Pasighat Sub-division in 1918 under the managing agency of the Bird Company Private Ltd³². However, following the great earthquake in 1950 and devastating flood in the next year, which badly affected the Company's operation, it was shifted to Namsai in Lohit district in 1952. Presently it is one of the leading medium scale wood-based industries in the State. Another saw mill, namely, the Lohit Saw Mill, was established at Sunpura in Lohit district in 1948³³. This

unit is owned and run by a Khampti entrepreneur. Kebang Koret Saw Mill was established at Pasighat under co-operative ownership in 1956³⁴. After a few years of successful operation, it was closed reportedly due to managerial problems. It is learnt that most of the members of the co-operative were the local tribal people, i.e., the Adis. The Nocte Timber Company at Deomali in Tirap district was incorporated as a Private Limited Company in November, 1962. Later, in February, 1981, it was taken over by the Government of Arunachal and presently it has become a subsidiary of APFC. Another wood-based middle scale industry, viz., NEFA Udyog was started under private ownership at Banderdewa in Lower Subansiri district during 1962-63³⁵. Another leading middle scale industry, viz., the Narottam Co-operative Industries Limited came into existence in 1972³⁶.

These are some of the important industries that came up during the early years of Independence and before the transitional phase of Arunachal history mentioned earlier came to a close. As these industries did not come under the purview of the department of industries, which was concerned only with the development of craft centres, any meaningful information regarding the early history of the private sector can hardly be retrieved from official records.

However, to assess the state of industrial development during the early 70s, we shall refer to the observations contained in a few contemporary reports. The report by the NCAER (1967)

mentioned only of three worthwhile wood-based industries, one each at Pasighat, Namsai and Deomali³⁷ which have already been referred to above. The report of the IDBI sponsored Study Team on industrial potential survey of Arunachal (1972) enlisted 26 industrial units then existing in the territory. The Team prepared the list of existing industrial units showing only the name of the units and their location. The ownership pattern, capital structure, number of workers employed, profitability, installed capacity, etc., none of these important aspects had been focussed. However, whatever information is found in the report is presented in (Table-5.21) in modified form in order to get some insight about the process of industrial development in the State.

TABLE-5.21

Product-Wise and District-Wise Distribution of Industrial Units in Arunachal Pradesh-1972.

Product-wise Industrial St. groups No.	Districts						
	Kameng	Subansiri	Siang	Lohit	Tirap	Arunachal Pradesh	
1. Wood-based industries	-	2		2	4	1	9
2. Food & Oil processing industries	-	-		3	6	3	12
3. Wool-proce- ssing industries	3	-		-	-	-	3
4. Soap manu- facturing	-	-		1	-	1	2
Total	3	2		6	10	5	26

It may be noticed that out of 26 industrial units reported to have been operating in the State, as many as 92 per cent were

basically processing units. Except the wood-based industries, most of the units were very small and mostly run at household level. The spatial distribution of the early industrial units reveals that the eastern zone of the territory enjoyed some advantage over the western zone. As many as 81 per cent of the total units were found to have been located in the former zone. This phenomenon is well explained by the fact that the eastern zone of Arunachal is not only contiguous to the industrially developed part of Upper Assam but also is comparatively more accessible, populated and resource rich than its western counterpart. Moreover, the tribes inhabiting in this part are more exposed to the Assam plains. The IDBI Team found three wool processing units in the westernmost part of the territory, i.e., in the undivided district of Kameng. It may be mentioned that the Monpas of Kameng have had a long association with the Tibetans of neighbouring Tibet as well as the Bhutanese across the border. Both of these two communities are reputed for their excellence in woollen works, and the diffusion effect of the same upon the neighbouring Monpas can be easily understood.

The Annual Administration Report 1972-73³⁸ brought out by the General Administration Department, Government of Arunachal, had also enlisted the then existing wood-based industries by name, location and type of ownership while presenting the industrial scenario of the territory. Though the number of wood-based industries enlisted in both the reports is the same, but the names

and locations of the two units found in the Report of the Study Team were replaced by two other units in the Annual Administration Report. It is difficult to ascertain as to whether it so happened due to communication gap or they were dropped due to their passing out of existence. This is not the only case; similar instances of producing factual figures without any appropriate explanation have been particularly noticed in the departmental reports and other Government publications on several occasions creating serious hindrances in understanding things in their proper perspectives. However, the Administration Report revealed one more additional information, i.e., type of ownership, of the early wood-based industrial units. Out of the 9 units, 3 have been found under co-operative and the remaining 6 under private ownership and management³⁹. A cross verification of this factual figures with the data presented in the Statistical Handbook of Arunachal Pradesh 1972-73 revealed that these 9 wood-based industrial units included 6 saw mills, one veneer mill and 2 plywood mills. Moreover out of 6 units under private ownership and management, 3 were owned by local tribals⁴⁰.

In another place the Administration Report cited 17 industrial units of all kinds including the small and medium scale industries which were functioning as on 31.3.1973 (Table-5.22)⁴¹.

It appears that a distinction was made between industries 'existing' and industries 'functioning'. Obviously, all existing

industries may not necessarily be interpreted as functioning at a

TABLE-5.22

Industrial Units Functioning in Arunachal Pradesh
as on 31.3.73

Sl. No.	Product-wise Industrial Group	Number
1.	Wood-based Industries	6
2.	Food and Oil Processing Mills	6
3.	Tailoring Unit	4
4.	Wool Carding Unit	1
Total		17

particular period. Even if an industrial unit remains close in the short run, it will keep on coming into the account of existing industries as long as there is some possibility of its reopening. It is to be noticed that the data presented in the Report of the Study Team were also related to the number of existing industrial units and was not connected anyway with the functioning units. These two sets of data while interpreted from this point of view may indicate the extent of industrial sickness inherent in the process of belated industrial growth that the territory has been experiencing.

The All India Report on the Census of Small-Scale Industrial Units (1973-74), found only 11 SSI units 'working' in Arunachal during the reference year. Industry-wise distribution of SSI units is shown in Table-5.23.

Any attempt to arrive at a clear understanding regarding the early process of industrial growth in Arunachal is bound to be

TABLE - 5.23

Industry-wise Distribution of SSI units Working in A.P. (1973-74)

Sl. No.	Category	No. of Units
1.	Hosiery and Garments	1
2.	Wood Products	5
3.	Rubber & Plastic Products	3
4.	Non-metallic Mineral Products	1
5.	Metal Products	1
Total		11

Source : Govt. of India, *All India Report on the Census of Small-Scale Industrial Units*, Vol. II, Development Commissioner, SSI, New Delhi.

hazardous if Table-5.22 and Table-5.23, both of which represent contemporary factual situation, are compared. While the natural course of industrial development often begins with the growth of agro-forest based processing units and then moves on to mineral or metal based units, the All India Report did not notice even a single agro-based processing unit in the territory. Whether the conflicting reports were due to the differences in the definition of SSI used by the different agencies cannot be ascertained as the Administrative Report was written more in a journalistic style without any compunction of citing adequate explanations for everything mentioned therein.

The Establishment Report of 1971 Census (Part. III-A) of Arunachal identified a total of 4,978 establishments of all kinds. Out of the total, only 5.9 per cent were reported to have been associated with manufacturing, processing or servicing activities;

32.8 per cent were business establishments; and the rest 61.3 per cent engaged obviously in miscellaneous activities were dubbed as 'others'. Out of 1,634 business establishments, there was only one wholesale business unit in the territory⁴².

According to 1971 census 57.65 per cent of the total population (4,67,511) of Arunachal were workers. The sectoral distribution of workers is shown in Table-5.24.

TABLE - 5.24

Distribution of Workers by Economic Activities-1971

Category	Persons	Percentage to total Workers.
I. Cultivators	2,11,168	78.34
II. Agricultural Labourers	5,292	1.96
III. Livestok, Forestry, Fishing, Hunting, Plantations, Orchards and allied activities	366	0.14
IV. Mining & Quarrying	5	negligible
V. Manufacturing, Processing Servicing & Repaire.		
(a) Household Industry	830	0.31
(b) Other than household Industry	103	0.04
VI. Construction	263	0.1
VII. Trade and Commerce	1,551	0.57
VIII. Transport, Storage & Communications	11	negligible
IX. Others	49,961	18.54
Total workers	2,69,542	100.00

Source: Census of India 1971, Social and Cultural Tables, Series 24, Part II(i), A. P.

Table-5.24 provides a snap-shot of the state of affairs

of the economy of Arunachal. More than 80 per cent of total workers were engaged in agriculture and allied activities. The share of workers engaged in manufacturing, processing, servicing and repairing in both household and other than household industries were less than 1 per cent of the total number of workers in the State. The higher percentage of workers in the tertiary sector does not appear to be because of greater participation in trade and commerce, transport, storage & communication activities; rather it appears, administrative expansion provided the main fillip to the growth of the tertiary sector.

In 1971, as per the NEC data, Arunachal ranked last in terms of number of small scale industries among the seven states of NER. There were 2653 SSI units in the region in total, out of which the share of Arunachal was as small as 11 only, i.e., 0.41 per cent of the total units of the region. Details are shown in Table-5.25.

From the above accounts it may be said that the state of industries in the territory was in an embryonic stage during the early 70s. The State took little initiative to develop the industrial sector other than the handicrafts. A few resource based industrial units had come up in the hinterlands of Upper Assam industrial zone in which the participation of a few local tribal people could be discerned.

TABLE - 5.25

Distribution of Small Scale Industries in North Eastern Region-1971
(in numbers)

Industry Group	A. P.	Assam	Mani- pur	Megha- laya	Naga- land	Mizo- ram	Tri- para	Total of NER	
1. Food Products	-	152	10	19	3	14	7		235
2. Beverages	-	1	-	-	-	-	-		1
3. Hosiery & Garments	1	29	71	2	1	7	3		114
4. Wood Products	5	268	242	33	3	11	41		603
5. Paper Products	-	176	12	11	4	2	1		206
6. Leather Products	-	8	1	1	-	1	2		13
7. Rubber & Plastic Products	3	198	16	15	9	2	21		264
8. Chemicals	-	126	9	7	2	-	26		170
9. Mineral Products	1	97	7	17	3	2	8		135
10. Basic Metal Alloy Industries	-	37	1	-	-	-	3		41
11. Metal Products	1	282	58	14	9	11	51		426
12. Machinery and Parts	-	27	7	3	-	-	17		54
13. Electrical Machinery Apparatus	-	11	20	3	-	-	5		39
14. Transport Equipment and Parts	-	10	6	1	-	-	-		17
15. Miscellaneous Manufacturing Industries	-	17	5	5	-	2	5		34
16. Repair & Services	-	209	20	33	4	9	26		301
Total Industry	11	1,648	485	164	38	61	216		2,623

Source: NEC, Basic Statistics of North Eastern Region, 1980.

GROWTH OF SSIS DURING 1975-1990

The year-wise number of SSIs registered provisionally in the State is available since 1975 (Table-5.26). It may be recalled that from the Fifth Plan the State Government had laid special emphasis on the development of the small scale sector in the State.

TABLE - 5.26

No. of SSIs Provisionally Registered with the Directorate of Industries, A.P.

Year	Number
1975-76	35
1976-77	34
1977-78	110
1978-79	98
1979-80	271
1980-81	43
1981-82	324
1982-83	152
1983-84	170
1984-85	269
1985-86	180
1986-87	210
1987-88	262
1988-89	195
Total	2353

Source:Govt. of A.P., Directorate of Industries, Itanagar.

From 1975 to 1989, as many as 2353 SSIs have been provisionally registered in the State. But provisional registration is merely a formal official exercise which is done before a unit comes into existence in order to help the entrepreneur in getting necessary institutional support in commissioning his plant. Even after getting the provisional registration, the unit, for one or other reasons,

may not come into existence. In fact, there is a wide variation between the number of SSI units registered provisionally and the number of SSI units actually functioning in Arunachal. In most cases, the departmental reports and other Government publications refer to the number of SSI units a bit indiscriminately without bothering to inform as to whether these are provisionally registered or permanently registered, how many of them are breathing and how many have died out, leading, therefore, to an erroneous perception. As comparable and complete records of all the provisionally registered SSI units for all the districts are not available, the experiences of some of the districts have been described below on the basis of official records (unpublished) to make the point clearer.

(c) TAWANG

(i) During 1976-80, 55 SSI units have been provisionally registered in the district of Tawang. Of these, only 17 units i.e., 30.9 per cent of the total SSI units are found to have been functioning as on 31.3.89.

(ii) An industry-group wise analysis of these 17 functioning SSI Units reveals that 2 of them are agro-based processing units, 7 units are producing forest-based products, one each is engaged in dry cleaning, printing, weaving, photographic works and bakery products. The remaining 2 units are producing hand-made paper. Thus, 53 per cent of the functioning units are found to be engaged in agro-forest based manufacturing activities.

(iii) A classification of the functioning SSI units in terms of investment in plant and machineries shows that 16 out of 17 units come under the category of 'below 1 lakh', and there is only one unit falling in the category of '1 lakh to 10 lakhs'.

(iv) A grouping of the functioning units in terms of the size of employment shows that there are 4 units employing 2 persons, 5 employing 3 persons, 4 employing 4 to 5 persons and 4 employing 6 to 10 persons.

(b) EAST KAMENG

(i) In the district of East Kameng, 50 SSI units have been provisionally registered during the period ranging from 1981 to March 1989. Only 12 of them i.e., 24 per cent of the total are reported to be functioning as on 31.3.89.

(ii) Out of these 12 functioning units, 7 are engaged in manufacturing forest based products; 2 each in weaving, knitting, etc.; and bakery products; one unit is engaged in blacksmithy. It is to be noticed that 58 per cent of the functioning SSI units have been engaged in manufacturing of forest-based products.

(iii) In terms of size of investment in plant and machinery 9 units have made an investment of 'less than 1 lakh', 2 have '1 to 10 lakhs', and for one unit investment size is not available. (iv) Employment size wise distribution of these 12 functioning units shows 1 unit employing one person, 3 units employing 2 persons, 2 units 3 persons, 1 unit 4-5 persons, 4 units

11-20 persons and for one unit number of persons employed is not available.

(c) UPPER SUBANSIRI

(i) The total number of provisionally registered SSI units for the decade 1979-89 in Upper Subansiri district amounted to 79. Of them 34 units i.e., 43 per cent of the total have been found to be functioning as on 31.3.89.

(ii) Of these 34 functioning SSI units, 11 belong to agro-based processing activities like rice, oil and wheat milling, 5 units are engaged in manufacturing of forest-based products like wood, cane and bamboo articles, one each is engaged in printing, dry cleaning, and blacksmithy works, 3 each in repairing works, bakery products, and photographic works, 4 units in weaving and 2 units are engaged in hotel business. Thus 47 per cent of the functioning units are manufacturing agro-forest based products.

(iii) None of the units has an investment in plant and machinery of '1 lakh or more'.

(iv) So far as the size of employment is concerned, there is 1 unit employing one person, 10 units 2 persons, 12 units 3 persons, 6 units 4-5 persons, 4 units 6-10 persons and one unit employing 11-20 persons.

(d) EAST SIANG

(i) There are 204 SSI units provisionally registered since 1978, of which only 57 units i.e., 27.94 per cent are reported to

have been functioning, as on 31.3.89.

(ii) The share of agro-forest based manufacturing units is 52.63 per cent, i.e., 30 out of 57 SSI units. Among the remaining 27 units, 10 units are engaged in weaving, knitting and tailoring activities, 5 in bakery products, 3 each in repairing and other services, 2 each in printing and blacksmithy works, and one each in dry cleaning and wire manufacturing.

(iii) Out of the 57 functioning SSI units, no information is available regarding the size of investment in plant and machinery for 28 units. Of the remaining 29 units, 15 units fall under the category 'below 1 lakh', 6 units each has an investment '1 lakh to 10 lakhs', and there are 8 units each having an investment between '11 and 20 lakhs'.

(iv) Information regarding the size of employment for 12 functioning SSI units is not found. Of the remaining 45 units, there are 11 units having 2 workers, 5 units 3 workers, 11 units 4-5 workers, 9 units 6-10 workers, 7 each employing 11-20 workers and 2 units are there having 21-30 workers.

The data regarding the size of investment on plant and machinery and the number of employees as presented above have their own limitations. These figures are approximations which the SSI units have furnished in the prescribed format while applying for provisional registration to the concerned state authorities. Whether a particular unit has invested the same amount or employed

the same number of workers as mentioned in the proposal could not be verified. In spite of these limitations, a careful scrutiny of these information reveals a few basic features of the pattern and process of growth of the manufacturing sector in the State.

It is observed that the percentage of functioning SSI units to the total number of units provisionally registered in different districts, as has been presented above, is not at all encouraging. The percentage of defunct units is as high as about 7% per cent in case of East Kameng, East Siang, Tawang, and Lohit districts. Though due to the variations in the base year, inter-district comparisons regarding the percentage of functioning SSI units to the total units registered provisionally will carry little sense, but the overall trend in the State may be surmised from these data. One obvious question that arises immediately in one's mind is : Why does the mortality of SSI units in the State remain so high ? The category of defunct SSI units at a certain date includes (a) deregistered units, (b) registered but not established, (c) registered and on the way of establishment but not started production activities, (d) registered and established but not functioning. While it is reported that some of the units are defunct due to non-availability of either required raw material or technical man power or necessary tools and equipments or financial assistance or required land from the Government, a majority of the units simply did not come into existence due to the lack of initiative and

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interest on the part of the proposed entrepreneurs. A significant share of the units registered but not established were reportedly initiated by the beneficiaries of different Government schemes like SEEUY. It is learnt from discussions with the concerned officials that in order to fulfill planning target, beneficiaries are identified irrespective of entrepreneurial skill and viability of their projects. Political considerations and compulsions also contribute a lot in this regard. As a result, targets are fulfilled in papers, but the ultimate purpose is not served as most of them do not pursue their projects. This has been one of the important causes of high incidence of mortality of the provisionally registered units. Moreover, it is learnt that in many cases industrial proposals are also being registered for other ulterior motives, e.g., for getting bank loan or scarce raw materials, etc., which are then used for other purposes.

It will be noticed that the lion's share of the functioning units in the districts referred above is composed of agro-forest based processing and manufacturing activities. Rice, oil and wheat milling on the one hand, and manufacture of wood, cane and bamboo products on the other are found to be the dominant activities in the manufacturing sector. A good number of units involving weaving, knitting and tailoring to produce hosiery products have also come up. With the growth of urban agglomerations and small townships particularly at the district and sub-divisional

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headquarters, activities like repairing services, printing works, tyre retreading, manufacturing of electrical accessories, dry cleaning, photographic works and bakery works are gradually emerging. Two important and newly explored manufacturing activities, i.e., extraction of citronella oil and stone crushing occupy an important place particularly in the eastern zone of the State.

Another important aspect of the functioning SSI units is that most of them belong to the tiny industry group if the size of investment in plant and machinery is taken into consideration. A sizeable section of the functioning units engaged in manufacturing cane and bamboo products are known to have invested only a few hundreds on plant and machinery. Manufacturing units having a comparatively large size of investment in plant and machinery, i.e., one lakh and above are all wood-based units producing plywood, sawn timber, veneer etc.

However, as per the records, since inception, 415 units have been permanently registered in the State as on 31.3.1990. An analysis of these units will provide us greater insight in understanding the present state of industrial development in the territory. It is learnt that all these 415 SSI units are functioning, and a total of 3611 persons are employed in them leading to an average size of employment of about 9 persons per unit. As the number of provisionally registered SSI units before 1975 is not

known, the exact percentages of SSI units registered permanently to the total provisionally registered units could not be calculated. But it should be less than 17.64 per cent as per the data presented in Table-5.26. Of course, there may be some unregistered and provisionally registered functioning units. However, district-wise distribution of permanently registered SSI units and total employment in them are shown in Table-5.27. It can be noticed that more than 70 per cent of the permanently registered functioning SSI units are concentrated in the four districts of Lower Subansiri, West Siang, Lohit and Dibang Valley. The districts like Tirap and Changlang which have a number of medium wood-based industries are startlingly lagging behind in this regard. The districts falling in the western zone of the State like Tawang, West Kameng, East Kameng and Upper Subansiri are known for their relative underdevelopment. This is also manifested by their respective percentage of permanently registered functioning SSI units. The average size of employment per unit is the highest in East Kameng district where there are only two permanently registered SSI units. Both the units are saw mills. Similarly this average is fairly higher than the state average in the two easternmost districts of Changlang and Tirap which have a relatively large number of saw mills.

A look into the product-wise distribution of the permanently registered functioning SSI units will be helpful to

TABLE - 5.27

District-wise Number of Permanently Registered Functioning SSI units and Employment as on 31.3.98.

SL.No. District	Number of Permanently Registered Functioning SSI units	Percentage to total	Number of employment	Average size of employment per unit
1. Tawang	10	2.41	23	2.30
2. West Kameng	23	5.54	228	9.91
3. East Kameng	2	0.48	64	32.00
4. Upper Subansiri	12	2.89	93	7.75
5. Lower Subansiri	57	13.74	470*	8.25
6. West Siang	64	15.42	545*	8.65
7. East Siang	39	9.40	330*	8.68
8. Lohit	93	22.41	690	7.42
9. Dibang Valley	77	18.55	443	5.75
10. Changlang	22	5.30	476	21.64
11. Tirap	16	3.86	249	15.56
Arunachal Pradesh	415	100.00	3611	8.74

Source: Govt. of A.P., Directorate of Industries, Itanagar.

* No. of employment in one SSI unit is not available.

understand the pattern of industrial development in the State. A product wise and district wise distribution of the units is shown in Table-5.28.

In Table-5.28 the group 'agro-processing' includes rice, oil, atta and flour milling units. All kinds of metallic activities like blacksmithy, silversmithy and steel works are clubbed under the group 'metal products'. Repairing services include all repairing activities of bicycle, radio, motor, etc. The category 'Others' consists of manufacturing of spun/hume pipes, soda water, polythene products, fruit processing and umbrella assembly. It is to

TABLE-9.28

Product wise and District wise Distribution of Permanently Registered Functioning SSI Units
As on 31.3.1990.

Product wise Group	D I S T R I C T											Total
	Tawang	West Kameng	East Kameng	Upper Suban- siri	Lower Suban- siri	West Siang	East Siang	Lohit	Dibang Valley	Chang- lang	Tirap	
1. Agro-processing	4	3	-	1	5	22	14	54	59	8	-	170
2. Wood, Cane & Bamboo products	4	10	2	6	14	15	17	25	15	11	11	130
3. Weaving, Knitting and Tailoring	1	-	-	1	13	3	1	-	-	-	-	19
4. Bakery products	1	5	-	2	4	7	2	4	1	-	2	28
5. Repairing services	-	1	-	1	4	3	2	6	2	-	-	19
6. Metal products	-	3	-	-	6	5	3	2	-	1	-	20
7. Printing works	-	1	-	-	-	1	-	-	-	-	1	3
8. Candle manufacturing	-	-	-	1	1	-	-	2	-	-	1	5
9. Tyre retrading	-	-	-	-	3	2	-	-	-	-	-	5
10. Dry cleaning	-	-	-	-	2	1	-	-	-	-	-	3
11. Soap, Phenyle and detergent powder manufacturing	-	-	-	-	2	-	-	-	-	-	-	2
12. Battery manufacturing	-	-	-	-	1	-	-	-	-	-	-	1
13. Brick manufacturing	-	-	-	-	1	-	-	-	-	-	-	1
14. Automobile body building	-	-	-	-	1	-	-	-	-	-	-	1
15. Stone crushing	-	-	-	-	-	1	-	-	-	1	-	2
16. Others	-	-	-	-	-	4	-	-	-	1	1	6
Total	10	23	2	12	57	64	39	93	77	22	16	415

Source : Govt. of A.P., Directorate of Industries, Itanagar.

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be noticed that 48.96 per cent of the SSI units are engaged in agro-processing activities and 31.33 per cent in manufacturing forest-based products. Thus, as a whole more than 72 per cent of the permanently registered functioning SSI units are operating in the sphere of agro-forest based processing activities, thereby indicating the initial state of industrial development in the territory. In a land where weaving had been a very popular household activity in the past, the fact that merely 4.58 per cent of the SSI units are engaged in weaving, knitting and tailoring may be interpreted as the backwash effects of development, even though in the absence of any comparable data regarding the level of output and employment in this activity in the past no conclusive statement can be made. Manufacturing of candle, brick, battery, soap, bakery products and repairing services, printing works, dry cleaning, tyre retreading etc.--all are demand-based industrial activities essential for the modern livelihood. But the growth of these industries is not impressive enough. Moreover, it should not be lost sight of that many of these activities produce such things as are not feasible to be imported from outside, or, even if some of them are imported, it will entail a much higher cost. And, industries in importable consumer goods have hardly come up in the State. This phenomenon may be explained by the following two observations. Firstly, due to the small size of population and segregated local market, the demand for consumer goods is not sufficiently high to stimulate the internal economic forces in order to undertake their production at the local

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level. Secondly, with the growth of communication in vertical line from the Assam plains all types of consumer goods from the national market have flooded all the townships and urban agglomerations in the territory denying the local industries the opportunity and the necessity to grow.

However, except Lower Subansiri and West Siang, industrial activities in other districts hardly reflects any urban character. Rather, these are the outcome of twofold needs--the need of the rural economy for agro-processing units and the gainful exploitation of the bounty of forest resources for which tea industry of Upper Assam provides a lucrative market.

The employment position in all these permanently SSI units registered in the State as on 31.3.90 is shown in Table-5.29. It can be noticed that 27.85 per cent of the units are employing only one person each. Most of them are agro-based processing units like rice or atta or flour milling, oil extraction, etc. These units are mainly concentrated in the two districts of Lohit and Dibang valley which jointly share about 41 per cent of the total permanently registered units in the State. A little more than 13 per cent of the units employ 2 persons each. More than 63 per cent employs one to five persons each. Number of unit employing more than hundred persons is only one. As most of them are tiny units, their capacity to generate employment opportunity is also very limited. Even the

TABLE - 5.29

Employment Size wise and District wise Distribution of Permanently Registered Functioning SSI Units
As on 31.3.1990.

Size of Employment	D I S T R I C T											Total
	Tawang	West Kameng	East Kameng	Upper Suban- siri	Lower Suban- siri	West Siang	East Siang	Lohit	Bibang Valley	Chang- lang	Tirap	
1	2	-	-	1	-	9	3	44	55	1	-	115
2	5	3	-	-	3	18	11	7	3	3	1	54
3	2	4	-	2	6	2	3	7	1	1	-	28
4 - 5	1	3	-	1	16	13	3	13	3	2	9	64
6 - 10	-	6	-	6	19	9	4	6	2	4	1	57
11 - 20	-	3	-	1	9	5	12	4	3	1	1	39
21 - 30	-	4	1	1	2	5	2	6	5	4	1	31
31 - 40	-	-	1	-	2	1	-	2	5	2	-	13
41 - 50	-	-	-	-	-	-	-	1	-	2	2	5
51 - 60	-	-	-	-	-	-	-	2	-	1	-	3
61 - 70	-	-	-	-	-	-	-	1	-	-	1	2
71 - 80	-	-	-	-	-	-	-	-	-	-	-	-
81 - 90	-	-	-	-	-	-	-	-	-	1	-	1
91 - 100	-	-	-	-	-	-	-	-	-	-	-	-
101 - 110	-	-	-	-	-	-	-	-	-	-	-	-
111 - 120	-	-	-	-	-	1	-	-	-	-	-	1
N.A.	-	-	-	-	-	1	1	-	-	-	-	2
Total	10	23	2	12	57	64	39	93	77	22	16	415

Source : Govt. of A.P. Directorate of Industries, Itanagar.

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average size of employment (9 persons per unit) is mainly due to a significant number of labour intensive wood-based units in the State.

It is not possible to assess the contribution of the small scale sector to the total value added of the manufacturing sector in the State due to the non-existence of such classified data.

The discussion made in this section does not provide a complete picture of the State. The fragmented factual data, a large part of which is neither comparable nor complete, have only been arranged in such a way that it can, at the least, help to form an idea of the state of industrial development in Arunachal Pradesh.

GROWTH OF NON-GOVERNMENT COMPANIES

Out of the 415 permanently registered functioning SSI units in Arunachal, 22 are registered as Companies. Apart from them, there are 61 other Companies of all types (including the Government Companies) in Arunachal making a total of 83 Companies registered with the Office of the Registrar of Companies, Shillong, as on 31.12.91. Companies, if any, registered elsewhere but operating in Arunachal are not included in this account. And Companies like Arunachal Credit Investment Co. (Pvt) Ltd. whose registered office is located outside the State are also excluded. Developmental activities undertaken during the first three decades of independence created modicum of infrastructure facilitating the exploitation of

rich forest resources of the State, and most of the Companies were established to this end. With the depletion of forest resources in the country as a whole, and in Assam in particular, the industrial and business houses have gradually moved into the adjacent forest rich areas of Arunachal from Tinsukia-Margherita industrial zone of Upper Assam. It is learnt that the business experiences of the entrepreneurial class of Upper Assam particularly the Marwaris have been instrumental behind the formation of a large number of Companies operating in timber business and wood-based industry in Tirap, Changlang, Lohit and Dibang Valley districts of Arunachal. Of the 83 registered Companies, 8 are Government and the remaining 75 are non-government. All the Government Companies are private limited, and out of 75 non-Government Companies only 6 are public limited companies. A product-wise and district-wise distribution of the non-Government companies is shown in Table-5.30.

It is to be noticed that about 59 per cent of the total non-Government Companies are engaged in manufacturing of wood products. More than 86 per cent of the 44 companies are concentrated in the four districts of Dibang Valley, Lohit, Changlang and Tirap in the eastern part of the State adjacent to the industrially developed part of Upper Assam. Companies like Arunachal Saw and Veneer Mills (Pvt.) Ltd. at Jairampur, Arunachal Forest Products (Pvt) Ltd. at Namchik, Tirap Veneer & Saw Mills (Pub) Ltd. at Miao, Wanchoo Veneer & Saw Mills (Pvt) Ltd, at Kanubari, Bizari

TABLE - 5.30

Product-wise and District-wise Distribution of non-Government Companies in A.P.
(As on 31.12.91).

District	INDUSTRY GROUP											Total
	Wood-based industry	Agro-Processing industry	Brewing industry	Chemical industry	Tobacco industry	Metal industry	Electronic industry	Tea industry	Hotel industry	Transport industry	Construction industry	
1. Tawang	-	-	-	-	-	-	-	-	-	-	-	-
2. West Kameng	-	-	-	3	-	1	-	-	-	-	-	-
3. East Kameng	1	-	-	-	-	-	-	-	-	-	-	-
4. Lower Subansiri	1	2	-	3	1	-	1	2	2	1	-	-
5. Upper Subansiri	-	-	-	-	-	-	-	-	-	-	-	-
6. West Siang	1	-	-	1	-	-	-	-	-	-	-	-
7. East Siang	3	-	-	-	-	-	-	-	-	-	-	-
8. Dibang Valley	8	2	-	1	-	-	-	-	-	-	-	-
9. Lohit	11	-	-	-	-	-	-	1	-	-	-	-
10. Changlang	10	1	-	-	-	-	1	1	-	-	1	-
11. Tirap	9	-	1	-	-	-	-	2	-	-	-	-
Arunachal Pradesh	44	5	1	8	1	1	2	8	2	1	1	1

Source : Govt. of India, Office of the Registrar of Companies, Shillong.

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Veneer & Saw Mills (Pub) Ltd. at Bizari, Dibang Valley Timber Trade (Pvt) Ltd. at Roing, Chowkham Saw & Veneer Mills (Pvt) Ltd. at Chowkham, Jenny Plywood Industries (Pvt) Ltd. at Bogapani, Guna Saw & Veneer Mills (Pub) Limited at Chowkham came up early in the State. Companies engaged in manufacturing of other than wood products came up later. The Lower Subansiri district alone has to some extent diversified manufacturing/servicing activities. Out of the 14 non-Government Companies in the district, only one is engaged in manufacturing of wood-products. Of the rest, 2 Companies are involved in agro-processing, 3 in chemical products, one in tobacco products, one in electronic articles, 2 in tea plantation, 2 in hotel business, one in transport service and one is engaged in construction activities. Next to wood-based activities, Companies engaged in the production of chemical products and tea plantations jointly occupy the second largest position. The altitude, climatic condition, and topography of the State all are very much congenial for the development of these two industries. Though the development of tea plantations for the benefit of the State has long been advocated by different expert committees appointed in this regard the State Government did not effectively consider this proposal till recently. But with the disintegration and flight of capital from Assam tea industry due to aggressive regionalism and political extremism developed during the last few years in Assam and also due to the pressing need for rapid economic development of Arunachal, tea plantation have made a modest beginning in the State in recent

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years. While significant share of capital from Assam tea industry has shifted mainly to the districts of Darjeeling, Jalpaiguri and West Dinajpur of West Bengal, a part of the same also has entered into the adjacent districts of Arunachal.

Most of the Companies in Arunachal are small, and only some of them are reported to be of medium category. In fact, no precise definition is employed for the large or medium ventures as also their small counterparts. As a result the distinction between large and medium scale industrial units is very often blurred in the statistical reports. If the cut-off point, generally employed by the financial institutions be taken into consideration, then the middle scale enterprises are those for whom the total project cost does not exceed Rs. 5 crores. Enterprises involving more than Rs. 5 crores as project cost may be categorised as large scale. But as because the data regarding the paid-up capital of all individual Companies are not available, so it is difficult to classify them following the usual standard as to how many of them fall under which category. However, in order to get some idea regarding the scale of operation of the companies in Arunachal, their distribution in terms of authorised capital is shown in Table-5.31.

It is to be noticed that the 34 Companies, i.e., more than 40 per cent of the total, were incorporated with an initial provision of less than Rs. 10 lakhs of authorised capital to be raised and invested in each of them. Similarly, another 22

Companies, i.e., more than 26 per cent, each has a initial provision

TABLE - 5.31

Distribution of Companies by Authorised Capital in A.P.
(as on 31.12.91)

Authorised Capital (Rs. in lakhs)	No. of Companies
0-10	34
10-20	22
20-30	17
30-40	2
40-50	2
50-60	2
60-100	-
100-500	4
Total	83

Source: Govt. of India, Office of the Registrar of Companies, Shillong.

Note: The figures relate to the initial authorised capital of the Companies as found in their "Articles of Memoranda" at the time of registration. The changes made later are not available for each individual Company and hence are not considered here.

of Rs. 10-20 lakhs, and the same for each of another set of 17 Companies i.e., 20 per cent, is Rs. 20-30 lakhs. Thus, about 88 per cent of the Companies have a registered capital of less than rupees one crore and there are only 4 Companies each having a sizeable authorised capital of rupees 1-5 crores. Three out of these comparatively big 4 Companies are under public sector, i.e., Government Company, and one is under private sector, i.e., non-Government Company.

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However, there were 59 Companies of all types having a total paid-up capital of Rs. 5.6 crores in Arunachal as on 31.3.1988. At that date, among the other north eastern states, Assam had 1501 Companies having a total paid-up capital of Rs. 438.2 crores, Manipur had 35 Companies with Rs. 10.6 crores, Meghalaya 117 Companies with 200.7 crores, Mizoram 5 Companies with Rs. 5 crores, Nagaland 155 Companies with Rs. 64.9 crores and Tripura had 25 Companies with a total paid-up capital of Rs. 16.1 crores. Thus 3.11 per cent of the total Companies of the region were located in Arunachal. But the share of total paid-up capital was only 0.76 per cent which clearly indicates weak financial position of the Companies in the State⁴³.

Of the total number of Companies in the respective states (as on 31.3.1988), 6 were Government Companies with a total paid-up capital of Rs. 3.57 crores in Arunachal, 37 with Rs. 299.68 crores in Assam, 12 with Rs. 10.51 crores in Manipur, 14 with Rs. 197.63 crores in Meghalaya, 1 with Rs. 4.95 crores in Mizoram, 9 with Rs. 60.26 crores in Nagaland, and 8 with Rs. 16.19 crores in Tripura⁴⁴. Thus while 6 Government Companies in Arunachal each had an average paid-up capital of Rs. 59.5 lakhs, the remaining 53 non-Government Companies each had the same worth Rs. 3.83 lakhs only. However, a comparison with the other states of NER reveals that capital mobilisation in terms of average paid-up capital per Company is higher in case of Government Companies in general. And

except Assam, the same for the non-Government Companies is higher in Arunachal than the other north-eastern states indicating a relatively higher capital mobilisation in the private sector.

Anyway, there are 2527 Companies of all types in the region as on 31.12.91. Of them about 79 per cent are located in Assam and the remaining 21 per cent are distributed among the six hill states of the region. Among the hill states, about 7 per cent goes to Nagaland, 6 per cent to Meghalaya, a little more than 3 per cent to Arunachal, about 3 per cent to Manipur, a little more than 1 per cent to Tripura and 0.5 per cent to Mizoram⁴⁵. Thus in terms of number of companies Arunachal ranks fourth in the region.

5.3 CO-OPERATIVE SECTOR

The Co-operative Movement in Arunachal dates back to the mid-fifties of this century. In fact the Movement was emphasized during the 'Frontier Phase' of her development as a corollary to the revivalist and protectionist policy towards the frontier tribes. The co-operative form of organisation was then viewed within a very restricted framework only to guarantee the supply of essential consumer goods to the government employees posted in the different administrative centres located in the interior of the territory. This was done with a view to control the influx of unscrupulous businessmen by reducing the dependence on market forces as much as possible. However, with the passage of time and opening up of the territory most of the administrative centres were brought under

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market network, and the role of the co-operatives underwent much change. Gradually, the Co-operative Societies have diversified their functions in different lines, and are playing a crucial role now particularly in case of marketing of primary products and producing resource and skill based products. People's participation in the movement has also increased simultaneously in this later phase of the movement.

There is a total of 200 Co-operative Societies (COS) registered with the Office of the Registrar of Co-operatives, Naharlagun, as on 31.1.92. Of them 145 COS, i.e., 73 per cent, are reported to be functioning and the remaining 55 are defunct. The basic particulars of the COS in Arunachal are presented in Tabl-5.32. It may be seen that consumer co-operatives constitute the largest group of 41 per cent of the total number of COS having within its fold about 24 per cent of the members associated with this Movement, and about 12 per cent of the total share capital involved in this sector. The LAMPS and other multi-purpose co-operatives are playing a very important role in economic development of this backward State. These are mainly engaged in activities like marketing of both inputs and surplus of agriculture and allied activities like horticulture, animal husbandary, fishery, forestry etc., providing loan facilities to the members, purchase and sale essential consumer items, etc.

TABLE - 5.32

Statement Showing the Basic Particulars of Co-operative Societies in A.P. (as on 31.1.92)

(Rs. in Lakhs)

Sl. No.	Type-wise Break-up of Co-op. Societies	No. of Socys.	Member-ship	Share Participation			Working capital	Annual Turnover	Annual Financial position	
				Govt.	Indv.	Total			Profit(+)-Loss(-)	
1.	Apex Co-op. Societies	3	221	94.31	23.63	117.94	2957.34	1414.66	(+)	36.87
2.	Consumers Co-op. Societies	82	12258	24.33	7.79	32.12	484.86	1070.04	(+)	1.60
3.	Large Area Multi-purpose Co-op. Societies (LAMPS)	22	18982	40.67	13.83	54.50	780.67	1602.39	(+)	18.60
4.	Multipurpose Co-op. Societies	22	5396	4.74	3.64	8.38	74.95	358.82	(-)	3.26
5.	Industrial Co-op. Societies	7	6514	4.42	11.99	16.41	234.09	107.24	(-)	24.30
6.	Transport Co-op. Societies	6	2690	9.35	2.10	11.45	88.75	117.19	(-)	5.28
7.	Weavers Co-op. Societies	5	706	0.65	1.25	1.90	47.24	53.45	(+)	2.40
8.	School Co-op. Societies	13	2205	0.57	0.10	0.67	3.46	7.73	(-)	0.08
9.	Marketing & Processing Co-op. Societies	3	506	1.85	0.51	2.36	9.69	1.61	(-)	1.52
10.	Farming Co-op. Societies	3	97	0.16	0.11	0.27	0.48	-	-	-
11.	Bairy Co-op. Societies	7	206	2.35	0.57	2.92	28.92	21.30	(-)	1.50
12.	Fishery Co-op. Societies	4	140	0.25	0.17	0.42	2.36	2.89	(-)	0.34
13.	Cinema Co-op. Societies	3	58	0.80	4.02	4.82	13.96	3.29	(-)	1.48
14.	Thrift & Credit Co-op. Societies	3	945	0.30	0.33	0.63	10.30	7.35	(-)	0.14
15.	Women Welfare Co-op. Societies	5	184	0.35	0.17	0.52	3.21	7.93	(-)	0.08
16.	Housing Co-op. Societies	1	33	0.95	0.62	1.57	1.60	-	-	-
17.	Societies under Liquidation	11	-	1.61	-	1.61	-	-	-	-
Total		200	51,141	187.66	70.83	258.49	4741.68	4775.89	(+)	21.49

Source : Govt. of A.P., Office of the Registrar of Co-operatives, Ndhaharlagun.

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For example, Daporijo Multi purpose Co-operative is engaged in marketing of oranges grown by the local people. Lawang Multi-purpose Co-operative is marketing potatoes which are abundantly grown by the local farmers. It also exports high quality potato seeds to Assam and Tripura. It supplies a significant share of locally grown potatoes to the defence personnel staying in the border areas. The LAMPs, at Tezu, has established a dairy firm which produces milk and other milk products for which there is a good market among the defence personnel. LAMPs and Multi-purpose co-operatives in the surplus zones like Bordumsa, Pasighat, Neko, Miao and Chowkham areas use to purchase surplus agricultural crops from the farmers thereby protecting the poor local people from the tentacles of the private Marwari businessmen operating mainly from Tinsukia and Dibrugarh. The combined share of these two types of Co-operative societies constitutes 22 per cent of the total registered societies, about 46 per cent of the total population in this Movement, about 24 per cent of total share capital, and 41 per cent of total annual out-turn in this sector.

However, in case of industrial sector the contribution of this Movement is not appreciable. Only 12 co-operatives have been registered so far to this end of which 7 societies (classified as industrial co-operatives in Table-5.33) have been formed to run timber trade and wood-based industrial units, and another 5 societies, classified as weavers' co-operatives, are running weaving

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units. Of the 5 weavers' Co-operative societies, 4 are engaged in carpet making and one in handloom manufacturing. Though the amount of share capital employed in these co-operatives is small, it is significant to observe that 4 of them are running profitably.

However, of the total 12 industrial societies, 50 per cent are defunct, and one society which has been running a medium wood-based industry at Deomali, viz., Narottam Co-operative Industries, leased out the unit to a private Marwari industrialist of Tinsukia due to recurring losses. It may be noted that the unit was established in 1972 for which the local Noctes had played the key role. The society had utilized the Namsang-Borduria People's Fund (which was created out of forest revenue paid to the Noctes and looked after by the Deputy Commissioner for the development of the district of Tirap) in order to mobilize the initial share capital of Rs. 10 lakhs for the establishment of the unit. The individual share was initially raised as loan from the People's Fund to be subsequently refunded by the share-holders through this industry. During the early years the unit had three separate sections one each for plywood manufacturing, saw milling and oil crushing. Upto 1977, the unit earned a net profit of Rs. 18,15,000 which was reinvested for its expansion. But for some reasons the unit had incurred losses during the later years and hence recently it was leased out to a Tinsukia based private Marwari industrialist.

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It may also be recalled that the Kebang Koret Saw Mill established by the Adis of Pasighat on a co-operative basis in 1956 had also been closed down after a few years of successful operation. It requires an in-depth study as to why the movement failed in the industrial sector in spite of congenial in-built psychological background of co-operation of the tribal communities in Arunachal.

NOTES AND REFERENCES

1. NEFA Administration, *Cottage Industries Department & its Activities 1965-66*, p. 5
2. Govt. of A.P., *Statistical Abstract*, (1989), p. 48
3. N. Rustomji, *Enchanted Frontiers*, *op. cit.*, p. 322.
4. *ibid.*
5. Govt. of India, *Public Enterprises Survey 1989-90*, Department of Public Enterprises, New Delhi, pp. 251-52.
6. Govt. of A.P., *Comptroller and Auditor General (CAG) Report*, (1985-86), pp. 99
7. *ibid.*, p. 81.
8. Govt. of A.P., *CAG Report*, (1988), pp. 92-104.
9. Govt. of A.P., *CAG Report*, (1984-85), pp. 86-110.
10. Govt. of A.P., *CAG Report*, (1988), p. 122.
11. Govt. of A.P., *CAG Report*, (1984-85), p. 126.
12. P.C. Alexander, *Industrial Estates in India*, (1963), Asia Publishing House, Bombay, p. 5.
13. K.R. Bharti, *Industrial Estates in Developing Economics*, (1976), National Publishing House, New Delhi, pp. 127-147.
14. Deepak Agrawal, *Prospects of Industrial Estates in Under-Developed Countries*, (1987), Chugh Publications, Allahabad, pp. 32-47.
15. Govt. of India, *Annual Report of Small Industries Development Organisation 1987-88*, Development Commissioner (SSI), Ministry of Industry, New Delhi, pp. 23-24.
16. Govt. of India, *Annual Report of Small Industries Development Organisation 1978-79*, Development Commissioner (SSI), Ministry of Industry, pp. 291-93.
17. Govt. of A.P., Directorate of Industries, Itanagar.

18. Govt. of A.P., *CAG Report, (1985-86), op. cit.*
pp. 45-46.
19. *ibid*, p. 49.
20. *ibid*, p. 50.
21. Govt. of A.P., *CAG Report, (1988), op. cit.*,
pp. 46-47.
22. Govt. of A.P., *CAG Report, (1985-86), op. cit.*, p. 49.
23. Govt. of A.P., Directorate of Industries, Itanagar.
24. Govt. of A.P., *CAG Report, (1989), pp. 54-57.*
25. *ibid*
26. Govt. of A.P., *CAG Report, (1979-80), p. 41.* The
Kalaktang hydel station was washed away in June 1989
flood.
27. *ibid*, p. 35.
28. Govt. of A.P., *Draft Eighth Five Year Plan (1992-97)
and Annual Plan (1992-93), Part-I, Planning &
Development Department, Itanagar, pp. 169-70.*
29. P. S. Datta, *Economic Development of Arunachal Pradesh
: A Case Study of North-Eastern Council's Role,*
(1991), Har-Anand Publications, New Delhi.
30. Govt. of A. P. *District Statistical Handbook, Dibang
Vally, 1977, P. 34.*
31. Parthasarathy Mishra, "Social, Political and
Psychological Barriers to Industrial Development of
the Tribal Areas", paper presented in the seminar on
*problems and Prospects of Industrial Development in
the North-East Region, 4-5 March 1981, Silchar.*
32. S. Dutta Choudhury, (ed), *Arunachal Pradesh District
Gazetteers, Lohit District, op. cit.*, p. 157.
33. *ibid*
34. S.D. Jha, *Rich Land and Poor People, 1983, Omsons
Publications, Guwahati, P. 156.*
35. *ibid*

35. S. Dutta Choudhury, (ed), *Arunachal Pradesh District Gazetteers, Tirap District, op. cit., p. 128.*
37. NCAER, *op. cit., p. 66.*
38. Govt. of A.P., *Annual Administration Report 1972-73, General Administration Department, Itanagar.*
39. *ibid, p. 59*
40. Govt. of A.P., *Statistical Handbook of Arunachal Pradesh 1972-73, p. 78.*
41. *ibid, p. 8*
42. Census of India, (1971), *Establishment Report, Part - III - A.*
43. Govt. of India, *Handbook of Industrial Statistics, (1989), Department of Industrial Development, Ministry of Industry, p. 186.*
44. *ibid, p. 187.*
45. Govt. of India, Office of the Registrar of Companies, Shillong.