



Report of the Study Team on Tribal Development Programmes

NAGALAND

Committee on Plan Projects
PLANNING COMMISSION
MAY 1968

R E P O R T
ON
THE STUDY IN
NAGALAND

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PREFACE

O.1 At the instance of the Planning Commission, the Committee on Plan Projects constituted in its Resolution No.COPP/Adm/16(1)/66 dated 26th October, 1966, (Annexure I) a Study Team on Tribal Development Programmes with the object of giving practical effect to the recommendations made in the Original Fourth Five Year Plan Draft Outline for the welfare of Scheduled Tribes and for assisting State Governments in evolving concrete schemes of development specially adapted to the needs and conditions of tribal communities and areas. The Team, as originally constituted, consisted of Shri P.Shilu Ao as Chairman and Sarvashri L.M.Shrikant and B.Mehta as Members. Shri B.Mehta resigned the membership of the Team on February 20, 1967 and Shri T.Sivasankar was appointed as Member in his place.

O.2 The Resolution constituting the Study Team provides for the co-option of a Member by the Study Team from each State in consultation with the Chief Minister of the State for the study of development programmes in respect of that State. For Nagaland Shri H.Zoplanga, Development Commissioner, was nominated by the State Government to function as a co-opted Member of the Study Team.

O.3 This report is based on an on-the-spot study of the various development programmes undertaken in Nagaland. The report was discussed with the State Government at the

(11)

draft stage and their suggestions and comments have been duly taken into consideration while finalising it. The Study Team wishes to thank the State authorities for the facilities provided by them for the conduct of this study.

NAGALAND



- D.C.'s HQ ⊙
- A.D.C.'s HQ ○
- S.D.O.'s HQ *
- E.A.C.'s HQ •

FIG. - 1

CHAPTER I

BACKGROUND INFORMATION

1.1 INTRODUCTION: The State of Nagaland was constituted only in December 1963. Comprising of the former Naga Hills District of Assam and the Naga Tribal (Tuensang) Area of the North East Frontier Agency, the State is divided into three districts of Kohima, Mokokchung and Tuensang. It extends between $25^{\circ} 6'$ and $27^{\circ} 4'$ North latitudes and $93^{\circ} 20'$ and $95^{\circ} 15'$ East longitudes and is bounded by Burma in the East, Assam in the West, NEFA in the North and Manipur in the South (Figure 1).

1.2 TOPOGRAPHY: The State consists of a long narrow strip of hilly country. The topography is harsh - full of hill ranges with deep gorges and steep terrains. The altitudes vary between 3,000 ft. to 10,000 ft. The climate is bracing and healthy. The summer temperature ranges from 60° F to 100° F. In the inhabited areas, snowfall is very rare. The annual rain-fall averages between 70" and 100". Most of the rains occur in the months from April to September. Because of the good soil conditions, heavy rain-fall and equable climate, the State is rich in green vegetations with sub-tropical

and temperate moist, evergreen forests with dense floor cover of herbs and shrubs. In the south-east, the tree-crop is largely coniferous. Because of shifting cultivation for centuries, virgin forests are now confined mainly to the uninhabited and inaccessible high mountain ranges only.

1.3 AREA AND POPULATION: Nagaland has an area of 16,488 sq. KM. and a population of 369,200 (1961 Census) of which the district-wise distribution is as under:

Table No. 1

Area and population of Nagaland (1961)

District	Area (Sq. KM)	Population (persons)	Scheduled Tribes (Persons)	Density Sq. KM.	Scheduled Tribes as percentage of total
1. Kohima	6,149	108,924	94,398	18	86.7
2. Mokok-chung	4,983	126,001	119,014	25	94.5
3. Tuensang	5,356	134,275	130,285	25	97.0
TOTAL	16,488	369,200	343,697	22	93.1

It may be observed that the density works out to 22 per sq. Km. as compared to 138 in India as a whole. Kohima district is more sparsely populated than the other two districts.

1.4 TRIBAL POPULATION: Almost the entire population belongs to Scheduled Tribes,* their population in 1961 was 343,697 which is over 93 per cent of the total population in the State. There is predominance of male population[@] which is 51.8 per cent. The proportion of rural population in the State is as high as 95 per cent. The Scheduled Tribes population is highly concentrated in villages, usually situated at hill tops, where 97 per cent of them have their abode. Projected population of the State in 1966 and 1971 is estimated at 401,299 and 438,539 respectively.

1.5 THE NAGAS: The people of Nagaland are known as Nagas* who are sub-divided into many separate tribes having distinctive dialects and cultural features.

Fourteen of these are major tribes, their population in

* The tribes in Nagaland have been removed from the "Scheduled Tribes List of Assam". A list of Scheduled Tribes in Nagaland is being issued shortly. In the meantime Tribes living in Nagaland are given all the benefits, accorded to the Scheduled Tribes.

@ The predominance of male population has been explained in the Census Report on Nagaland (1961) - Vol. XXIII - Part II-A, as below:

"It should also be borne in mind that the population figures include a large number of Police and Assam Rifles personnel deployed in Nagaland for security purposes, and as explained elsewhere in the tables, this is one of the factors which had unduly altered the females to males ratio".

Except some Kacharis and others.

1961 and area of concentration is indicated in Table 2 and Figure 2 respectively. It may be observed that Konyak, Ao, Sema, Angami, Lotha and Chakesang tribes among themselves constitute over three-fourth of the tribal population in Nagaland. More than half of the Nagas are Christians.

Table No. 2

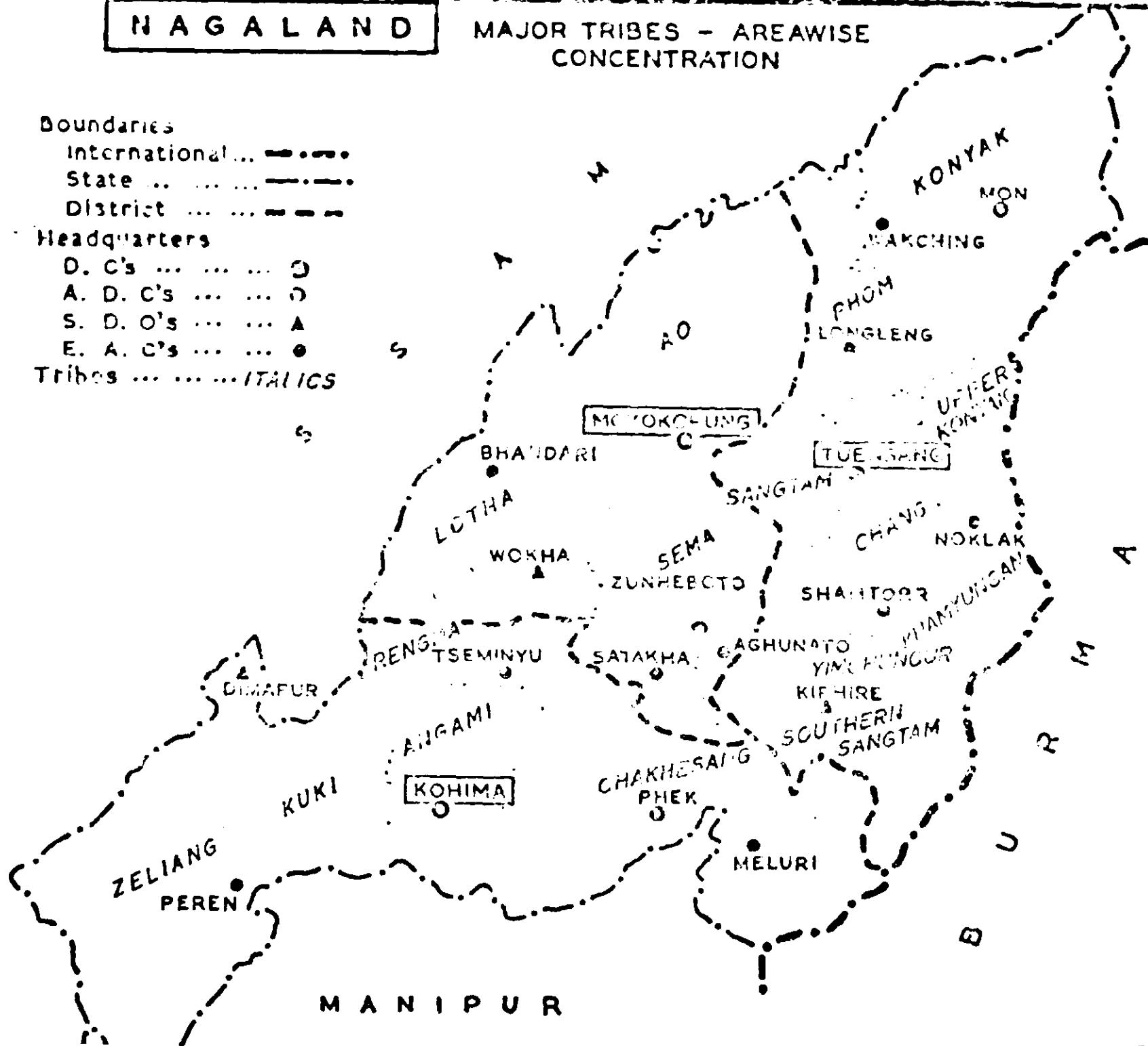
Population of major tribes in 1961

S.No.	Tribe	Population
1	Angami	33,766
2	Ao	55,924
3	Chakesang	25,942
4	Chang	11,328
5	Khiemungan	12,434
6	Konyak	59,773
7	Kuki	3,029
8	Lotha	26,565
9	Phom	13,385
10	Rengma	5,790
11	Sangtam	18,496
12	Sema	47,439
13	Yimchunger	13,848
14	Zeliang	9,460

NAGALAND

MAJOR TRIBES - AREAWISE CONCENTRATION

- Boundaries**
 International ... -.-.-
 State ... -.-.-
 District ... -.-.-
Headquarters
 D. C.'s ... ○
 A. D. C.'s ... ○
 S. D. O.'s ... ▲
 E. A. C.'s ... ●
Tribes ... *ITALICS*



1.6 LITERACY: As compared to the all India percentage of 24 in 1961, the literacy figure stood at 17.9 in Nagaland and 14.3 in the case of Scheduled Tribes in the State. Tuensang district appears to be educationally very backward as the literacy percentage therein was only 4.5 in 1961 compared to 25.4 in the rest of the State. Literacy among females in the State was as low as 11.3 per cent and a little lower i.e. 10.6 per cent among the females of the Scheduled Tribes, compared to 24 per cent among all males of the State and 19 per cent among the male population of the Scheduled Tribes.

1.7 WORKING FORCE: The working force among the Scheduled Tribes of Nagaland is reckoned at 49 per cent as per 1961 census estimates, the female participation being 51 per cent. An overwhelming majority of the Naga Tribes are engaged in Agriculture and allied pursuits which account for 93 per cent of the male and almost all the female workers. Occupational distribution of the tribal population is as under:

Table No. 3
Occupational distribution of workers among
Scheduled Tribes

Category of workers	Persons		Males		Females	
	No.	% of Total	No.	% of Total	No.	% of Total
Total S.T. Population	343,697	100.00	171,233	49.82	172,464	50.18

contd----

Category of workers	Persons		Males		Females	
	No.	% of Total	No.	% of Total	No.	% of Total
Non-workers total	141,161	100.00	71,688	50.78	69,473	49.22
Total workers	202,536	100.00	99,545	49.15	102,991	50.85
(i)As cul- tivators	192,330	94.96	91,178	91.53	101,212	98.27
(ii)As Agri- cultural labourers	2,341	1.16	1,065	1.07	1,276	1.24
(iii)In Mining, quarrying, livestock, forestry, fishing, hunting and plantation, Orchard and allied activities.	111	0.05	01	0.09	20	0.02
(iv)As house- hold Industry	34	0.02	16	0.02	18	0.02
(v)In manufac- turing other than House- hold industry	190	0.09	174	0.17	16	0.02
(vi)In con- struction	261	0.13	259	0.26	2	-
(vii) In trade and commerce	356	0.18	325	0.33	31	0.03

contd-----

Category of workers	Persons		Males		Females	
	No.	% of to- total workers	No.	% of total workers	No.	% of total workers

(viii) In
Transport,
Storage &
Communication 151 0.07 151 0.15 - -

(ix) In other
services 6,762 3.34 6,346 6.38 416 0.40

It may be seen that agriculture is the principal occupation of the Nagas followed by animal husbandry, forestry, mining, quarrying, transport, handicrafts, fishing, hunting, plantations, orchards and allied activities.

1.8 LAND USE PATTERN: No systematic survey of the land use pattern appears to have been undertaken.

However, the rough estimates in this regard are as follows:

	<u>Sq. Kms.</u>	<u>Sq. Miles</u>
1) Total geographical area	16,488	6,366
2) Area under cultivation	6,905	2,666*
3) Area under reserved forest	308	119
4) Area under protected forest	513	200
5) Land under private forest	1,813	700
6) Land for civil use	389	150
7) Remaining area including waste lands, etc.	6,555	2,531

* This figure includes areas under permanent and shifting cultivation.

Out of 2,666 sq. miles or about 17 lakh acres of land set apart for cultivation, only 48,000 acres are under permanent cultivation and the rest are under jhum or shifting cultivation which is practised on a cyclical basis. It is estimated that a little over 2 lakh acres are put under jhum every year. It would thus be seen that over 80 per cent of the area is under forests, thick jungles and shrubs.

1.9 LAND OWNERSHIP: The land is generally owned by the community, the chiefs and individuals. Joint cultivation in "Jhum" is popular. Except where terraced cultivation is practised by the Angamis and Chakesangs, there is little individualisation of agriculture. Even the forests are owned by the community i.e. Village Councils.

1.10 NO EXPLOITATION: The element of economic and social exploitation of the poor and the backward tribals by the money-lenders, businessmen or contractors does not exist in the State in the way it is obtaining in other tribal areas of the country. It may be mentioned in this regard that factors such as restricted entry of outsiders into Naga areas by an inner-line permit system, community living and joint cultivation system, restric-

tions on the award of contracts to non-tribals, etc. have been responsible for such a happy state of affairs.

1.11 AGRICULTURE: The climate is suitable for growing almost all kinds of crops. The soil is quite fertile and generally thick. The inadequate knowledge of modern agricultural methods and traditional method of Jhum cultivation have, however, been hampering agricultural development. The staple crop of the State is paddy, followed by maize and millet. Taro, pulses, oilseeds cotton, jute, sugarcane and vegetables (including potato and chillies) constitute the other main crops in the State. There is great scope for terraced cultivation on the forest hills and gentle slopes whereas horticulture can be developed in high elevations and steep hilly areas. Minor irrigation possibilities also exist but a further expansion of irrigation and power facilities is necessary.

1.12 FORESTS: Out of about 2,639 sq. Kms. of forest area, only 308 sq. Kms. come under reserved forests. Deforestation and unscientific jhuming have tended to adversely affect the forest economy of the State. The people are gradually being persuaded to

follow more scientific methods and practices of exploitation and preservation of forests. There is scope for setting up forest based industries.

1.13 CRAFTS: The people of Nagaland are noted for their skills in weaving, basket making, wood work and iron smithy. Here again their techniques of production are being modernised and supply of raw materials ensured.

1.14 MINERALS: Coal is the only mineral which is being exploited from Borjan colliery, though its production is stopped now. Brine-wells are found in some parts of Kohima and Tuensang districts where common salt is produced. Traces of limestone, coal, lignite, etc. are found in the interior places, but in the absence of any geological survey, no definite information about the quality and quantity is available.

1.15 LOCAL INSTITUTIONS: Nagas have their own effective institutions for regulating their social life and village councils composed of elders, have been in existence in Nagaland from the olden times. These institutions were strengthened by the Regulation of 1945 (Administration of Justice Regulation). After Nagaland had become a fullfledged State, the Nagaland Tribal Area, Range and Village Councils Act was enacted in 1966,

when Tribal Councils and Range Area Councils were formed with the object of strengthening local self-government on the principles of village councils and traditional laws. The law empowers these Councils to discuss and recommend schemes relating to the welfare and development of the tribes, community and areas concerned. A separate Regional Council has been constituted for a period of 10 years for the Tuensang District to fulfill the special provision embodied in the Constitution. The Deputy Commissioner functions as the ex-officio Chairman of the Council.

1.16 DEVELOPMENT PLANS: Systematic planning for economic and social development has been undertaken only from the Third Plan (1961-66) onwards. Out of 21 Community Development Blocks (including 4 pro-extension blocks) in the State, 11 are tribal development blocks.

1.17 STATISTICAL DATA: The basic facts and figures relating to the State are contained in Annexure II.

CHAPTER II

DEVELOPMENT IN NAGALAND

2.1 General: The State of Nagaland did not exist during the First and Second Five Year Plan periods. The development schemes were, however, taken up during 1958-61 on an ad-hoc basis in the Naga Hills and Tuensang Area (NHTA), as it was then called. But due to the absence of any planning or well organised implementing machinery, much progress could not be made.

2.2 Development during Second Plan Period:
During the Second Five Year Plan period, the expenditure amounted to Rs.315.72 lakhs as against the provision of Rs.433.85 lakhs. The following table indicates the Second Plan provision and the actual expenditure under different heads of development.

Table No. 4

Second Plan Provision and Expenditure

Head of Development	Plan provision (Rs. in lakhs)	Actual Expenditure	Expenditure as percentage of provision
I	2	3	4
1. Agricultural Programmes including Community Development	66.98	52.50	78.38

Head of Development	Plan provision (Rs. in lakhs)	Actual Expenditure	Expenditure as percentage of provision
1	2	3	4
2. Irrigation and Power	30.00	12.05	40.17
3. Industry and Mining	3.75	-	-
4. Transport and Communications	181.71	159.05	84.73
5. Social Services	142.90	89.92	62.93
6. Miscellaneous	2.51	2.20	87.65
Total:	433.85	315.72	72.77

2.3 Third Plan Schemes and Programmes: The Third Plan actually started in December 1963 when the new State of Nagaland came into existence. Although the original Third Plan outlay for the State was tentatively fixed at Rs.725 lakhs, the actual allocations made from year to year came to Rs.1,534.92 lakhs. The actual expenditure was Rs.1,080.57 lakhs i.e. about two third of the allocations as per details in the table below:

Table No. 5

Third Plan Allocations and Expenditure

(Rs. in lakhs)

S.No.	Head of Development	Alloca- tions	Actual Expen- diture 1961-66*	Expendi- ture as percent- age of alloca- tion
1	2	3	4	5
I	<u>Agricultural Programmes</u>			
	. Agricultural Production)			
	. Minor Irrigation)	148.05	77.20	52.14
	. Soil Conservation)			
	. Animal Husbandry	58.37	44.42	76.10
	. Forests	89.88	46.62	51.87
	. Fisheries	18.04	12.01	66.57
II	<u>Cooperation and Community Development</u>			
	. Cooperation	30.60	18.88	61.70
	. Community Development Works	101.02	82.05	81.22
	. Local Development Works	6.00	3.59	59.83
III	Power	91.40	84.84	92.82
IV	Industry and Mining including Village and Small Industries	28.42	12.64	47.44
V	<u>Transport & Communications</u>			
	. Roads	366.68	343.01	93.54
	. Road Transport	89.92	36.26	40.32
	. Tourism	5.00	-	-

*The sector-wise progress of annual expenditure is given in Annexure III.

contd....

1	2	3	4	5
VI	<u>Social Services</u>			
	. General Education)			
	. Technical Education)	166.95	128.94	77.23
	. Research and Cultural Programmes	13.84	1.41	10.19
	. Health	223.04	107.34	48.12
	. Housing	33.48	34.02	101.61
	. Town Planning	10.00	6.45	64.5
	. Tribal Development Blocks	24.25	29.53	121.77
	. Labour and Labour Welfare	3.74	-	-
VII	<u>Miscellaneous</u>			
	. Statistics	3.65	1.14	31.23
	. Information and Publicity	22.59	8.21	36.34
	GRAND TOTAL:	1534.92	1078.56	70.26

The shortfalls in expenditure were due to the difficult law and order situation and the dearth of experienced and technical personnel. Significant progress was recorded under Agriculture, Animal Husbandry, Education and Health. Shortfalls were under Minor Irrigation, Land Reclamation, Improved seeds, Power and Roads. Despite shortfalls, it was during the Third Plan period that the foundations for development in Nagaland were truly laid. The scheme-wise achievements and expenditure during Third Five Year Plan are contained in Annexure IV.

2.4 Provision for the Fourth Plan: For the Original Fourth Plan ^{draft out line} (1966-71) an outlay of Rs.2,750 lakhs was suggested by the Technical Team of the Planning Commission against the actual Third Plan expenditure of Rs.1,078.56 lakhs. The State Government, however, proposed an outlay of Rs.34.86 crores and the Planning Commission agreed to an allocation of Rs.30 crores. Table 6 gives detailed information about the outlay position under various heads of development.

Table No. 6

Original Fourth Five Year Plan (1966-71)
of Nagaland

(Rs. in lakhs)

Head of Development	<u>Fourth Five Year Plan (1966-71)</u>			
	Actual expenditure during Third Plan	Reco- mended by Tech- nical Team	Propo- sed by State Govt.	Agreed to by Planning Commission
1	2	3	4	5

I AGRICULTURAL PROGRAMMES

.Agricultural production		240	230	172
.Minor Irriga- tion	77	30	25	25
.Soil Conserva- tion		20	35	41
.Animal Husbandry	44	77	150	125
.Forests	47	110	111	110
.Fisheries	12	40	40	30
I	<u>180</u>	<u>517</u>	<u>519</u>	<u>503</u>

contd....

	1	2	3	4	5
II <u>COOPERATION & COMMUNITY DEVELOPMENT</u>					
. Cooperation	19	40	40	40	
. Community Development Works	82	80	101	100	
. Local Development Works	4	40	30	30	
	-----	-----	-----	-----	
II	105	160	171	170	
	-----	-----	-----	-----	
III POWER	85	150	262	200	
IV <u>INDUSTRY & MINING</u>					
. Large & Medium Industries	-	175	190	190	
. Mineral Development	-	1	7	7	
. Village & Small Industries	13	94	92	50	
	-----	-----	-----	-----	
III	13	270	289	247	
	-----	-----	-----	-----	
V <u>TRANSPORT & COMMUNICATIONS</u>					
. Roads	343	700	794	765	
. Road Transport	36	100	180	125	
. Tourism	-	10	22	10	
	-----	-----	-----	-----	
V	379	810	996	900	
	-----	-----	-----	-----	
VI <u>SOCIAL SERVICES</u>					
. General Education)					
. Technical Education)	129	336	425	401	
. Cultural Programme	1	4	25	10	

contd....

. Water Supply and)				
Drainage)	107	120	160	120
. Health)		145	145	145
. Housing	34	70	110)	90
. Urban Develop	6	-	90)	
. Welfare of Back-				
ward Classes				
(T.D.)	30	100	111	136
	-----	-----	-----	-----
VI	307	795	1125	932
	-----	-----	-----	-----
VII				
<u>MISCELLANEOUS</u>				
. Statistics	1	8	12	8
. Information &				
Publicity	8	40	40	40
	-----	-----	-----	-----
VII	9	48	52	48
	-----	-----	-----	-----
 GRAND TOTAL	 1078*	 2750	 3486	 3000

2.5 Priorities in the Fourth Plan: In the State's Original Fourth Plan Draft Outline, it is proposed to give priority to Agriculture and Communications. Agricultural programmes have to be given the highest priority as the economy of over 90 per cent of the entire population depends primarily upon agriculture. Provision for development of communications is also necessary in order to establish the infra-structure of economic development which has been in the process of being gradually built up.

*The exact figure is 1078.56 lakhs but as the figures of expenditure under various heads have been rounded off, the total in this table comes to Rs.1078 lakhs.

2.6 Annual Plans - Outlay and Expenditure: After the Third Plan, the State has so far prepared three Annual Plans, namely for the years 1966-67, 1967-68 and 1968-69. An outlay of Rs.511 lakhs was approved by the Planning Commission for the Annual Plan for 1966-67. Against this, the expenditure incurred amounted to Rs.482 lakhs. There was shortfall in expenditure mainly under Agricultural and Allied Programmes, Industry and Mining and Social Services. On the other hand there was a step up of expenditure in the Transport and Communications Sector. The approved outlay for the State's Annual Plan for 1967-68 was Rs.625 lakhs and the anticipated expenditure is reported at Rs.609 lakhs. The expenditure is expected to be lower under Agriculture and Allied Programmes and Power whereas it would be higher in the Transport and Communications Sector. For the Annual Plan for 1968-69, the State Government proposed an outlay of Rs.755 lakhs, against which an outlay of Rs.600 lakhs was approved by the Planning Commission. Annexure V shows the approved outlays and expenditure for the Annual Plans for 1966-67 and 1967-68 and the approved outlay for the Annual Plan for 1968-69 under various sectors of development.

2.7 Achievement of physical targets: The physical and achievements during 1966-67 as well as the physical targets/ anticipated achievements for 1967-68 under important programmes are given in Annexure VI. This Annexure also contains the targets proposed for 1968-69. It will be seen that the physical targets fixed for the year 1967-68 under Agricultural Production are expected to be achieved in full. However, shortfalls are anticipated under Power and Education.

2.8 A significant aspect of the development programmes in Nagaland: The significant aspect to be noted about the development programmes in Nagaland is that all the programmes are for tribals who constitute almost the entire population of the State. As such, unlike other States, no line of distinction need be drawn between general development programmes and those for tribal development. The dimensions of development programmes would, however, be limited by the availability of trained personnel, inputs, and capacity of the administration to implement them. In fact the requirements of trained personnel may not completely be met from within the State before the Fifth Plan period. The stability of peace in Nagaland is, however, a good augury for the

future and the day is not far off when the State will achieve a break-through in development. In order to avoid any serious imbalance in development in different parts of the State, the Study Team recommends that in the formulation of the development programmes, special attention and treatment should be given to the more backward areas like Tuensang District, Chakasang and Zoliang/Kuki areas. .

CHAPTER III

AGRICULTURE AND ALLIED SECTORS

I. AGRICULTURE

3.1 General: The State of Nagaland is one of the most under-developed regions of the country. The economy of over 90 per cent of the population in the State is entirely dependent on agriculture. Hence, improvement of agriculture has to be the principal task of development in the State for many years to come. This has to be brought about in a planned manner as there are a number of drawbacks which have to be removed.

3.2 Shifting Cultivation (Jhuming): The main problem to be tackled is that of the method of cultivation, namely, shifting cultivation or jhuming as it is locally known, which is practised in most parts of the State. It is stated that out of a total land area of 40,74,240 acres in the State, only 48,000 acres are under permanent cultivation and in about 50 per cent of the remaining area jhuming is practised. As a result, the State is deficient in foodgrains in spite of the existence of congenial climatic conditions, adequacy of rainfall and fertility of the soil where almost all types of crops can normally be grown. This is mainly because, apart from its other

serious after-effects on the land, jhuming restricts the scope for the utilization of the land in that the land once brought under jhum has to be abandoned for a number of years. It is reported that out of the total of about 16,69,000 acres of jhum land in the State, only 2,08,650 acres are being cultivated in a year. In other words, while for a population of nearly 4 lakhs, a little over 4 acres per capita of cultivable land is available, the area under actual cultivation is only about half an acre per head. Extensive agriculture is thus the only solution for the economic growth and prosperity of the people. The Technical Team appointed by the Planning Commission also has rightly stressed the need for rapid development of agriculture in the State and recommended a fairly large amount of money for the agricultural sector including various forests and soil conservation schemes.

3.3 It has to be recognised that jhuming, though a primitive method, cannot be stopped immediately because it has been the way of life of the people for centuries past. Therefore, it needs to be gradually regulated by terracing and other means, which may go along side by side with jhuming. This will, however, have to be a long term process and the programme would need to be taken up

by the Government in a big way in order to bring the widely prevalent jhuming practice under control. For this purpose, it is necessary that scientific methods of jhuming are evolved for the State as a whole so that by a process the jhuming area is reduced and more land brought under permanent rice cultivation.

3.4 Land Reclamation: The Government of Nagaland have taken up certain land reclamation schemes to bring more areas under terrace rice cultivation with a view to bringing the jhuming method of cultivation under control. However, it was understood that in certain areas in Tuensang because of the hillocks being very steep, terrace rice cultivation is generally not possible on the lands presently under jhum. The Study Team recommends that the State Agriculture Department should make a survey of these areas in order to ascertain a suitable method of cultivation. Similarly in some areas in Mokokchung district the soil has become poor due to extensive jhuming and as a result the people are reported to have started migrating from these areas in search of better agricultural lands. A similar survey should be taken up by the Agricultural Department in these areas. Further, the people of the Kohima district

have been doing extensive terrace rice cultivation but in spite of this the district is deficit in foodgrains. The Study Team recommends that the Agriculture Department should carry out a survey to find out the availability of additional land in the district in order to bring it under cultivation with a view to increasing the food production.

3.5 It is noticed that although schemes for reclamation of lands have been in progress for some years now, the actual area brought under cultivation is not adequate*. It is, therefore, necessary to ascertain how the financial assistance provided by Government for land reclamation is being utilised, how many families are settled on the reclaimed lands and how much area is actually cultivated so that steps may be taken to improve the position.

3.6 Cash Crops: Besides the permanent rice cultivation, there is considerable scope for cultivation of potato and other cash crops, particularly in Kohima District. The cultivation of these crops should, therefore, be encouraged. The Agriculture Department should take the initiative and provide necessary technical guidance as well as supply fertilisers and seeds on a 50 per cent

*The State Govt. have intimated that the progress of Land Reclamation Schemes has been very slow for want of heavy equipment, like Bull-dozers which are not available within the country.

to enable them to
subsidy basis to the cultivators/take to these crops.
Further, the Team would suggest that to meet the needs
of the people, grant of short term loans for growing
cash crops should be encouraged. The proposal for the
provision of cold storage facilities for potatoes at
Dimapur is reported to be under consideration. The
Study Team recommends that this scheme should be given
priority.

3.7 Soil Conservation: The question of soil
conservation arises because of two important factors,
namely:-

- (1) Widespread practice of shifting
cultivation, and
- (2) hilly and undulating terrain and
heavy rainfall.

Terrace cultivation is suggested as a remedy to minimise
the bad effects of shifting cultivation which include
soil erosion. The area under jhuming is estimated at
about 17 lakh acres which will eventually have to be
brought under land development. The problem is thus
a colossal one. Moreover, jhuming, which has been the
way of life of the people in Nagaland is likely to
continue for a long time. It is, therefore, necessary
to undertake a survey to size up the problem of soil

erosion and to prepare a comprehensive long-term programme of soil and water conservation to be executed in a phased manner. While areas in the valleys should be brought under terrace cultivation, the upper slopes would need to be covered by afforestation.

3.8 Setting up an Engineering Division: The Study Team feels that in order to make the State of Nagaland self-sufficient in food, appropriate schemes should be taken up to open up the valleys and the areas in the plains at the foot hills for agricultural purposes. The State's Fourth Plan should accordingly be re-orientated by the inclusion of concrete schemes for opening up the valleys even by mechanised cultivation. A phased programme should be drawn up by the Agriculture Department for draining and reclaiming the lands in the valleys. It is stated that 15 pilot projects for soil conservation and land development are to be set up during the Fourth Plan period. Since technical advice and guidance are essential for the successful execution of these projects, the Study Team recommends that a full-fledged Engineering Division may be set up in the Agriculture Department for giving proper technical advice for the reclamation of lands in the valleys and

in the plain areas at the foot hills, suggesting most appropriate means of irrigation and advising about terracing of the slopes. For the development of agriculture in the valleys the Study Team would also recommend taking up of a package scheme under Intensive Agriculture Development Programme for intensive cultivation like the one in Mandi District of Himachal Pradesh. The Government of India should provide all possible technical and financial assistance to start such projects in Nagaland. The State Government may take up this matter with the Government of India.

II ANIMAL HUSBANDRY

3.9 The people of Nagaland are meat eaters. Special emphasis has, therefore, to be laid on animal husbandry in any development programme of the State. Practically every family in the rural areas in the State owns a few pigs, some poultry and a few head of cattle. However, livestock is generally of non-descript type having poor productivity. While no estimates of livestock population in Nagaland were available at the time of the visit of the Technical Team appointed by the Planning Commission, it was felt that the number of livestock was far in excess of the carrying capacity of the land. Subsequently

it appears that the first livestock/survey* was undertaken in April 1966. Based on the results of this survey, it should now be possible for the State Government to draw up a suitable programme enunciating a clear breeding policy in the State. It will also be necessary for the State Government to take up a few schemes for ~~feed~~ and fodder development with a view to raising the quality of the livestock.

8.10 The State Government have already on hand a number of schemes for raising the productivity of the livestock through better breeding and feeding, disease control and provision of suitable marketing facilities. The original Fourth Five Year Plan Draft Outline of the State also laid emphasis on improving the health and ^{main} quality of the livestock. The Δ obstacle in undertaking the programme on a large scale is, however, the shortage

* The State Government have since intimated that due to disturbed conditions, Census could be conducted in only 317 villages and for the remaining villages, rough estimates were made. Thus, the estimated livestock population in the State is as follows:

Cattle (Cows)	76,433
Buffaloe	4,320
Goat	12,417
Sheep	259
Pigs	1,01,854
Poultry	4,38,157
Mithun	10,157
Others	522

of technical manpower within the State. Since there are no veterinary training facilities available in Nagaland, the State Government has been sending students/trainees outside the State for different veterinary courses.

3.11 In view of the continuing increased need for trained veterinary staff in the State, it would be useful if the State Government could draw up a long-term plan for the training of personnel. In this context, the possibility of providing facilities for veterinary training within the State, specially at the lower level, may also be examined*. Although a number of veterinary dispensaries have been opened in the State to provide medical aid to the needy breeders, there is no livestock research station nor are there any diagnostic and investigation laboratories in the State for effective control of diseases among livestock as proposed in the Fourth Five Year Plan Draft

Outline. The need for the establishment of these institutions may be considered by the State Government@.

*The State Government have since intimated that as a part of the long-term Plan, seats in various Institutes/Courses have been reserved in other States and attractive stipends, book-grants, etc. provided. But the response from students is not encouraging, as normally they are attracted towards Engineering, Medical courses, etc. The position may change in course of time. As such, the State Government feels that there is no immediate prospect of opening any Training Institute within the State.

@The State Government feel that due to dearth of technical personnel, there is no immediate prospect of setting up Livestock Research Station and Diagnostic and Disease Investigation Centre. A scheme has, however, been included in the 1968-69 Plan for setting up Disease Investigation Units in the 3 District Headquarter Dispensaries.

III FISHERIES

3.12 The people of Nagaland are fond of fish. However, the level of production of fish in the State was only of the order of 50 tonnes as against supplies of 400 tonnes of fish procured annually from Manipur and Assam. It is necessary, therefore, to substantially augment the fish supplies within the State. The Technical Team appointed by the Planning Commission had suggested various measures for being undertaken by the State Government for fisheries development.

3.13 The fishery programme of the State Government seeks to educate and encourage villagers in modern technique of pisciculture and it was reported that more than 500 cultivators have taken up fish rearing either individually or jointly through cooperatives. However, no intensive survey for development of pisciculture appears to have been made in the State so far. The need for such a survey is obvious for making optimum use of the existing water resources which are rather limited in so far as development of fisheries is concerned. Besides renovating the derelict tanks and bringing them under fish culture, small tanks could be constructed in the interior areas to stock carp finger links for breeding.

This would enable local needs to be met within the village itself. However, there being no professional fishermen in the State, the Fishery Department will have to provide necessary guidance and assistance to the villagers in the initial stages.

CHAPTER IV

FORESTS

4.1 Percentage Area under Forests: Forests constitute the main source of income in Nagaland. They can also provide raw materials to forest-based industries. About 15 per cent of the total area of the State is under forests. This is far short of the area which the National Forest Policy Resolution of 1952 postulates (about 60 per cent) for mountainous areas like Nagaland. The need for protection and efficient management of forests in such a situation, therefore, needs no emphasis.

4.2 Ownership of Forests: The significant fact about the forests of Nagaland is that most of them are owned by the village community or individuals. The areas under different forests are stated below:

	<u>Sq. Miles</u>	<u>Sq. Km.</u>
1) Reserved forests	119	308
2) Protected forests*	200	518
3) Private forests*	<u>700</u>	<u>1813</u>
Total forests:	1019	2639

*The figures depict a rough estimate only as the survey of the protected forests has not been completed yet. Similarly, none of the private forests has been fully surveyed as yet and the area covered by them, all over the State in patches, is difficult to guess. The rough estimates, however, place it around 700 sq. miles only. Some of these forests contain a degraded secondary growth only.

4.3 Demarcation of Forests: The major portion of the Reserved Forests in the State has been heavily exploited during the last World War. These forests do not, therefore, carry any stock of much value except in the plantation area of about 1600 acres where plantation work started just at the end of the last War and is steadily progressing every year.

4.4 The position with regard to Protected Forests is also not happy. These were demarcated only on the map and with the change of political situation, people have started encroaching into these forests for felling trees and jhuming. Immediate steps are, therefore, called for to prevent any further encroachments. For this purpose, the Technical Team appointed by the Planning Commission had recommended a survey of these forests and demarcation on the ground and later enactment of appropriate legislation to define their status. The Study Team recommends that this survey and demarcation may be completed expeditiously and thereafter a suitable working plan prepared so that these forests may be exploited scientifically and maximum benefit derived from them.

4.5 The Reserved Forests are, at present, being managed under the working plans which were drawn up when

these forests were under the Assam State. In the new set up, there is need to have a fresh look at the old working plans and to reorient them or draw up new working plans to suit present needs. A suggestion on similar lines had also been made by the Technical Team. The matter calls for immediate action on the part of the State Government as it is important that these forests are brought under scientific management without further loss of time.

4.6 Exploitation of Private Forests: As regards private forests, there are still large tracts of virgin forests carrying stocks of valuable trees both in the interior of the State as well as in the border areas. Unfortunately, the opening up of these areas in the last few years through road communications has enabled the people to exploit these forests heavily. In view of the comparatively small forest area in Nagaland, it is necessary that such heavy exploitation is checked and the forests are saved from total destruction. The State Government should, therefore, devise ways and means of exploiting these forests scientifically so that the State and the people derive the maximum benefit from these forests.

4.7 The Private forests are generally owned by an individual, a clan, a whole village or a number of villages. The immediate need is to demarcate all these forests, through systematic surveys, with the consent of the owners. This will be no easy task as out of about 1813 sq. Kms. constituting the private forests, only about 259 sq. Kms. are covered by a few large blocks while the remaining area (about 1554 sq. kms), is covered by small blocks scattered throughout the State. It is suggested that after the demarcation of the forests Government should take the initiative in enlisting the cooperation of the local leaders, whose good offices can play a vital role in moulding public opinion, to launch an intensive propaganda campaign to bring home to the people the importance of preservation and scientific exploitation of forests. Separate working plans should also be prepared by the State Government for the private forests with a view to providing advice and guidance to the owners in their management. Once the benefits are demonstrated to the people, they are not likely to raise any objection to these forests being constituted as their own reserved forests. In course of time, the undertaking of appropriate legislation to treat these

forests as reserved forests could also be considered by the State Government. With a view to raising the proportion of area under forests in Nagaland to the level recommended in the National Forest Policy Resolution of 1952, it will also be necessary for the State Government to take steps to bring more area under forests. It will be useful in this context if the land left bare after jhuming could be brought under forest cover with a view to protecting and enriching its soil by planting species best suited to the needs of jhuming cycle such as Alder, Wattle or Eucalyptus. These plantations could at the same time add to the income of the people. The State Forest Department have made certain proposals in this regard which may be examined by the ^{Union} Ministry of Food and Agriculture.

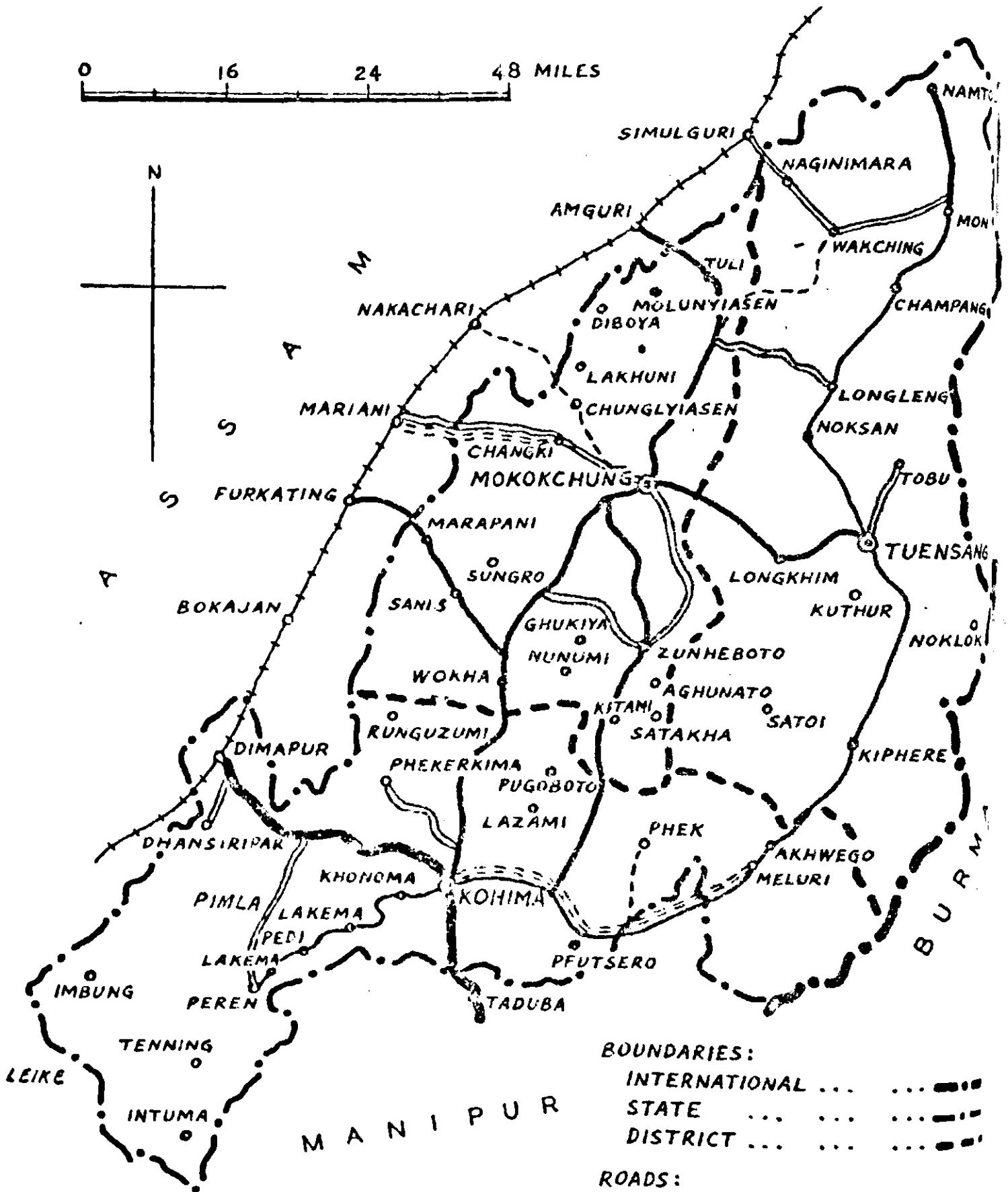
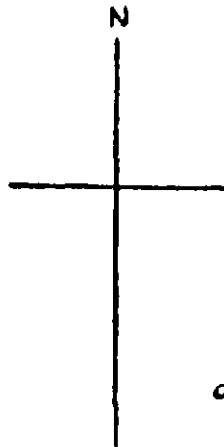
4.8 Need for technical personnel: Paucity of technical personnel in the State is likely to prove a bottleneck in the execution of any large scale forest programmes such as the ones recommended above. While it will be possible for the State Government to train up the local people in course of time, for its immediate needs it will have to depend on trained personnel from outside the State. In view of the importance of forests in the economy of Nagaland, the Study Team recommends that the

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Union Ministry of Food and Agriculture may assist the State Government in securing the services of suitable personnel on deputation from other States.

NAGALAND — ROADS

0 16 24 48 MILES



BOUNDARIES:

- INTERNATIONAL
- STATE
- DISTRICT

ROADS:

- NATIONAL HIGHWAY
- STATE HIGHWAY
- MAJOR DISTRICT ROAD
- OTHER DISTRICT ROAD
- BORDER ROAD
- IMP. VILLAGE ROAD

RAILWAY

CHAPTER V

TRANSPORT AND COMMUNICATIONS

5.1 Existing Major Roads: Transport in Nagaland is dependent mainly on roads and being a border State, they have to be given a high priority. Although considerable progress has been made with regard to road construction and over 30% of the Third Plan expenditure was incurred on roads, the position with regard to the accessibility of the various areas, particularly during the monsoon, is still far from satisfactory. Apart from the National Highway No.39 connecting Kohima with Dimapur on the one side and Manipur border on the other (extending over a distance of 69 miles) and a few other State Highways and District Roads (having a total mileage of 75), no other roads in the State are surfaced. These comprise 2132 miles of unsurfaced roads suitable for jeeps and other light vehicles. However, besides the 69 miles of National Highway connecting Manipur with Nagaland, only 237 miles of road are fit for three tonners.

5.2 Construction of additional roads: It will be seen from the map that Tuensang district is particularly lagging behind in road development. The Study Team recommends that the following three roads in that area should be given priority in road construction work:

- i) Tuensang-Champang-Mon road - 157 kms.
- ii) Tuensang-Melori road via Shamatorr and Kiphire - 190 Kms.
- iii) Tuensang-Tobu road - 57 kms.

The Study Team also feels that areas which remain cut off during the monsoon need to be opened up by the construction of new roads. Although economic considerations have to be taken into account while formulating programmes for road development, yet in view of the urgent need for developing this area communications have to be given the highest priority as it is on communications that all the other development depends. The availability of adequate traffic should not, in the view of the Study Team, be made a pre-condition for the construction of roads in such areas as in view of the backwardness of the people and the lack of transport facilities available to them, it will be some time before they can make use of the roads effectively.

5.3 Improvement of existing roads: As stated earlier, out of the total unsurfaced road milcage of 2182, only 237 miles of roads are fit for three tonners. This is standing in the way of extension of bus services to important centres. The existing roads, therefore, need to be improved so that they can cater to all kinds of

traffic all the year round. The Study Team recommends that adequate provision may be made for this purpose in the State's ^{NEL} Fourth Five Year Plan.

5.4 Programme for future roads: In the road programme, the needs of administration, defence and economic development should be taken into account. The Study Team recommends that a survey should be made to ascertain the needs of new economic roads to open up the valleys and areas in the foot hills of economic importance. The State Government may set up a small team of officers belonging to the PWD, Forest and Agriculture Departments for undertaking such a survey and suggesting a road programme with proper priorities. The Study Team, however, considers that in the interest of the economic development of Nagaland, the roads in the State should be linked with those in the neighbouring States. It would also be in the interest of these States to cooperate in road construction programme. Such cooperation is particularly needed in the construction of Rajabari road and Kohima-Bokajan road. Since roads provide an infra-structure for socio-economic development, controversies should not be allowed to come in the work of road construction as in the

process, it is ultimately the overall economy of the country which is involved.

5.5 Maintenance of roads constructed by Block Agencies:

During the tour of the Study Team, representations were made by the local leaders that roads constructed by Block Agencies were not being properly maintained as the Block Budgets did not provide any funds for maintenance. Since in the absence of proper maintenance, roads ultimately fall into disuse, the expenditure incurred on their construction becomes infructuous. It is necessary that adequate funds are provided from the general budget for the maintenance and upkeep of approach and other roads.

5.6 Road Transport: Transport throughout the State of Nagaland is only by roads. With a view to providing easy transport in the State, the State Government has rightly organized a State Road Transport Organization. Operation of passenger bus services on important routes of the State was started in 1965. Except Phek and Kiphire, all the main headquarter towns, viz. Kohima, Dimapur, Mokokchung, Zunihobote, Wokha, Tuensang and Mon are now connected by passenger bus services. Besides, goods services have also been organized. By the end of the Third Plan, the State Transport Organisation

covered a road mileage of 359 Kms by long route bus services, 200 Kms by town bus services and 215 Kms by taxi services. The total daily average operational mileage by bus was 2056 Kms, while, by taxi or car, it was 396 Kms, and on an average 1333 passengers were handled daily. The programme for the ^{original} Fourth Five Year Plan (Draft Outline) envisages expansion in the bus, car, as well as goods services. While implementing the programme, it is suggested that first priority may be given to inter-connecting the three district headquarters. Keeping this need in view, the Study Team recommends that the existing bus route should be extended from Wokha to Mokokchung so as to connect Mokokchung with Kohima. As Mokokchung-Tuensang route has already been taken up, the extension of bus route from Wokha to Mokokchung will ultimately connect Tuensang with Kohima. During discussions with the Study Team, the State officials mentioned that due to steep gradient of the road from Wokha to Mokokchung, there was need to secure 4 x 4 vehicles for use as transport between these two stations. The Study Team is glad to know that the State Government have since been able to get these vehicles released. It should now be possible to introduce the bus service

between the two towns in the near future.

5.7 Postal and Telecommunication Facilities: The need for the development of postal and telecommunication facilities in a developing economy like that of Nagaland is obvious. The Study Team observed that these facilities were lacking in Nagaland. In fact, at a few places representations were also made to the Study Team for the extension of postal and telegraph services. The all-India average for the area served by a post office today is about 13 sq. miles and a population of about 4,500 as against 57 sq. miles and 10,000 persons on the eve of independence. Compared to these, the figures for Nagaland in 1965 were 220 sq. miles and 12,700 persons respectively. If only area were to be taken into account, the number of Post Offices in Nagaland falls short of even the pre-independence standards as on the basis of its area, the State would be entitled to over a hundred Post Offices as against 29 functioning in 1965. The Study Team is glad to note that the Posts and Telegraph Department are now following a liberal policy with regard to opening of new post offices in border and very backward areas. In the backward areas, post offices are opened even when they are not remunerative and the limit of the loss per year per post office has been raised to Rs,2,500/-. Similarly, in

the case of Telegraph Offices, the Third Plan policy envisaged provision of Telegraph Offices, among other places, in Block Headquarters. The Study Team suggests that the State Government may take up the question of opening more posts and telegraph offices in Nagaland with the Posts & Telegraph Department. To start with, the aim could perhaps be to have a combined Posts and Telegraph Office in each of the Community Development and Tribal Development Blocks in the State.

5.8 Tourism: Nagaland having remained secluded and isolated for a long time, it was rarely that people would have thought of visiting the State for rest or holidaying. With the restoration of peace in the State, it should now be possible for the people from outside the State to visit Nagaland. The State has many spots of natural beauty and health resorts which could be developed to attract tourists. The State Government are taking certain preliminary steps for the promotion of tourism in the State and, as a part of this programme, it is proposed to build tourist lodges at Dimapur, Kohima, Mokokchung and Tuensang. Side by side with the provision of accommodation, it is also necessary to develop transport and recreational facilities at selected centres

for the tourists. The Study Team recommends that a nucleus Tourist Cell, to be expanded into a Tourist Bureau in due course, may be set up in the State for developing and encouraging tourism. A couple of persons possessing the necessary aptitude should be selected and sent round the various States with a view to seeing what facilities would need to be provided for the tourists in Nagaland.

5.9 Tourists like to carry souvenirs for themselves as well as for others from the places they visit. This is what provides a fillip to the economy of the tourist centres. Handicrafts and Bamboo products can be developed as possible attractions for the tourists coming to Nagaland.

CHAPTER VI

INDUSTRY AND MINERALS

6.1. Development of Industries: Organised industry had a late start in Nagaland. It was only during the Third Plan period that a beginning was made when the proposal to set up an Industrial Estate in Dimapur for the development of small scale industries was formulated and a Weaving-cum-Production Centre was started in Mokokchung. The Industrial Estate is, however, yet to be set up. So far 11 sheds have been constructed apart from the construction of Small Industries Service Institute and Extension Centres but housing facilities for labour, trainees, staff, etc. are not yet available. With the setting up of the Industries Department during the last year of the Third Plan the pace is set for undertaking industrial programmes in the State in a planned manner. The Study Team understands that a Sugar Mill, a Paper and Pulp Mill and a Veneer and Plywood Factory are proposed to be taken up during the Fourth Plan period and that considerable progress has already been made in this direction. In fact as a prelude to the setting up of a Sugar Mill, a khandsari

plant has already been set up and was commissioned on February 20, 1968. Further, the Small Industries Service Institute, Calcutta, of the Government of India, appears to have already undertaken extensive surveys of Nagaland to explore possibilities for the establishment of small scale industries there. The State Government would no doubt now be in a position to prepare concrete schemes for taking up such industries in the State. The State Government may also consider the advisability of setting up a specialised State Small Industries Corporation for giving the required impetus to the development of small industries in the State. Such Corporations have already been set up by many other State Governments with share capital entirely paid-up by them. The main functions of this Corporation may be:-

1. Running of Training-cum-Production Centres.
2. Procurement and distribution of imported and indigenous scarce raw materials.
3. Supply of machinery on hire-purchase basis.
4. Construction of industrial sheds and development of new industrial areas.
5. Assisting the small enterprises in marketing their products.
6. Running of Sales Emporia and helping in export marketing.

6.2 Initial planning for setting up new industries:

In view of the fact that there is at present no industry worth the name in Nagaland, the Study Team recommends that proposals formulated by the State Government for setting up of industries in the State should be considered sympathetically by the Government of India and necessary technical as well as financial assistance provided to the State Government. On its part, the State Government should ensure adequate planning of the projects before they are set up. Having regard to the fact that the State has had no real experience in the starting of industrial enterprises, the State Government may find it useful to depute suitable persons to study the working of similar enterprises elsewhere in the country. To ensure that the projects are completed and commissioned in time - various aspects of planning such as supply of raw materials, manpower, etc. should be given due consideration during the project formulation stage.

6.3 Village Industries and Handicrafts: Side by side

with the establishment of medium and small scale industries in the State, it would be necessary to develop village industries and handicrafts with a view to preserving and encouraging the traditional crafts and culture.

For this purpose, suitable industries may be selected keeping in view the availability of raw materials in the area.

6.4 Mineral Development: As no detailed survey of mineral resources had been conducted in the State, not much was known about its mineral potential. The only mineral which was being produced was coal and its production during 1965 was 20,147 tonnes. It was learnt that the production of coal had since been stopped.

6.5 Survey of Mineral Resources: The Technical Team appointed by the Planning Commission had suggested that a systematic survey should be undertaken by the Geological Survey of India. It is understood that preliminary investigations have since been undertaken by the Geological Survey of India and the Oil and Natural Gas Commission but the results of their investigations have not yielded any definite results for the purpose of embarking upon a worthwhile programme of mineral development in the State.

6.6 In view of the difficulties of arranging surveys of mineral resources in the State on a whole-time basis by outside agencies, the State Government have decided to organise their own Department of Geology and Mining from the current year so that a full-time geological

exploration including geological mapping and exploration of specific 'Prospects', could be taken up. The Study Team recommends that this work may be given priority and a phased programme drawn up for exploration of the mineral resources of the State so as to strengthen the economy of the State.

CHAPTER VII

POWER

7.1 General: There was hardly any electricity generated in the State prior to 1960, except for a few isolated diesel stations operated by the military authorities. In the Second Plan a beginning was made in power development and one town was electrified. In the Third Plan, 6 spill-over schemes were completed and 10 new schemes were taken up. As a result, Nagaland increased its installed capacity from 150 KW to 1295 KW. The generation was in diesel stations located in a few important towns. For the electrification of the other places the State is dependent on Assam. The State Government has entered into an agreement with the Assam State Electricity Board for bulk purchase of 6700 KW. The agreement which is for five years is due to expire in 1970-71. With this power and additional diesel schemes already taken up, the power supply available to the State will be 8600 KW by the end of the Fourth Plan period. At present 16 towns and administrative centres are electrified and the aim is to electrify another 32 towns during the current Plan period.

7.2 Need for long range perspective Plan: The Study Team understands that though a gradual reduction in the unit cost of electrical energy may result from the increase of its consumption from year to year the cost of energy, specially in the Naginimara, Changki and Tuli areas would continue to be extremely high and that any revision of the agreement already entered into with the Assam State Electricity Board in the future is not likely to bring down the cost of power purchased from Assam. Some other shortcomings of this arrangement are stated to be (i) the very long transmission lines and the frequent interruptions due to various faults which require considerable time for restoration in view of the difficult terrain on which the lines are erected; (ii) the scheme envisages receipt of power from Naharkatiya Thermal Power Station which is an isolated station and not connected to any other power grid like the other stations in Assam; there is also no other standby arrangement in case of failure in the power-station; and (iii) there will be a number of tapplings on the long length of single circuit lines in Nagaland, and, therefore, the possibilities of frequent interruptions in the power supply cannot be ruled out. Besides,

Assam has its own programme for industrial development which will place additional demands on its power systems and a stage is likely to be reached when it may not be possible for the Assam State Electricity Board to continue the existing supply of power to Nagaland, let alone meet the additional demands likely to be created in Nagaland. In view of these facts, it is necessary that a long range perspective plan for power development should be formulated for the State.

7.3 Purchase of power from Manipur: The State Government had worked out certain schemes for generating power. These schemes have, however, been found to be uneconomic by the Central Water and Power Commission. The Study Team had the benefit of advice of Shri K.L.Vij, Vice-Chairman, Central Water and Power Commission in this matter. It was learnt that investigations into a major hydro-electric scheme in the Loktak lake which had been taken up by the Manipur Administration, have since been completed. This project when commissioned, will generate 60,000 KW Power and the generation cost would be of the order of only two paise per unit. It was suggested that if Nagaland Government could be a partner in the scheme, it would obtain in the near future cheap power which will be sufficient to cover the entire demand of the

State. The Study Team understands that micro-hydel schemes for which there are possibilities in the State are recommended only when no other more economical schemes are possible in the area. Investigations of any new schemes in Nagaland would in any case take time and additional time would be needed for completing a project after the completion of investigation in gestation. The Study Team therefore recommends that the Government of Nagaland may consider the suggestion of the Central Water and Power Commission and seek the good offices of the Government of India to undertake the Loktak Hydro Electric Scheme as a joint project of the Manipur Admn. and Nagaland Government. In view of the urgent need of the State for electrical energy for domestic consumption as well as for industry, the scheme should, in the opinion of the Study Team, be given high priority.

7.4 Power for interior areas: It is doubtful if it is economical to transmit power from Manipur for use in the interior and far flung areas, specially in Tuensang. Such transmission will present difficulties in view of the difficult terrain. There would, therefore, still be need for the State of Nagaland to generate power within the State to meet a part of its demands. For this purpose

it is necessary to investigate fresh schemes. The guidelines forwarded by the Planning Commission to the various State Governments for drawing up the Draft Annual Plan for 1968-69 require that an adequate provision should be made for investigations of both hydro-electric and thermal projects for the Fifth Plan. The Study Team hopes that the State Government will bear in mind the suggestions of the Planning Commission and provide for necessary investigations for fresh schemes.

7.5 Need for fresh load survey: A load survey of the State was conducted by the Central Water and Power Commission in 1964 and it had forecast a maximum demand of 893 KW during 1967-68. This has, however, proved to be an underestimate as the actual demand in the State at present is reported to be about 1200 KW. With the growth of population and the setting up of industrial units, the demand is likely to increase. There is, therefore, an immediate need for a reassessment of the load in the State with a view to drawing up a suitable power development programme.

CHAPTER VIII

EDUCATION

8.1 Level of Literacy: The rate of Literacy in Nagaland at the time of 1961 Census was 17.9 per cent. As a result of the rapid expansion in educational facilities since then, it must be much higher now. Indeed according to the report of the Technical Team appointed by the Planning Commission, the schooling facilities at the elementary stage are quite satisfactory and can compare favourably with the all-India position. Girls are however, lagging far behind boys in regard to literacy and ^{the} level of literacy is particularly low in Tuensang District comparing unfavourably with the literacy in the other two Districts, as will be clear from the following table:

Table No. 7

PERCENTAGE OF LITERACY

<u>District</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>
Kohima	29.87	10.81	20.09
Mokokchung	37.09	21.84	29.63
Tuensang	6.97	1.84	4.47
Nagaland	69.44	30.50	17.91

Special steps are, therefore, necessary to narrow the gap in progress as between boys' education and girls' education and to raise the level of literacy in Tuensang.

8.2 Need for consolidation: The table below indicates the position with regard to educational institutions and enrolment at the end of Second and Third Five Year Plans:

Table No. 8

Educational Institutions and Enrolment

Sl. Category No. of Institutions	Position at the end of Second Year Plan Period 1960-61		Increase during Third Five Year Plan 1965-66		Position at the end of Third Five Year Plan 1965-66		Percent- age of Increase	
	No	Enrol- ment	No	Enrol- ment	No	Enrol- ment	No	Enrol- ment
1.L.P. Schools	458	38777	342	18709	800	57486	74.6	48.2
				Total 5656				
				Girls				
2.M.E.Schools	51	6573	87	6397	138	12970	170.5	97.3
				Total 1958				
				Girls				
3.H.E.Schools	10	2117	21	3005	31	5122	210.0	141.9
				Total 731				
				Girls				
4.Colleges	1	75	1	82	2	157	100.0	109.33
5.Teachers' Training Centres	1	37	2	48	3	85	200.0	129.7

It will be seen that there has been considerable expansion of educational facilities in the State, at different levels, particularly during the Third Five Year Plan. Not only has the number of institutions increased substantially, but there has also been a corresponding increase in enrolment at various levels. The increase in enrolment, however, has been at a slower pace and not in the same proportion as the increase in the number of institutions. It would, therefore, be reasonable to infer that there is much scope for additional enrolment in the institutions already established. A stage has thus reached when there is urgent need for consolidation with a view to making optimum utilisation of the facilities available. This opportunity could also be taken to bring about qualitative improvements. With this end in view, the Study Team suggests that the State Government may review their policy of taking over more schools for management. The emphasis should be on improving the standards of teaching, provision of buildings and other facilities in the existing schools, such as hostel accommodation, playgrounds and residential quarters for teachers, etc.

8.3 Training of Teachers: During the Study Team's tour of Nagaland, complaints were received about the shortage of teachers in the schools. It was subsequently indicated by the State officials during discussions that deficiencies had since been made good and that teachers had been appointed in the various schools according to the sanctioned strength. It appears, however, that most of them are untrained and this has further increased the already existing backlog of untrained teachers. There are now three Teachers' Training Centres in the State and an Institute of Education has been proposed/at the State level. School education being the base for College education, it is necessary that school teachers should be adequately trained. The State Government may, therefore, urgently take steps to accelerate the pace of training of teachers so that the quality of teaching is improved.

8.4 Inspection of Schools: While the Study Team was touring the State, representations were made on behalf of the public that there was need for strengthening the arrangements for periodical inspection of schools by augmenting the inspecting staff. The Study Team is glad to note that an additional post of Inspector of Schools

and 12 posts of Sub-Inspector of Schools have since been created by the State Government and that the Government would take steps to strengthen the staff further, if necessary.

8.5 In Service Training: The Study Team would like to emphasize the need to organise ^{training} inservice/for inspecting officers. With the setting up of an Institute of Education in the State, which is already in the offing, it should be possible to devote the necessary attention to this matter.

8.6 Education in Science, Mathematics and Agriculture: In view of the rapid advance in technology, there is need to give special importance to the teaching of science and mathematics in the schools. It has been reported that the standard of teaching in these subjects is very poor as qualified science teachers are not easily available. With a view to attracting qualified teachers for science and mathematics, it is suggested that suitable incentives should be offered.

8.7 As the economy of the State is based on forests and agriculture, there is need for giving an agricultural bias to the education in the rural areas. In view of the State's own need for a large number of agricultural

personnel, it is necessary to provide adequate facilities for agricultural courses both at the Secondary and University stages. For this purpose Agricultural Schools may be set up in selected areas and these would in due course, lead to the establishment of an Agricultural College in the State.

8.8 Strengthening of existing colleges: At present there are only two colleges in the State. These should be strengthened and the Arts and Science Departments well organized in both the colleges. As ultimately a University may need to be set up in Nagaland, it is necessary to draw up, well in time, a phased programme of expansion so that in due course facilities for post-graduate studies become available within the State.

8.9 Need for University with English medium: The State Assembly has recently resolved that English shall be the official language of the State. It would, therefore, be desirable from the long term point of view to establish a University in the State with English medium so that the Naga students do not experience any difficulty when Universities in the neighbouring States at which they are now studying switch over to the regional languages.

8.10 Educated unemployment: It will be seen from Table No.8 that the enrolment of students in educational institutions has been rapidly increasing. While there were 47,542 students pursuing courses of general education in the various schools and colleges in the State during 1960-61 the enrolment during 1965-66 numbered 75,735. It is estimated that more than 90,000 students are going to the schools and colleges today. This is a healthy sign. But, it has another aspect. In the past more than 90% of the population has been depending on agriculture but the situation is now fast changing with the spread of education. A large number of students now in schools and colleges are not likely to return to farming, particularly because farming in the State is still in a primitive stage and it will be some time before it can grow as a paying industry. The introduction of improved methods of cultivation may ultimately bring about a change in the pattern of farming and attract the educated section but it will be a long time before this can take place. Meanwhile, there will be demand for employment opportunities from the students leaving the schools. Obviously, the number of jobs cannot be expected to rise in the same proportion as the number of ^{Jobs} ~~students~~. As a

result, unemployment among educated persons is bound to assume serious proportions in the near future unless arrangements are thought of well in advance to tackle it. It is necessary to examine this matter and prepare a perspective plan for utilising this manpower. It may be useful in this context to engage experts to advise the Government on the one hand and on the other to guide the students coming out from the schools and colleges. It may also be advantageous to set up a Manpower Unit in the State to undertake manpower planning in a scientific way and on a continuing basis. The Unit could usefully achieve coordination among the various agencies participating in the process of planning, supply and utilisation of manpower, as contemplated in the ^{Original} Fourth Five Year Plan Draft Outline.

CHAPTER IX

MEDICAL AND PUBLIC HEALTH

9.1 Common diseases: The common diseases prevalent in the State are (i) Tuberculosis, (ii) Gastro-intestinal diseases, (iii) Respiratory diseases, (iv) Typhoid and Typhus group of fevers, (v) Diarrhoea and Dysentery, (vi) Infective Hepatitis, (vii) Skin diseases, (viii) Intestinal parasitic Infestation, (ix) Malaria etc. Leprosy and Goitre are detectable in certain areas only and Venereal diseases are present in a negligible form. The State has no record of any diseases in an epidemic form.

9.2 Hospitals and Dispensaries: The progress with regard to extension of medical facilities in Nagaland has been very satisfactory as will be evident from the following table:

Table No. 9

Number of Hospitals, Dispensaries, etc.

Sl. No.	Item	Position at the beginning of the Third Plan	Up-to-date position (1967-68)
1	2	3	4
1.	General Hospitals	22	31
2.	T.B. Hospitals	1	1
3.	Dispensaries	27	83

(including outposts)
contd....

1	2	3	4
4. Primary Health Centres	-		3
5. Leprosy Colonies	-		2
6. V.D. Clinic	-		1
7. Total Beds	628		725
8. Bed-Population ratio	-		1 bed for 510 persons
9. Medical Unit - Area ratio	-		1 medical Unit for 54 sq. miles.
10. National Malaria Eradication Programme (both active and surveillance phase)			1 unit
11. BCG Team			3 Teams
12. Small-pox Eradication Programme			1 Team

It will be seen that at the beginning of the Third Plan, there were 27 dispensaries, 22 general hospitals and one T.B. Hospital. There was provision for 628 beds in all these hospitals. Now, besides a T.B. Hospital, there are 83 dispensaries and 31 general hospitals with a provision of 725 beds. The State thus has one bed available for 510 persons and one medical unit for every 54 sq. miles. This is considered to be quite a high proportion as compared with other parts of the country

9.3 Shortage of personnel: The State has been experiencing an acute shortage of doctors and other para-medical personnel with the result that most of the hospitals and dispensaries are being run without the full complement of staff. It was estimated that

on December 1, 1966, at least one-third of the sanctioned posts of doctors could not be filled up. During discussions with the Study Team, the State officials indicated that 51 Naga students were receiving training in the Medical Colleges in other States and that by the end of the Fourth Plan, 22 local students were expected to come out successfully. For training medical staff other than doctors, there is already a scheme to establish a para-medical training institute during the Fourth Five Year Plan. It was reported that land for the Institute had already been acquired and that the construction of building would start soon. The Study Team recommends that this work should be given high priority so that the Institute can start functioning without avoidable delay.

9.4 Pre-medical courses: At present there are no arrangements for pre-medical courses in Nagaland and students have to be sent to different States to take up these courses. In view of the fact that a large number of medical personnel will be needed in the State on, more or less, a continuing basis and arrangements for Science education already exist in one of the existing colleges in the State and a Science wing is to be added

to the other shortly, the Study Team feels that the time is ripe for starting pre-medical courses in the State itself.*

9.5 Control of Communicable Diseases:

Malaria Eradication Programme: It is reported that the programme was started in Nagaland in the latter part of 1959 with a Malaria Eradication Unit which was divided into eight sub-Units. While upto 1964-65, only spraying of DDT was done, during 1965-66, both surveillance and spraying were carried out simultaneously. The Study Team is glad to note that as a result of the taking up of the Malaria Eradication Programme, the incidence of Malaria in the State has been brought down from 33% to 3% by the end of the Third Plan period. This is, however, many times the overall proportional case-rate of Malaria for the entire country which was 0.05 per cent in 1965. There is, therefore, need to intensify the programme to further bring down the incidence of Malaria and to reach the complete eradication stage by the end of the Fourth Plan period.

* The State Government have since pointed out that all schools and colleges in Nagaland are affiliated to the Gauhati University in Assam. The pre-medical courses have been conducted in the Gauhati Medical College only and not in any of the General Science Colleges (as is the practice in other parts of the country) in the whole of the eastern region. It is, however, still felt that pre-medical courses can be advantageously started in the existing colleges of the State.

Small-Pox: The programme of vaccination was started in Nagaland towards the end of 1962-63. However, due to paucity of doctors, no medical officer could be placed in-charge* of the team with the result that it was not possible to cover the whole of Nagaland. The Technical Team set up by the Planning Commission had stated that till September 1966, only 45% of the total population could be covered. While it is gratifying to note that not a single case of small-pox has been reported in the State, yet, necessary precautions have to be taken against its outbreak. The Study Team, therefore, recommends that the programme should be intensified and efforts made to cover the entire population in the shortest possible time.

B.C.G. Vaccination Programme: Tuberculosis is believed to be prevalent all over Nagaland though the percentage of the population affected is not known as no survey has so far been conducted. For prevention of the T.B., BCG vaccination programme is in progress and in course of time, it will be possible to cover the entire State. To accelerate the programme, one additional team was raised

* The State Government have since intimated that an Officer has already been appointed and he has taken charge of the Small-pox Eradication Programme at the State level.

during 1965-66 and at present two teams are at work.*

Leprosy: There are two Leprosy Colonies in Nagaland. But the practice of colonisation of Leprosy cases is obsolete in modern treatment. It was understood that the State Govt. had a proposal to establish Leprosy Survey, Education and Treatment Centres for imparting knowledge to the public regarding leprosy and providing domicilliary treatment. It was also indicated by the State officials that one medical officer who had been sent to Madras for training in Leprosy control and treatment has since returned and has taken charge of the Leprosy Colonies and the S.E.T. Centres. Another Doctor is currently receiving training in surgical treatment at Vellore. Steps would need be taken to properly organize leprosy surveys by qualified doctors and for giving treatment to the leprosy patients who are reported mostly in Tuensang district and Zeiliang area.

9.6 Need for Consolidation: The State has so far concentrated on the setting up of hospitals and dispensaries and on programmes of eradication such as Malaria and Small-pox. While the eradication programmes have no doubt to be continued and even intensified, a stage has now been reached when more stress needs to be laid on public health and preventive measures rather than on the establishment of new hospitals and dispensaries in the immediate future. The aim of the entire health programme has, therefore,

*The Study Team has since been informed that a third BCG Team has already been set up and is functioning in Tuensang district. One officer has been appointed and he he taken charge of the Team.

to be one of consolidation with a view to ensuring better and fuller utilisation of the existing facilities rather than of making additions to these facilities quantitatively. Accordingly, steps should now be taken to fill all the vacant posts of doctors and to strengthen the existing hospitals and dispensaries with adequate medicinal supplies and equipment and for expanding their coverage. There may still be some remote areas which may not be easily accessible to dispensaries or hospitals. For such areas, arrangements may be made, as recommended by the Technical Team of the Planning Commission, to provide first aid boxes in the schools and at other suitable places. The Director of Health Services and District Medical Officers should jointly chalk out a programme so that medical coverage for the people in the districts and sub-divisions, is provided at least once a year. The Study Team feels that such a programme can be put through without much difficulty because more roads have been constructed opening up the interior areas.

The State Government should also take steps to appoint an adequate number of specialists for providing specialised treatment in district hospitals,

etc. For this purpose, specialisation by the State doctors in various fields should be encouraged and facilities provided liberally.

9.7 Health Education: Among the main causes of diseases prevalent among the population in Nagaland are (i) ignorance in matters of personal health and hygiene, (ii) unhygienic local practices and (iii) irregular dieting and imbalance in nourishment. There is an urgent need, therefore, for the spread of health education with a view to imparting knowledge of basic principles of health and nutrition to the people. The Technical Team appointed by the Planning Commission had in their report recommended the highest priority for such a programme. They had also recommended that suitable books and literature in the regional languages might be prepared for the use of the school going children as well as the grown-up people. Another recommendation made by them related to the provision of compulsory teaching of health education at least for two periods in a week to students in the schools. The Study Team considers the recommendations of the Technical Team useful and would urge that these may be implemented by the State Government without delay. In this connection,

it may be worthwhile establishing a Health Bureau in the State Medical and Public Health Department for drawing up and undertaking concrete schemes for the spread of health education. To start with, the Bureau might arrange for distribution, among the people, of translations of suitable Health Education Material brought out by the Central Health Education Bureau of the Union Ministry of Health.

9.8 Water Supply: At the time of the visit of the Study Team to Nagaland, it was noticed that water supply schemes in the State were being operated by three agencies, namely, the Public Works Department, Public Health Department and the Block authorities. The Study Team felt that there was need to coordinate the activities of the various agencies in the interest of better and effective implementation of these schemes. It is learnt that the Public Health Engineering Wing under the Medical Department has since been transferred to the control of the Chief Engineer, PWD. There are thus two agencies to execute the water supply schemes viz. PWD for all major and minor schemes and the Blocks for minor or small schemes costing not more than Rs.20,000 each. The control of the entire water supply





programme now vests in the Development Commissioner and the Planning Secretary. It is hoped that this arrangement would ensure the execution of the schemes in a coordinated manner and avoid any possible duplication or overlapping of activities on the part of the agencies incharge of the programme.

9.9 Extent of Problem: The problem of water supply in Nagaland is very acute. Only a small percentage of villages has been provided with good drinking water supply. This is because most of the villages are situated on hill tops where water supply through gravitation is not possible or is very expensive, adequate perennial sources being located at considerable distance from the villages. A water supply survey conducted by the State Government in 1964 revealed that out of 750 villages covered by the survey, 277 villages and 8 hamlets were without any good drinking water source while 219 villages and 52 hamlets had only inadequate sources. Since then about 85 villages are reported to have been provided with water supply. Obviously a very large number of villages has still to be covered. The task of providing water supply to each and every village is a colossal one. Instead of pumping water to individual



villages at high altitudes it may be worthwhile undertaking some major schemes whereby drinking water is pumped to storage tanks in some selected villages situated at the highest altitudes for distribution by the gravitational method to villages situated at lower altitudes. Such a programme should also prove more economical in the long run than piece-meal programmes which will not only involve more expenditure but will be less comprehensive in their scope. At the suggestion of the Study Team the State Government have agreed to undertake a fresh survey to classify the villages to which water supply could be made by the gravitation or some other alternative method. The Study Team recommends that as soon as the results of the above survey become available, the State Government should take up the programme for the provision of water supply to the villages in a big way.

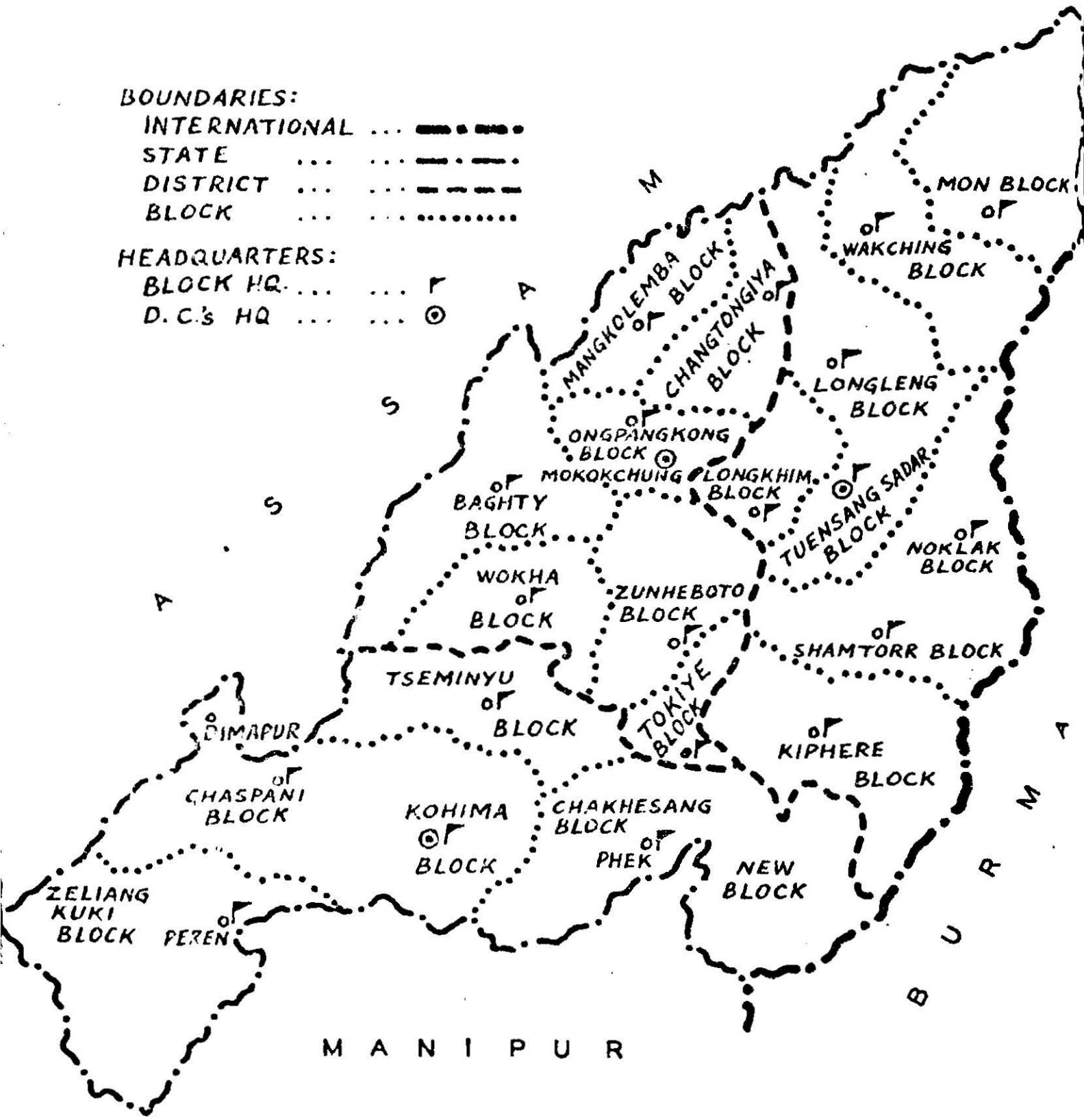
NAGALAND — DEVELOPMENT BLOCKS

BOUNDARIES:

- INTERNATIONAL ... 
- STATE ... 
- DISTRICT ... 
- BLOCK ... 

HEADQUARTERS:

- BLOCK HQ. ... 
- D.C.'s HQ ... 



N.B.— THE BOUNDARY OF THE BLOCKS RECENTLY BIFURCATED VIZ.— KOHIMA-GHASPANI, LONGLENG-TUENSANG SADAR, SHAMTORR-NOKLAK, & CHAKHESANG-NEW BLOCK HAS NOT YET BEEN DEFINED.

FIG. - 4

CHAPTER X

COMMUNITY DEVELOPMENT AND TRIBAL
DEVELOPMENT BLOCKS AND COOPER-
ATION

10.1 Existing Development Blocks: At the end of the Third Plan, the State was covered with 17 Development Blocks. At the beginning of the Fourth Plan, it was decided to bifurcate four of the Blocks which were found to be unwieldy, into eight Blocks to ensure proper supervision and better implementation. However, for various reasons, the opening of these Blocks could not be taken up during 1966-67, as contemplated. It is understood that two new Blocks have since started functioning and that the remaining two Blocks might be opened during the year bringing the total number of Community Development Blocks in the State to 21. A reference is invited in this connection to figure 4.

10.2 Upto the end of the Third Plan there were 9 Tribal Development Blocks in the State. Subsequently, with the conversion of two Blocks into Tribal Development Blocks, the total number of Tribal Development Blocks during the year 1966-67 rose to 11. It is proposed

to set up* 10 more Tribal Development Blocks during the remaining four years of the ~~Fourth Plan~~ thus covering the entire State by Tribal Development Blocks and raising the number of Tribal Development Blocks in the State to 21.

10.3 Achievements of Development Blocks: During the tour of the Study Team to Nagaland, it was found that in most cases the Blocks were understaffed and there had been frequent transfers of the Block Development Officers. The Study Team was not, therefore, able to elicit much information about the activities of the various Blocks and the impact of the developmental work undertaken by them on the tribal economy although during the Second and Third Plans a total expenditure of about Rs.150 lakhs had been incurred on the Community and Tribal Development Blocks.

10.4 Need for coordination of activities at Block Level: The Study Team feels that in the main the weakness in the administration of programmes in the State has been the lack of integration of the activities of the Blocks and of the different Development Departments. During the discussions held by the Study Team with the State officials in September, 1967, it was learnt that the

* The Government of India have since decided as a measure of policy not to convert any more blocks into T.D. Blocks.

position had considerably improved. Although most of the schemes in the Community Development Programme are agriculture based, the Block Development Officers in the State are generally appointed from the Civil Service, perhaps due to shortage of technical personnel in the Agriculture Department. As an experimental measure, four officers from the Agriculture Department have recently been appointed as Block Development Officers. It is hoped that this arrangement would help bring about effective coordination of activities of different departments and channelise all village schemes through the Block level agency.

10.5 Reorientation of programmes: Conditions in Nagaland are different from other States since general development in the State had not till recently taken place in adequate measure. Naturally, therefore, the immediate needs of the people are many and varied. The common Community Development Block pattern does not seem to be suitable to the State of Nagaland particularly because the popular contribution inherent in certain schemes cannot be secured fully at present. Nevertheless, the Community Development and Tribal Development Blocks can play a vital role in accelerating the develop-

ment in the State. For this purpose, however, it will be necessary to secure for the Block authorities much more flexibility in the programmes than is possible under what is called the schematic budget. The Study Team feels that the programme should be sufficiently flexible to enable schemes to be reoriented to suit the wishes and needs of the people. For instance, the Chakesang area in Kohima, where the saturation point has almost been reached in terracing, there should be concentration on other programmes rather than land development. The State Government may appropriately appoint a small committee, consisting of officers of the various Development Departments, to draw up, in association with the local leaders and the Block officials, a programme, with clear priorities, of the activities to be undertaken in each Block during the next two or three years.

10.6 Cooperation: The cooperative movement in Nagaland is still in its infant stage. The movement was started in 1960 with 12 Societies. By the end of the Third Plan the number was 112 with a total membership of 2519. To give an impetus to the movement, a full-fledged ^{de} Department was created and some additional

staff both at the Block level and State level was appointed. The more important societies now include Consumers and Trading, Industrial (including Weaving), Service Cooperatives, Farming and Dairy, Students' Cooperatives and Multipurpose Cooperative Societies. The Department has also seen providing facilities for training of office bearers and members of the Cooperative Societies.

10.7 The most notable amongst the achievements of the Cooperative Department has been the establishment of a chain of Consumers' Cooperative Stores and the setting up of a Cooperative Bank at Dimapur with a capital of Rs.7.5 lakhs. It is now proposed to establish branches of the State Cooperative Bank in the three districts of the State. It is recommended that action to set up these branches may be taken at an early date.* Progressive villages may be selected area-wise and Consumers Cooperatives set up there as pilot projects. More multipurpose societies may also be established in villages with a view to providing credit, and marketing facilities and meeting consumer needs.

* The State Government has since intimated that a branch of the Cooperative Bank is being opened shortly at Mokokchung. It will serve the immediate needs of the Tuensang District as well, while the Bank at Dimapur will cover the entire Kohima District.

Summary of Recommendations and Conclusions

CHAPTER II - DEVELOPMENT IN NAGALAND

1. In the formulation of the development programmes, special attention and treatment should be given to the more backward areas like Tuensang District, Chakasang and Zeliang/Kuki areas. (para 2.8)

CHAPTER III - AGRICULTURE AND ALLIED SECTORS

2. The State Agriculture Department should make a survey of such of the areas in Tuensang and Kokochung districts, where terrace rice cultivation is not generally possible on the lands presently under jhum, in order to ascertain a suitable method of cultivation. The Agriculture Department should also carry out a survey to find out the availability of additional land in the Kohima district in order to bring it under cultivation with a view to increasing the food production. (para 3.4)

3. The Agriculture Department should provide necessary technical guidance as well as supply fertilizers and seeds on a 50 per cent subsidy basis to the cultivators to enable them to take to the cultivation of potato and other cash crops. (para 3.6)

4. The proposal for the provision of cold storage facilities for potatoes at Dimapur should be given priority. (para 3.6)

5. It is necessary to undertake a survey to size up the problem of soil erosion and to prepare a comprehensive long-term programmes of soil and water conservation to be executed in a phased manner. While areas in the valleys should be brought under terrace cultivation, the upper slopes would need to be covered by afforestation. (para 3.7)

6. Appropriate schemes should be taken up to open up the valleys and the areas in the plains at the foot hills for agricultural purposes. The State's Fourth Plan should accordingly be re-oriented by the inclusion of concrete schemes for opening up the valleys even by mechanised cultivation. (para 3.8)

7. A full-fledged Engineering Division may be set up in the Agriculture Department for giving proper technical advice for the reclamation of lands in the valleys and in the plain areas at the foot hills. (para 3.8)

8. For the development of agriculture in the valleys, a package scheme under Intensive Agriculture Development Programme for intensive cultivation like the one in Mandi District in Himachal Pradesh should be taken up. The Government of India should provide all possible technical and financial assistance to start such projects in Nagaland. (para 3.8)

9. In view of the continuing increased need for trained veterinary staff in the State, it would be useful if the State Government could draw up a long-term plan for the training of personnel. (para 3.11)

10. There is need for an intensive survey for development of pisciculture. (para 3.13)

CHAPTER IV - FORESTS

11. The survey of protected forests and demarcation on the ground may be completed expeditiously and thereafter a suitable working plan prepared so that these forests may be exploited scientifically and maximum benefit derived from them. (para 4.4)

12. It is important that the reserved forests are brought under scientific management without further loss of time. (para 4.5)

13. The immediate need is to demarcate private forests, through systematic surveys, with the consent of the owners. Separate working plans should also be prepared by the State Government for the private forests with a view to providing advice and guidance to the owners in their management. (para 4.7)

14. The Union Ministry of Food and Agriculture may assist the State Government in securing the services of suitable personnel on deputation from other States for undertaking forest development programmes. (Para 4.8)

CHAPTER V - TRANSPORT AND COMMUNICATIONS

15. In view of the urgent need for developing areas which remain cut off during the monsoon, communications have to be given the highest priority. The availability of adequate traffic should not be made a pre-condition for the construction of roads in such areas. (para 5.2)

16. Adequate provision may be made in the State's Fourth Five Year Plan for improving existing unsurfaced roads. (para 5,3)

17. A survey should be made to ascertain the needs of new economic roads to open up the valleys and areas in the foot hills of economic importance. (para 5,4)

18. In the interest of the economic development of Nagaland, the roads in the State should be linked with those in the neighbouring States. (Para 5.4)

19. It is necessary that adequate funds are provided from the general budget for the maintenance and upkeep of approach and other roads. (para 5.5)

20. While implementing the programme for expansion of bus services, first priority may be given to inter-connecting the three district headquarters. (para 5.6)

21. The State Government may take up the question of opening more posts and telegraph offices in Nagaland with the Posts and Telegraphs Department. (para 5.7)

22. A nucleus Tourist Cell, to be expanded into a Tourist Bureau in due course, may be set up in the State for developing and encouraging tourism. A couple of persons possessing the necessary aptitude should be selected and sent round the various States with a view to seeing what facilities would need to be provided for the tourists in Nagaland. (para 5.8)

CHAPTER VI - INDUSTRY AND MINERALS

23. The State Government may consider the advisability of setting up a specialised State Small Industries Corporation for giving the required impetus to the development of small industries in the State. (para 6.1)

24. The proposals formulated by the State Government for setting up of industries in the State should be considered sympathetically by the Government of India and necessary technical as well as financial assistance provided to the State Government. (para 6.2)

25. The Department of Geology and Mining may be organised on a priority basis and a phased programme drawn up for exploration of the mineral resources of the State. (para 6.6)

CHAPTER VII - POWER

26. The Government of Nagaland may seek the good offices of the Government of India to undertake the Loktak Hydro-Electric Scheme as a joint project of the Manipur Administration and Nagaland Government. (para 7.3)

27. There is need for a reassessment of the load in the State with a view to drawing up a suitable power development programme. (para 7.5)

CHAPTER VIII - EDUCATION

28. The State Government may review their policy of taking over more schools for management. The emphasis should be on improving the standards of teaching, provision of buildings and other facilities in the existing schools, such as hostel accommodation, playgrounds and residential quarters for teachers, etc. (para 8.2)

29. The State Government may urgently take steps to accelerate the pace of training of teachers so that the quality of teaching is improved. (para 8.3)

30. For providing adequate facilities for agricultural courses both at the Secondary and University stages, Agricultural Schools may be set up in selected areas and these would in due course, lead to the establishment of an Agricultural College in the State. (para 8.6)

31. It would be desirable from the long term point of view to establish a University in the State with English medium. (para 8.9)

32. It may be useful to engage experts to examine the problem of unemployment among the educated persons and to advise the Government on the one hand and on the other to guide the students coming out from the schools and colleges. (para 8.10)

33. It may be advantageous to set up a Manpower Unit in the State to undertake manpower planning in a scientific way and on a continuing basis. (para 3.10)

CHAPTER IX - MEDICAL AND PUBLIC HEALTH

34. The scheme to establish a para-medical training institute during the Fourth Five Year Plan should be given high priority so that the Institute can start functioning without avoidable delay. (para 9.3)

35. There is need to intensify the Malaria Eradication programme to further bring down the incidence of Malaria and to reach the complete eradication stage by the end of the Fourth Plan period. (para 9.5)

36. The small-pox vaccination programme should be intensified and efforts made to cover the entire population in the shortest possible time. (para 9.5)

37. Steps would need to be taken to properly organize leprosy surveys by qualified doctors and for giving treatment to the leprosy patients who are reported mostly in Tuensang district and Zeiliang area. (para 9.5)

38. The State Government should take steps to appoint an adequate number of specialists for providing specialised treatment in district hospitals, etc. (para 9.6)

39. There is an urgent need for the spread of health education with a view to imparting knowledge of basic principles of health and nutrition to the people. It may be worthwhile establishing a Health Bureau in the State Medical and Public Health Department for drawing up and undertaking concrete schemes for the spread of health education. (para 9.7)

40. As soon as the results of the survey, recommended by the Study Team, to classify the villages to which water supply could be made by the gravitation or some other alternative method become available, the State Government should take up the programme for the provision of water supply to the villages in a big way. (para 9.9)

CHAPTER X - COMMUNITY DEVELOPMENT AND TRIBAL DEVELOPMENT BLOCKS AND COOPERATION

41. The State Government may appoint a small committee, consisting of officers of the various Development Departments, to draw up in association with the local leaders and the Block officials a programme, with clear priorities, of the activities to be undertaken in each Block during the next two or three years. (para 10.5)

42. More multipurpose societies may be established in villages with a view to providing credit and marketing facilities and meeting consumer needs (para 10.6)

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ANNEXURES

Annexure I
(Réference para 1.1)

Copy of Government of India, Planning Commission, Committee on Plan Projects, Resolution No. COPP/Adm/16(1)/66 dated the 26th October, 1966, setting up the Study Team on Tribal Development Programmes, and incorporating change in composition of the Study Team made subsequently.

STUDY TEAM ON TRIBAL DEVELOPMENT PROGRAMMES

No. COPP/Adm/16(1)/66: Programmes for the welfare and development of scheduled tribes form an integral part of the Five-Year Plans. Although significant progress has been achieved in several directions, it is important that during the Fourth and Fifth plan periods the process of economic and social development among tribal communities should be greatly accelerated. Rising levels of well-being, growing economic opportunities and greater integration with the rest of the population are essential both for the welfare of tribal communities and the progress of the country as a whole.

2. The Draft Outline of the Fourth Five Year plan provides substantial resources for special programmes for the welfare of tribal communities and indicates a number of directions in which current development programmes should be reoriented. In the light of past experience, it has become essential that the schemes formulated should enable the tribal communities to secure an adequate share in the benefits of general development programmes and speed up their economic and social advance. With the object of giving practical effect to these recommendations and assisting State Governments in evolving concrete schemes of development which are specially adopted to the needs and conditions of tribal areas, at the suggestion of the Planning Commission, the Committee on Plan Projects have set up a Study Team on Tribal Development programmes composed of the following:

(i) Shri P. Shilu Ao,
Former Chief Minister
of Nagaland.

Chairman

- | | |
|--|---|
| (ii) Shri I.M. Shrikant,
Secretary, Bharatiya
Adimjati Sewak Sangh
and ex-Commissioner
for Scheduled Castes
and Scheduled Tribes | Member |
| (iii) Shri T. Givasanber,
formerly Secretary in
the Union Ministries
of Irrigation and
Power and Works,
Housing and Supply
and later Lt. Governor
of Goa. | Member

(Appointed from April
12, 1967, in place of
Shri B.Mehta, IAS,
Chief Secretary,
Government of Rajasthan
who left the Study
Team on February 20,
1967, consequent on
his appointment as
Member, Official
Language (Legislative)
Commission) |

3. The Study Team will work in close cooperation with the Planning Commission, the Department of Social Welfare, the Commissioner for Scheduled Castes and Scheduled Tribes, the Department of Community Development and other Central Ministries concerned. In consultation with the Chief Ministers of States, the Study Team will co-opt one or more members in each State to function as members of the Team in relation to tribal development programmes in respect of that State.

4. The Study Team, thus enlarged, will acquaint itself first hand with the problems and needs of tribal communities in each State, appraise the working of tribal development programmes, specially during the Third Five Year Plan, and make detailed and specific recommendations regarding programmes of development to be carried out during the Fourth Five Year Plan. Particular emphasis will be given to devising measures for carrying the benefits of development in different sectors as effectively as possible to tribal communities and to the building up of the economy of tribal development blocks and tribal areas. The Study Team will give special attention to measures for strengthening the personnel and machinery for implementing programmes for tribal development in each State. It will also

suggest steps for harnessing the leadership and institutions among tribal communities so as to ensure their fullest participation in the tasks of economic and social development.

5. . The Study Team is expected to complete its work over a period of one year.

6. The headquarters of the Study Team will be at New Delhi.

7. Ordered that the RESOLUTION be published in the Gazette of India for general information.

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BASIC FACTS AND FIGURES
(Data relates to 1961 unless otherwise indicated)

Item	Unit	Particulars
Area		
Districts	Sq. Kms.	16,488
Sub-Divisions	Nos.	3
Towns	Nos.	9
Development Blocks (as delimited on 1.1.67)	Nos.	3
Villages (inhabited)	Nos.	21*
Villages (uninhabited)	Nos.	814
Total population	Nos.	14
Males	Nos.	362,200
Females	Nos.	191,027
Urban population	Nos.	178,173
Rural population	Nos.	19,157
Working population	Nos.	350,043
Workers in Agriculture	Nos.	219,310
Scheduled Tribe population	Nos.	195,954
Scheduled Caste population	Nos.	343,627
Literate persons	Nos.	126
Literacy	%	66,117
Density of population per sq.km.	Nos.	17.91 (24) ₂₂ (138)
Reporting area, 1964-65**	Thousand Hectares	13.51
Area under Forests, 1964-65**	-do-	266
Barren and Unculturable Land 1964-65**	-do-	1,033
Net area sown, 1964-65**	-do-	47
Area under Rice, 1964-65**	-do-	45
Area Irrigated, 1964-65**	-do-	12
Production of rice, 1965-66	Thousand Tonnes	43.2
Per capita consumption of Electricity, 1965-66	KWH	3.24 (60.29)

* Including 4 new pre-extension blocks.

** These figures are provisional.

Source: Indian Agriculture in Brief (Eighth Edition)

Figures given in parenthesis show All-India average.

Annexure III
(Reference Col. 4 of
Table 5)

Progress of Annual Expenditure under the
Third Five Year Plan

Actual expenditure (Rs. in lakhs)

Sl. No. Head of Development	1961-62	1962-63	1963-64	1964-65	1965-66	Total Third Plan exp.
1. Agriculture	5.20	7.56	13.20	22.23	29.01	77.20
2. Animal Husbandry and Veterinary	0.41	1.10	5.72	13.27	23.92	44.42
3. Fishery	0.52	1.37	1.15	3.60	5.37	12.01
4. Forests	1.82	4.50	7.34	15.49	17.47	46.62
5. Cooperation	0.48	2.31	0.97	6.68	8.44	18.88
6. Community Development	12.45	14.28	14.71	22.49	18.12	82.05
7. Power	4.37	3.25	2.84	5.96	68.42	84.84
8. Industries	0.80	1.01	1.03	2.28	7.52	12.64
9. Roads	41.91	44.46	35.17	77.51	143.96	343.01
10. Road Transport	-	-	4.90	9.19	22.17	36.26
11. Tourism	-	-	-	-	-	-
12. Education	8.19	10.24	18.96	36.41	55.14	128.94
13. Research and Cultural Programme	-	-	0.03	0.26	1.12	1.41
14. Health	15.50	10.12	12.61	29.01	40.10	107.34
15. Housing and Town Planning	2.33	1.16	6.53	10.00	14.00	34.02
16. T.D. Blocks	-	(0.84)*	3.96	9.87	15.70	29.53
17. Statistics	-	-	-	0.16	0.98	1.14
18. Information and Publicity	0.03	0.24	1.43	2.78	3.73	8.21
19. Local Development Works	-	-	-	-	3.59	3.59
Total:	94.01	101.60	130.55	267.19	485.21	1078.56

*Under Non-Plan

Annexure IV
(Reference Para No.2.3)

--Scheme-wise achievements and expenditure
during Third Five Year Plan

Sl.No.	Name of the Scheme	Achievements		
		Unit	Physical Actual	Financial Expenditure (Rs. lakhs)
1	2	3	4	5
I. <u>Agricultural Development Programmes</u>				
1.	Improvement of Jhuming	-	-	-
2.	Development of terrace cultivation	Acres	12738	11.90
3.	Land Reclamation	-do-	971	5.22*
4.	Horticultural Development and Area Development	-do-	962	5.42
5.	Distribution of seedlings and grafts	-do-	677	1.77
6.	Progeny orchard-cum-nursery			
	i. Demonstration orchards	No.	3)	
	ii. Nurseries	No.	3)	4.06
	iii. Acreage developed	Acres	272)	
7.	Potato Development			
	i. Potato seed farm	No.	1	0.42
8.	Plant protection schemes area covered	Acres	4656	1.42
9.	Improved Agricultural Implements		-	1.74
10.	Demonstrations on Cultivators holdings		-	0.76
II. <u>Animal Husbandry</u>				
1.	Supply of pedigree birds on subsidy basis	No.	8165	0.58
2.	Establishment of State Poultry Farms	No.	3	11.40
3.	Deep liter system family Poultry units	Units	470	0.42

*Includes cost of tractors etc.

-/-

1	2	3	4	5
4. Supply of Piggings	No.		399	0.55
5. Establishment of State Piggery farms	No.		3	6.92
6. Supply of breeding bulls	No.		259	1.02
7. Establishment of state Dairy farms	No.		3	9.02
8. Hill cattle development Unit	No.		1	0.48
9. Opening of Veterinary out-posts	No.		5	1.08
10. Veterinary dispensary	No.		4	1.26
11. Quarantine check posts	No.		6	1.93
12. Vaccination for eradication of rinderpest	No.		26111	0.60
13. Opening of Duck Farm (Demonstration centre)	No.		1	0.44
14. Sheep Farm (Demonstration Centre)	No.		1	0.54
15. Veterinary Education Training	-		-	0.75
16. Reorganisation of Department	-		-	5.17
17. Upgrading Centres	No.		9	1.86

III. Fishery Development

1. Establishment of Demonstration Centres	No.		13	3.33
2. (i) Construction of Ponds	No.		495)	4.95
(ii) Water area covered	Acres		250)	
3. Loans				
(i) Cultivators benefitted	No.		34)	
(ii) Water area covered	Acres		93)	2.77
4. Fishery intensification				
(i) Cooperative projects benefitted	No.		-	-
(ii) Water area covered	Acres		-	-
5. Education and training				
(i) Candidates passed diploma in fisheries	No.		1)	
(ii) Candidates passed Fishery demonstration training	No.		9)	0.16

1	2	3	4	5
IV. <u>Cooperation</u>				
1. Cooperative Societies formed	No.	99	-	
2. Membership	No.	NA	-	
3. Opening of consumer wholesale store	No.	2	-	
4. Rural Godowns	No.	1	-	
5. Loan advanced to cooperative Societies	No.	76		16.63
V. <u>Community Development</u>				
Tribal Development Blocks				
Community Development Blocks	-	17		82.05
Agricultural Development Programme				
1. Land brought under cultivation	Acre	1022		8.78
2. Minor Irrigation Channels	Acres	8358		6.29
3. Seeds plants improved tools, manure fertilisers	-	-		1.71
Animal Husbandry				
4. R.I.R.birds	No.	4104)		On 50%
Milch cows	No.	12)		subsidy
Breeding Bulls	No.	340)		
5. Jeepable roads	Miles	398)		11.62
Village approach roads	Miles	300)		
Porter tracks	Miles	15)		
Maintenance of roads	Miles	286)		
Drinking Water:				
Villages covered:	No.	103		5.83
Social Education Programme:				
1. Adult literacy centre	No.	25)		4.15
2. Community Centre	No.	43)		
3. Melos etc.	No.	40)		
Housing Programme:				
(i) Staff Quarter	No.	61		8.52

1	2	3	4	5
VI. <u>INDUSTRIES</u>				
1.	Handloom industry	-	-	1.92
2.	Handicraft and Cottage	-	-	0.30
3.	Village Industry	-	-	0.30
4.	Sericulture	-	-	0.82
5.	Improvement of Emporiums	-	-	0.33
6.	Exhibition	-	-	0.63
7.	Training	-	-	0.17
8.	Industrial Loans	-	-	6.97
9.	Administration	-	-	1.20
Total:				12.64
VII. <u>Road Development Programme</u>				
1.	Construction	Miles	459)	
2.	Widening and improvement	Miles	432)	
3.	Mule paths	Miles	139)	343.01
4.	Bridges	No.	15)	
5.	Metalling and surfacing	Miles	95)	
VIII. <u>Transport</u>				
(i) Route Mileage covered by nationalised transport				
	(1) By bus services	Km	359	Total expenditure for Third Plan period Rs.36.25 lakhs
	(2) By town bus services	-do-	200	
	(3) By taxi-services	-do-	215	
(ii) Total daily operational mileage				
	(1) By bus	KM	2056	
	(2) By car (Taxis)	-do-	396	

1	2	3	4	5
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(iii) Number of Vehicles

(1) Bus	No.	35
(2) Taxi	No.	9
(3) Truck	No.	16 (8 sold to other Govts.)
(4) Jeep	No.	2

IX. Health

Hospitals	No.	27	Total expenditure during the Third Plan under the head water supply and Drainage and Health was Rs. 107 lakhs.
Dispensaries	No.	31	
Medical outposts (Dispensaries manned by compounders)	No.	34	
Total beds available	No.	688	
Coverage of area by one Medical Unit	Sq.Miles	64.4	

Medical Education and Training
Progress at the end of Third Five Year Plan

Name of course	No. sent during third Plan period	No. came-out successful so far	No. still under training	Duration of courses
1. M.B.B.S.	41	2	41	6½ years including premedical course. 2 came out from the batch sent during 2nd plan period.
2. Senior Nursing course	10	5	5	3 years.
3. Lady Health Visitor	4	3	1	2½ years

Position of staff trained at staff training
School, Kohima

Name of course	No. taken during 3rd plan period	No. came-out successful	No. still under training	Duration of course	Remarks
Junior Nursing course	23	17	6	3 years	
Auxilliary Nurse Midwife course	40	-	40	2 years	
Dai Training course	20	18	-	9 months	2 failed
Compounder Training course	25	4	15	1 year	6 failed

X. Power

1. Electrification of towns by Diesel stations (completion of second five year plan spillover schemes)

No. 6

Out of 7 towns proposed to be electrified during the 2nd Five Year Plan period, only one could be electrified. Remaining 6 towns have been electrified during Third Five Year Plan
2. Installed capacity increased during Third Five Year Plan., period

K.W. 1140
3. Total capacity installed at the end of Third Five Year Plan

K.W. 1295

Annexure V
(Reference Para 2.6)

Annual Plans - Outlays and Expenditure

(Rs. in lakhs)

Head of Development	Fourth plan outlay	1966-67		1967-68	1968-69	
		Outlay	Expenditure	Outlay	Likely Expenditure	approved outlay
1	2	3	4	5	6	7

AGRICULTURAL AND ALLIED PROGRAMME

1. Agricultural Production

1.1 Agricultural production	172.00	32.89	24.09	34.21	23.57	43.30
1.2 Minor Irrigation	25.00	5.94	5.22	6.00	8.15	11.50
1.3 Soil Conservation	41.00	4.75	2.53	7.00	3.92	9.00
Total-1	238.00	43.58	31.84	47.21	35.64	63.80

2. ALLIED PROGRAMMES

2.1 Animal Husbandry	125.00	12.00	17.58	25.00	22.05	30.30
2.2 Forests	110.00	37.15	26.46	22.00	16.02	21.00
2.3 Fisheries	30.00	6.00	3.94	6.00	3.83	7.00
Total-2	265.00	55.15	47.98	53.00	41.90	58.30

Total 1 + 2 **503.00** **98.73** **79.82** **100.21** **77.54** **122.10**

3. COOPERATION AND COMMUNITY DEVELOPMENT

3.1 Cooperation	40.00	10.00	7.52	6.50	6.20	7.50
3.2 Community Development	100.00	20.00	19.76	24.00	24.00	25.00
3.3 Rural works programme	30.00	8.00	7.82	5.00	4.00	5.00
Total-3	170.00	38.00	35.10	35.50	34.20	37.50

<u>-1-</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>
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4. IRRIGATION AND POWER

4.3 Power	200.00	55.00	57.25	77.70	58.98	41.24
Total-4	200.00	55.00	57.25	77.70	58.98	41.24

5. INDUSTRY AND MINING

5.1 Large and Medium Industry	190.00	-	1.66	12.00	15.51	15.00
5.2 Village and Small Industry	50.00	18.00	8.17	15.00	12.00	10.00
5.3 Mineral Develop- ment	7.00	-	-	1.00	0.24	2.60
5.4 Weights and Measures (Commerce)	-	-	-	-	-	1.00
Total-5	247.00	18.00	9.83	28.00	27.75	28.60

6. TRANSPORT AND COMMUNICATION

6.1 Roads	765.00	110.00	143.90	150.00	175.00	128.84
6.2 Road Transport	125.00	30.00	23.83	30.00	30.00	30.00
6.3 Tourism	10.00	4.00	0.54	2.08	3.28	4.00
Total-6	900.00	144.00	168.27	182.08	208.28	162.84

1	2	3	4	5	6	7
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7. SOCIAL SERVICE

7.1 General Education	401.00	47.54	44.69	70.80	73.45	80.31
7.2 Technical Education	30.00	2.66	0.33	3.20	1.21	4.40
7.3 Cultural Programme	10.00	4.25	1.90	2.60	3.25	2.33
7.4 Health	145.00	24.00	25.39	41.00	44.09	35.00
7.5 Water Supply	120.00	26.00	18.68	36.43	38.75	40.00
7.6 Housing	50.00	14.00	14.00	10.00	10.00	10.00
7.7 Urban Development	40.00	11.00	2.03	10.00	6.88	10.00
7.8 Welfare of Backward Classes	136.00	20.00	19.70	20.00	20.00	16.25
7.9 Social Welfare	-	-	-	-	-	1.00
7.10 Public Cooperation	0.07	0.01	-	0.01	0.01	0.01
Total-7	932.07	149.46	126.72	194.04	197.64	199.30

8. MISCELLANEOUS

8.1 Statistics	8.00	1.60	0.56	1.80	0.82	2.70
8.2 Information and Publicity	38.43	6.40	4.60	5.50	4.27	5.42
8.3 Evaluation	1.50	-	-	0.17	-	0.30
Total - 8	47.93	8.00	5.16	7.47	5.09	8.42

Grand Total: 3000.00 511.19 482.15 625.00 609.48 600.00

Annexure VI
(Reference Para 2.7)

Physical targets for selected programmes
under the Annual Plans

I t e m s	Unit	Target fourth plan	Achieve- ment 1966-67	1967-68		Target 1968- 69
				Target	Achievo- ment antici- pated	
1	2	3	4	5	6	7
I. <u>Agricultural Programme</u>						
i. Foodgrains:						
(a) Production Potential created (additional)	000 tons	19.0	1.4	0.8	0.8	1.6
(b) Sugarcane Production	"	54	38	41	41	42
ii. Minor irrigation	000 acres					
Total area		15.50	3.70	3.50	3.50	4.50
iii. Improved seeds	000 acres					
Total area covered						
(a) High yielding varieties		5.00	0.4	0.80	0.80	0.90
(b) Other improved varieties		9.50	7.0	11.00	11.00	12.00
Total quantity distributed	000 tons	53.00	0.12	0.03	0.03	0.03
Plant protection	000 acres					
Total area covered		10.00	4.50	6.30	6.30	7.00

1	2	3	4	5	6	7
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(iv) Chemical fertilisers distributed in terms of

a) N	Tons	270	56	15	15	80
b) P ₂ O ₅	"	170	70	20	20	120
c) K ₂ O	"	260	5	5	5	50

Composting quantity
Green manuring
(area benefitted

Acres	450	90	90	90	100
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(v) Trained personnel

a) Agriculture Degree outturn	No.	12	11	17	17	12
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Diploma certificates	No.	36	29	52	52	49
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II. Cooperation

1. Primary Cooperative societies (Agricultural credit)

No.	45	-	2	-	4
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2. Memberships

No.	2500	-	50	-	120
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3. Rural Godowns

No.	15	-	2	-	2
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4. Primary Marketing Societies

No.	5	2	2	-	2
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III. Power

i) Installed capacity- additional

KW	5700	385	825	155	1200
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ii) Electricity Generated

Lakh KWH	34.59	18.87	35.41	16.56	84.90
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iii) Electricity sold

"	291.56	15.13	30.97	15.86	72.71
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Rural Electrification

Towns/villages electrified

Nos.	30	5	8	3	11
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1	2	3	4	5	6	7
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IV. Roads

Surfaced	KMS	394	140	170	173	203
Un-surfaced		3094	2658	2850	2696	2739

Mule paths/Bridle

Tracks						
Unsurfaced	Kms.	NA	760	NA	730	700

V. General Education

Enrolment (Additional)

1. Classes. A.B. I & II No.

Total:		15000	4014	4800	2500	1800
Girls		6000	1450	1500	900	650

2. Classes, III, IV, V and VI

Total		6000	1030	1500	1000	500
Girls		2500	425	500	425	150

3. Classes: VII, VIII, IX and X.

Total		1800	278	360	600	250
Girls		750	98	100	250	120

iv) University/college (arts, Science and commerce)

Total	No.	500	90	500	150	250
Science only	No.	250	32	250	40	65

Teachers:

i.) In elementary Schools

Number	No.	860	43	250	250	250
% of trained	%	29.89	1.50	22.75	20.33	20.33

In secondary schools

	No.	120	6	24	24	24
% of trained	%	24.15	1.23	18.23	18.23	13.28

1	2	3	4	5	6	7
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Technical Education

Polytechnics

a) No. of institution		1	-	-	-	-
b) Sanction annual admission capacity		30	2	30	30	30

VI. Health (Additional)

1. Hospitals	No.	9	-	2	3	1 (TB clinic)
2. Dispensaries						
Rural	No.	15	5	6	10	4
3. Beds	No.	212	22	84	112	50
4. Primary Health Centres	No.	15	3	3	3	3

VII. Housing

1. Low Income Group Housing	No. of tenements	NA	NA	NA	NA	25
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