

Gazetteer of India
ARUNACHAL PRADESH
Tirap District



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The Tirap District of Arunachal Pradesh, a mountainous terrain lying south of the Brahmaputra and flanked by the Patkai range separating India from Burma in this region, is inhabited by a number of hardy and energetic tribes — the Noctes, Wanchos, Tangsas, Singphos and several other tribal groups. Illustrated with rare photographs, the gazetteer presents a detailed account of the district and various aspects of life of its people. It brings out in a series of chapters of topical interest the facts as to how since independence this remote area has been undergoing a significant change towards progress and development.

The volume contains statistical data upto the year 1976-77 and a mine of important information gleaned from authentic sources.

L. N. A. C. No 17326/45/81

R. R. No 362/45/81

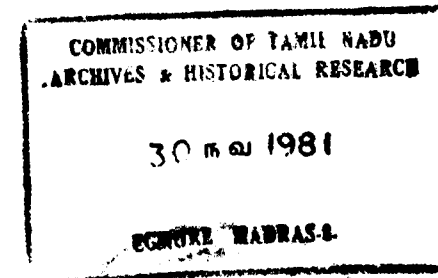
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**GAZETTEER OF INDIA
ARUNACHAL PRADESH
TIRAP DISTRICT**

T. N. A. C No. 12326/65/87

ARUNACHAL PRADESH DISTRICT
GAZETTEERS



TIRAP DISTRICT

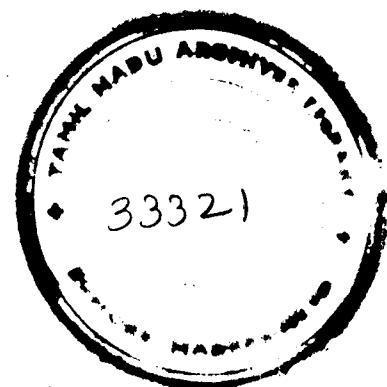
Edited by

S. DUTTA CHOUDHURY

GOVERNMENT OF ARUNACHAL PRADESH
1980

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Price : Rs. 53/-

FOREWORD

I am happy to know that the Tirap District Gazetteer is soon coming out. This will be the second volume of District Gazetteers of Arunachal Pradesh — the first one on Lohit District was published during last year.

The Gazetteer presents a comprehensive view of the life in Tirap District. The narrative covers a wide range of subjects and contains a wealth of information relating to the life style of the people, the geography of the area and also developments made so far in various sectors.

The Tirap District Gazetteer, I hope, would serve a very useful purpose as a reference book.

Raj Niwas
Itanagar-791111
May 6, 1980

R. N. HALDIPUR
Lieutenant Governor, Arunachal Pradesh

Published by Shri R. N. Bagchi
Director of Information and Public Relations
Government of Arunachal Pradesh, Shillong

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PREFACE

The present volume is the second in the series of Arunachal Pradesh District Gazetteers. The publication of this volume is the work of the Gazetteers Department of the Government of Arunachal Pradesh, carried out persistently over a number of years. In fact, the draft of Tirap District Gazetteer passed through a long course of examinations, changes and rewriting until the revised draft recommended by the Advisory Board in 1977 was approved by the Government of Arunachal Pradesh in 1978 and finally by the Government of India in 1979.

The Tirap District is inhabited by a number of tribes, who have distinct tradition and culture of their own. The conditions of life in the hills and valleys, they lived in isolatedly for centuries, remained almost unchanged until the attainment of independence, ushering an era of progress and welfare in this area. Since 1947, an all-round development of great significance has taken place in the district in social, economic, political and cultural spheres. Our task to reflect all these important facts and events on the gazetteer was far greater than our means. There is no old gazetteer of the district to be revised. We, therefore, make no claim that this volume is exhaustive, although utmost care was taken to write the gazetteer as comprehensively as the available material enabled us to do so.

This publication presents the first gazetteer of Tirap District. It contains information dating from early times and covers statistical and other numerical data upto the year 1976-77. Some more recent information is also incorporated.

I would take this opportunity of expressing my deep gratitude to Shri K. A. A. Raja, former Lt. Governor of Arunachal Pradesh, for his kind and valuable advice for improvement of this volume, and to Shri R. N. Haldipur, the present Lt. Governor of Arunachal Pradesh, who has kindly favoured us with a foreword of this gazetteer.

I am also immensely grateful to Shri I. P. Gupta, Chief Secretary to the Government of Arunachal Pradesh and Chairman of the Advisory Board, for his kind help and guidance.

I will be failing in my duty if I do not express my thanks to Dr. P. N. Chopra, M.A., Ph.D., Editor (Gazetteers), Government of India, Department of Culture and the staff of the Central Gazetteers Unit, Union Ministry of Education, New Delhi, for their effective role in planning and co-ordinating the work of preparation of the District Gazetteers. The Unit scrutinised the draft of this volume with great care and made several helpful suggestions with a view to improving the standard and quality of the publication.

The publication of this volume would not have been possible without the drafts prepared at first by Shri Parul Dutta, who was then Assistant Research Officer in Tirap, and later successively by Dr. H. Bareh and Shri S. M. K. Subhani, both of whom were Editor (Gazetteers), Arunachal Pradesh during 1965-66 and 1967-73 respectively. I am greatly indebted to all of them for their valuable contributions which enabled me to prepare the final revised draft of this gazetteer.

I would express my grateful thanks to Shri R. Yusuf Ali, former Chief Secretary, for his appraisal of the draft; Smti Vineeta Rai, the then Deputy Secretary (Political), for her valuable observations; Shri T. P. Khaund, Secretary to Lt. Governor and Shri R. P. Rai, the then Deputy Commissioner, Tirap District for the help given us. I am also grateful to Shri L. N. Chakravarty, the then Director of Research; Shri Parul Dutta, now the Director of Research; Dr. J. K. Barthakur, formerly Director of Census Operations, Arunachal Pradesh and Shri J. M. Syiem, the then Deputy Commissioner, Subansiri District, who had all painstakingly examined the draft and made constructive suggestions.

I am obliged to so many officers of various departments and district offices of the Government of Arunachal Pradesh for their contributions and co-operation that I feel I can hardly express in full measure my acknowledgement of debts to all of them. I would, in particular, thank Shri L. Massar, the then Extra Assistant Commissioner, Khonsa; Shri B. K. Ghosh, District Statistical Officer, Khonsa; Shri J. N. Chowdhury, an author and formerly the Librarian, Central Library, and Shri N. B. Mazumder, the then Statistical Inspector, Forest Department. I would also specially thank Shri I. N. Gohain, Shri A. K. Paul, Tabulation Officers and Shri K. J. Pandit, Artist, Directorate of Census Operations, Arunachal Pradesh, for the maps prepared by them.

I am grateful to Shri B. Kakoti, the then Geologist (Sr.)-in-Charge, Geological Survey of India, Arunachal Pradesh Circle, for the report on geology and mineral resources; and Dr. A. K. Ghosh, the then Officer-in-

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The co-operation extended to us by the Directorate of Information and Public Relations, Government of Arunachal Pradesh, has been very helpful. I should like to express here my grateful thanks to Shri R. N. Bagchi, for the art work and cover-design; Shri B. Goswami, Publication Officer, for the help rendered by him and the staff of the Photographic Section, for the illustrations.

I would most deeply thank my colleagues, the officers and members of the staff of the Gazetteers Department; Shri C. K. Shyam, Compiler and Shri Kamalendu Ghosh, Research Assistant, in particular, for their contributions towards publication of this volume.

Shillong
May 15, 1980

S. DUTTA CHOUDHURY

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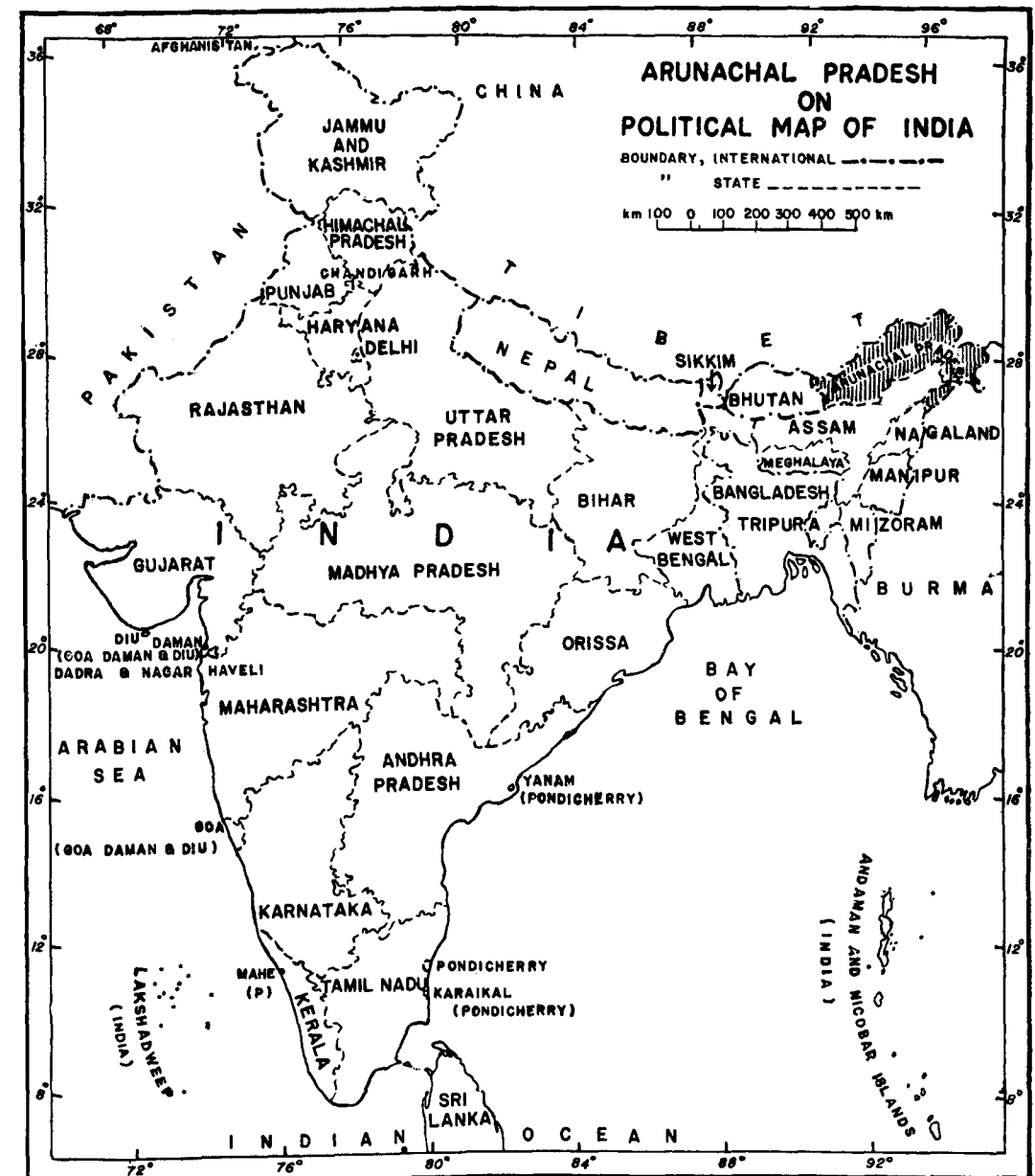
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GUIDE TO SPELLING OF SOME PLACE AND RIVER NAMES

NAME	CORRECT VERSION	NAME	CORRECT VERSION
Arunachal	... Arunāchal	Miao	... Miāo
Banfera	... Banfara	Nagaland	... Nāgāland
Barhat	... Barhāt	Naharkatiya	... Nāhorkatiya
Bogapani	... Bogāpāni	Namchik	... Nāmchik
Bordumsa	... Bardumsha	Namdapha	... Nāmdapha
Changlang	... Chānglāng	Namphai	... Nāmphāi
Dadam	... Dādām	Namphuk	... Nāmphuk
Deban	... Debon	Nampong	... Nāmpong
Disang	... Disāng	Namrup	... Nāmrup
Disangmukh	... Disāngmukh	Namsai	... Nāmsāi
Gandhigram	... Gāndhigrām	Namsang	... Nāmsang
Goalpara	... Goālpāra	Nazira	... Nāzira
Jairampur	... Jairāmpur	Pangsau	... Pangsāu
Kanubari	... Kānubāri	Pritnagar	... Pritnagar
Kathang	... Kāthāng	Rangkatu	... Rāngkātu
Koriapani	... Koriāpāni	Sibsagar	... Sibsāgar
Kumlao	... Kūmlāo	Sonari	... Sonāri
Laju	... Lāju	Tengapani	... Tengāpāni
Lekhapani	... Lekhāpāni	Tewai	... Tewāi
Makum	... Mākum	Tikak	... Tikāk
Manabum	... Mānābum	Tirap	... Tirāp
Manmao	... Mānmāo	Vijaynagar	... Vijaynagar
Margherita	... Mārgherita	Wakka	... Wākka



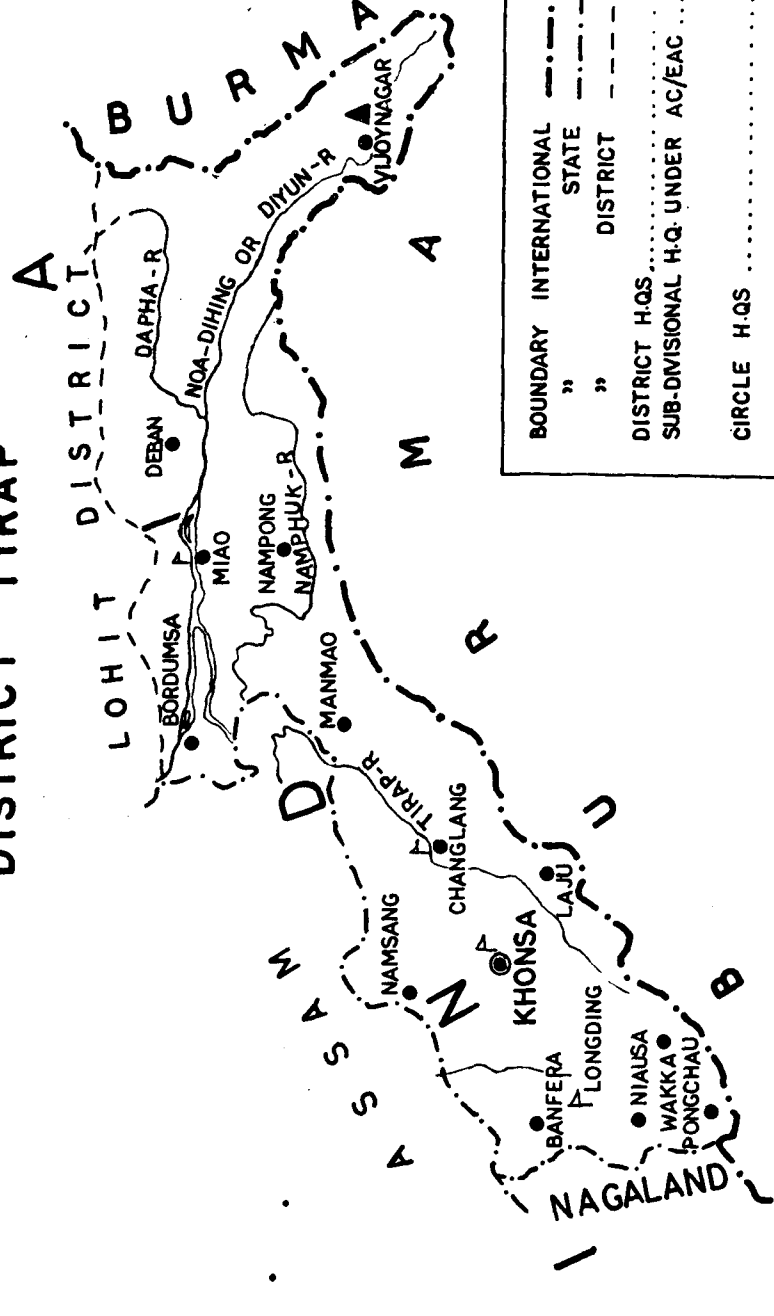
Based upon Survey of India map with the permission of the Surveyor General of India.

The territorial waters of India extend into the Sea to a distance of twelve nautical miles measured from the appropriate base line.

The boundary of Meghalaya shown on this map is as interpreted from the North-Eastern Areas (Reorganisation) Act, 1971, but has yet to be verified.

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ARUNACHAL PRADESH DISTRICT TIRAP



- BOUNDARY INTERNATIONAL ———
- " STATE - - -
- " DISTRICT - - -
- DISTRICT H.Q.S. ●
- SUB-DIVISIONAL H.Q. UNDER AC/EAC P
- CIRCLE H.Q.S. ●
- HISTORICAL/ ARCHAEOLOGICAL SITES▲

BASED UPON SURVEY OF INDIA MAP WITH THE PERMISSION
OF THE SURVEYOR GENERAL OF INDIA.

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CHAPTER I

GENERAL

PHYSICAL FEATURES AND NATURAL RESOURCES

Origin of the Name of the District and its Formation as an Administrative Unit

The name of the district has been derived from Tirap, a river that flows from south-west to north-east and then takes a westerly turn in the plains of Assam. The name appears to have had its origin in the Bodo word *ti*, meaning water.

The history of the Tirap District as an administrative unit goes back to 1943 when it was called the Tirap Frontier Tract. The tract was carved out of some areas of the Sadiya Frontier Tract and the Lakhimpur Frontier Tract. The name of the unit underwent a sequence of changes from the frontier tract to frontier division, and finally in 1965 to the Tirap District.¹

Location, General Boundaries, Area and Population

The Tirap District is an arch like south-eastern and south-western prolongations of Arunachal Pradesh adjoining Burma, and it is the only district of the Pradesh which lies entirely to the south of the Brahmaputra. Bounded on the north by the Dibrugarh District of Assam and the Lohit District of Arunachal Pradesh, on the south by Burma, on the east by Burma and on the west by the Sibsagar and Dibrugarh Districts of Assam and the Mon District of Nagaland, the district lies between the latitudes 26°40'N and 27°40'N and the longitudes 95°11'E and 97°10'E.

Smallest in area of all the districts of Arunachal Pradesh, Tirap occupies an area of 6,907 sq. km² of land with a population of 97,470 (51,774 males and 45,696 females) persons. It has in the entire Pradesh the highest density of population of 14 human souls a square kilometre, which in Arunachal Pradesh as a whole is only 6 persons. There is hardly any urban area in the district and the population is almost entirely rural.

¹ See Chapter II for a detailed account of the administrative history.
² The area figure is provisional.

Sub-Divisions and Circles

The district is divided into four sub-divisions, namely Khonsa, Changlang, Miao and Longding.

KHONSA

The Khonsa Sub-division occupies a south-western part of the district. Khonsa was established originally as an administrative centre early in 1954 under the charge of a Base Superintendent (now called Circle Officer). The headquarters of the district moved from Margherita to Khela in 1955. In 1959, the headquarters of the Deputy Commissioner (then Political Officer) was shifted to Khonsa from Khela. The local inhabitants of the sub-division are the Noctes. The Deputy Commissioner is assisted at the headquarters by an Additional Deputy Commissioner, three Extra Assistant Commissioners, an Accounts Officer and four Circle Officers.

The Sub-division is divided into three administrative circles, namely Khonsa, Laju and Namsang, of which Khonsa is directly under an Extra Assistant Commissioner, while the other two are in the charge of a Circle Officer each.

CHANGLANG

The Changlang Sub-division lies to the north-east of Khonsa Sub-division. The Tangsas and the Noctes constitute the bulk of the population. Changlang, the headquarters of this sub-division, was constituted as an administrative centre in 1954. The sub-division, which is in the charge of an Extra Assistant Commissioner, is divided into three administrative circles, namely Changlang, Nampong and Manmao, each under the charge of a Circle Officer. The Extra Assistant Commissioner is assisted at the headquarters by the Circle Officer.

MIAO

The Miao Sub-division is situated on the north and north-east of the district, inhabited by the Tangsas, Singphos and Yobins. The sub-division, which is in the charge of an Extra Assistant Commissioner, consists of four administrative circles—Miao, Bordumsa, Deban¹ and Vijoynagar. The circles are each under a Circle Officer.

LONGDING

The Longding Sub-division in the extreme south-western part of the

¹ The administrative centre at Deban shifted to Diyun in 1977.

district is inhabited by the Wanchos. It consists of four administrative circles, namely Niauxa, Banfera¹, Wakka and Panchao.

The sub-division is placed under the charge of an Extra Assistant Commissioner who is assisted by a Circle Officer at the headquarters at Longding. All the four circles are each under a Circle Officer.

Natural Divisions

The district is a rugged mountainous area except for a narrow strip of plains of the Brahmaputra Valley on the north. The Patkai mountain system forms the eastern and southern heights of the district, and it delineates the boundary between India and Burma. The mountain descends into the plains westwardly through a series of hills, which constitute the highland. The Dapha Bum is the highest point in the district, and its summit remains snow-covered for most of the year. About 85 km to the east of Dapha Bum lies the Hpungan Bum. The Patkai range varying in height has a number of passes across it, of which the Pangsau Pass is very important.

The vegetation on the whole is tropical evergreen, rain forest type and semi-evergreen according to the variations in altitude and soil conditions. There are a few grass-lands in comparatively less humid areas.

River System and Water Resources

Most of the rivers in the district flow east to west according to the gradient of the terrain. The Noa-Dihing originating from the Patkai Range, the Namphuk and other tributaries of the Burhi-Dihing, which change their course frequently, constitute the principal drainage system. These rivers become turbulent during the monsoon. The major river is the Noa-Dihing flowing east-west through the entire north-eastern and northern stretch of the district and meeting the Lohit river near Namsai in the Lohit District. The Dapha river is one of its tributaries. A flood in the Noa-Dihing and its tributaries in 1951 caused a great damage to the timber wealth of the district, but at the same time they increased the fertility of the soil by depositing silt along their courses. The Burhi-Dihing, flowing south-west by Ledo, Margherita, Jaipur and Naharkatiya, meets the Brahmaputra near Borgohaingaon in Assam. Its tributaries in the Tirap District are the Namphuk, the Namchik, the Namsang, the Namphai and the Tirap.

The Tirap river rises from a high peak between Laju and Wakka in the south-western region. It flows from south-west to north-east through the district of Tirap and then turns north and due west in the plains of the Dibrugarh District to join the Burhi-Dihing near Ledo. The Namsang

¹ The administrative centre at Banfera shifted to Kanubari.

river flows into the Burhi-Dihing forming a natural boundary at some length between the district of Tirap and Assam. The Namphuk and the Namphai rivers are in the north of the district and they flow from east to west.

Other rivers in the district are the Tisa, the Tekan, the Tiking, the Tising Ju and the Tewai. The Tisa in the southern part of the district flows south-north and receives the Tekan on the right, and the Tising Ju and Tewai on the left. The Tisa is known in the plains as Disang or Dilli which drains the Sibsagar District in Assam and meets the Brahmaputra near Disangmukh.

Besides these rivers, one noticeable hydrographic feature is some shallow lakes created by the shifting rivers. These lakes have now become natural fisheries.

The springs are the main sources of water supply to the village settlements. There are a number of brine springs and wells in the Namsang-Borduria area in the Khonsa Sub-division, from which the Noctes manufacture salt for their local consumptions and trade.

GEOLOGY

Introduction

The south of upper Assam plains and the north-east of Nagaland, a linear high hilly terrain, constitute the major part of the Tirap District. The area is formed of a great thickness of sediments predominantly of Tertiary sequence. The geological information of this area dates back to 1886 when La Touche (1886), during his reconnaissance traverse of the Noa-Dihing Valley upto Chaukan Pass, visited Miao Bum and referred to two thin coal seams exposed on the hill slopes at a distance of 2.4 km from Dihing at an elevation of 433 metres above Dihing. He also compared the rocks exposed near the Bishi village with those on the Miao Bum and gave an account of the gas seepages in the springs. In recent times, the Geological Survey of India and the Assam Oil Company have taken keen interest in the Tertiary formations of the area for oil and coal resources.

Physiography

The south-western part of the Tirap District is the continuation of the northeast-southwest trend of the Naga Hills, while in its north-eastern part the Lohit frontier ranges extend with a prominent northwest-southeast trend in the region of Vijoynagar. On the northern side, the northeast-southwest hills rise to a maximum altitude in Kuwen-Bum and Miao Bum regions of the district. Towards the south-western side, the components of the Patkai range show a similar trend and continue in southern sectors of the district.

In the Miao region, the low northwest-southeast hill of Manabum rises as an appendage of the north-east physiographic trend and extends towards upper Assam (Lohit) plains where it gradually loses its identity.

In the north-eastern part of the district, the main drainage is constituted by Tirap, Namchik and Namphuk rivers, the tributaries of the Burhi-Dihing, which flow across the north-eastern ranges. The south-western part of the district is drained by Dirak, Namsang and Tisa rivers.

Tectonics

The general geological set up of the Tirap District may be divided into two parts, namely (i) the metamorphites of the Vijoynagar area and (ii) the Tertiary formations in the rest of the district.

(i) Metamorphites

Geologically not much is known about the metamorphites within the Tirap District. However, a few traverses have indicated that the quartzites and probably slaty phyllites and mica schists continue south-eastwards from the outer ranges of the Lohit District towards the Vijoynagar area. Eastwards these rocks are bounded by the northwest-southeast trending Mishmi thrust, which also continues south-eastwards from the Lohit District. Unlike the concealed configuration of the Mishmi thrust in many parts in the Lohit District, this tectonic plane is seen to abut against the Naga thrust and other tectonic lines within the Tertiary of Tirap and upper Assam. The northeast-southwest Naga thrust appears to be restricted by the Mishmi thrust, the junction of the two being almost at right angle. But further south-east, the Tertiary formations and tectonic lines etc. show a gentle deflection in trend which approximates parallelism to the Mishmi thrust. It is generally inferred that the tectonic movements along the Mishmi thrust are sequentially later than the Pliocene movement along the Naga thrust.

(ii) Tertiary Formations

The Tertiary formations as exposed in the Tirap District are briefly outlined below:

(a) Alluvium and High Level Terraces

(b) *Disang Series*: The lowermost horizon of the Tertiary sequence in Tirap is represented by the rocks of Disang series. The Disangs constitute chiefly a thick horizon of unfossiliferous dark grey, compact shales with

frequent intercalations of hard, massive, grey or reddish coloured sandstones. These rocks are nowhere exposed north of the Disang thrust. The shaly to arenaceous facies of Disangs is typical of a miogeosynclinal depositional environment. On the south of Bogapani, the Disangs are extensively developed upto the southern limits of the district. The rocks are highly folded and faulted with the result that enormous thickness of sediments is repeated.

There are a number of brine/saline wells and springs located in the Disang series or rocks. It is, however, not known whether the source of the saline water is in the Disangs or the underlying rocks.

(c) *Barail Series*: The rocks of the Barail series occur in two types of sedimentary environments within the Tirap District; the one south of the Disang thrust belongs to the geosynclinal facies, while the other north of the Disang thrust belongs to shelf or platform facies. The northern facies characterised by the presence of coal seams and fresh to deltaic deposition occurs as narrow belts to the base of many intricate thrust scales within the belt of Schuppen. The east-west Margherita thrust along the foothills of Kuwen Bum range also exposes the coal bearing Baragolai stage and the more resource potential zones of Tikak Parbat stage in the Miao and Namchik and Namphuk areas. There are a number of coal bearing Barails towards north-eastern side around Rima, Wintong, Longchang, Motongsa villages. In the oil fields of Assam Plains, these Barail rocks are important oil bearing horizons. A few brine or saline springs/wells are also located in Barails.

The southern Barails are disposed above the Disang shales, and are characterised by the grey, fine, compact sandstones and intercalated grey to greenish shales. These rocks are often seen at the higher contours of the high ridges south of the Khonsa region and south of Longding.

(d) *Tipam Series*: The rocks belonging to Tipam series generally occur in the form of elongated wedges in which the coarse grained massive and compact sandstones and clays (Girujan clays) constitute the major lithounits. These Tipam rocks are seen north of the Disang thrust, i.e., approximately north of the line joining Bogapani, Tipang and continuing further north-eastwards. Within this area the Margherita thrust and other structures have also exposed the underlying coal bearing Barail rocks. The Tipams are also generally exposed just above the Naga thrust.

Minor coaly lenses and oil and gas shows are also known from the Tipam sandstones. One of the characteristic features of these sandstones is the first occurrence of epidote among its heavy minerals; it is possible that the epidotised Lohit Himalayan rocks which might have been uplifted during the Tipam times formed one of the provenance areas.

(e) *Namsang Beds*: Around Deomali area in the Namsang and Dihing Valleys the mottled clays, sandstones, gritty to conglomeratic sandstones with pebbles of coal (derived from Barails), and minor lignitic lenses constitute the Namsang beds. These are overlying the Girujan clays of the Tipam series.

(f) *Dihing Series*: The uppermost formation in the Tertiary rock sequence in Tirap is represented by Dihing series which is observed in the north-eastern portion of the district. They are exposed in the plains just north of the foothills of Kuwen Bum. The formation chiefly comprises a boulder bed composed of pebbles and boulders of quartzites and gneisses embedded in a matrix of loose sand and clay, and sand rocks with very soft greenish and bluish clayey bands. Carbonised wood fragments and small lenses of lignite are quite frequently seen in the sequence. The maximum thickness of the order of about 2500 metres is seen in the Manabum anticlinal structure.

MINERALS

Coal

The prominent resources of coal in Arunachal Pradesh are available in the Tirap District. The coal seams occur in the Tertiary rocks in continuity with the upper Assam coalfields. There are two coalfields located in the district, namely (a) Namchik-Namphuk coalfield and (b) Miao Bum coalfield.

(a) *Namchik-Namphuk Coalfield*: Between the two tributaries of the Burhi-Dihing river, that is Namphuk Kharasang river in the north and north-east and Namchik river in the west, the coalfield is situated about 10 km north-east of Makum coalfield of Assam. The major coal seams occur in the supra-thrust block in the Tikak Parbat stage (Barail series) which is separated by the Baragolais by the basal coal horizons. As a result of extensive survey carried out by the Geological Survey of India and others, eight coal seams (seams I to VIII) have so far been found in this area, of which seam III has a maximum thickness varying from 4.55 m to 19.00 m. The total seam-wise reserve of coal in this field is estimated at 14.28 million tonnes, but the overall potential of the area may be about six times as much.

The coals of this field generally contain high volatiles and high sulphur contents similar to those of upper Assam coalfields. The general range of variations in the proximate analysis of these coals is as follows: Moisture — 1.9 to 3.7%, Ash — 3.8 to 16.9%, V.M. — 39.2 to 46.7%, F.C. — 39.0 to 51.0%, C.I.(S.S.S.) — 8.29 and sulphur — 0.8 to 6.3%.

(b) *Miao Bum Coalfield*: This coalfield is an eastward extension of the Namchik-Namphuk coalfield. Two major coal seams having an average thickness of about 10 m have been correlated in this area. The reserves of coal in this area are probably about 6 million tonnes upto a depth of 200 m (down dip).

Since the Central Fuel Research Institute has already proved the suitability of Makum coal as cooking blend with Jharia-Raniganj coal, the adjacent Namchik-Namphuk coals may also prove suitable for this purpose. Suitability of Assam coal has also been indicated for the manufacture of synthetic petroleum, low temperature carbonisation plants and power generation. The Tirap coals may also hold out such promises.

Gold

Although no authentic information of the occurrence of gold in Arunachal Pradesh is available, the historical record of gold panning in the sands of the Burhi-Dihing river is significant. The tributaries of the Burhi-Dihing derive rock materials from the area comprising igneous and metamorphic complexes. It is said that in the olden days the tribal inhabitants of Vijoynagar area were in touch with the traditionally expert gold panners of the adjacent area of Burma.

Oil and Gas

The Tertiary succession (Eocene to Pliocene-Pleistocene rocks) constituting the Patkai range is a continuation of the Assam Tertiary belt which is well known for its oil and gas resources. Existence of a number of oil and gas seepage ("pungs") in the Namchik area have been reported 'Oil shows' near Tisa stream south of the Kanubari area have also been reported. But economic finds of oil and gas in these areas are yet to be established.

Pyrite and Pyrrhotite

Small nodules and vein-lets of pyrite are observed in Disang shales between Bogapani (27°09':95°24') and Khonsa (27°06':95°32') along road cuttings and river sections. These occurrences are of academic interest only.

Saline/Brine Waters

Brine/Saline springs and wells of the Tirap District are well known. They are locally called 'sun'.

Salt is prepared by the local inhabitants from the saline water.

A preliminary investigation of these brine wells has been carried out by the Geological Survey of India to determine particularly the potassium content.

The brine/saline wells are found localised chiefly around Borduria (27°08':95°25'), Khonsa (27°00':95°30') and Namsang ((27°09':95°28')). Generally, the springs/wells occur along joint planes, shear joints, faults or faulted anticlines and are placed in the stream valleys. The oozing is mostly in Disang beds but a few are located in Barail rocks also. Although no distinct source of the salinity is yet known, it is believed that the source is deeper or below the exposed Disang shales. The brine seems to represent the cognate water in marine sediments.

The chemical analysis of two saline/brine samples from pullung and Khela indicates the following:

Location	pH	Sp. cond.	TDS ppm	SiO ₂ ppm	Na ppm	K ppm	Ca ppm	Mg ppm	HCO ₃ ppm	Cl ppm	NO ₃ ppm	Br ppm	I ppm
Pullung	6.50	77000	57500	6	20455	139	605	65	1011	32279	122	70	Trace
Khela	6.45	12100	7224	5	2500	40	82	37	105	4086	22	16	Trace

Platinum

Minute grains of platinum containing almost equal proportion of lead-grey mineral identified as irridosmine were found accompanying minute gold particles in the sands of the Noa-Dihing river (27°33'00":96°00'00"). The largest grains of platinum weighed 0.095 gms. Recently, the sands collected from the Noa-Dihing river were analysed, but no deposit of platinum profitable from the economic point of view could be located.

Earthquake

Earthquakes have taken place in this district in 1897, 1930 and 1950. The ravages they caused were, however, less serious in effect than those which took place in the neighbouring district of Lohit. Perceptible changes brought about by the 1950 earthquakes are that the Noa-Dihing river in its hill course is flowing with greater speed than before, and the level of the area east of the confluence of Namphuk and Kaikhe (Noa-Dihing) is raised. Some villages in the Miao and Bordumsa areas were also damaged due to raising of river beds and silting. Almost half of the cultivation

land in Khagam and Phup was completely silted after 1950. Occasional landslides caused by frequent light tremors have been noted from time to time.

FLORA

The flora of Tirap District as of other districts of Arunachal Pradesh is rich in variety and extent. The vegetation and flora as described here are based on several explorations made by the Botanical Survey of India.

The vegetation of the district largely consists of tropical and sub-tropical evergreen forests with interspersed grasslands and temperate forests in the high hills. Most of the wooded areas are not virgin forests. These are of secondary nature owing to the frequent destructions of forests by shifting cultivation practised from early times by the local people. Primary forests are limited to comparatively less accessible areas.

As in all tropical rain forests, the vegetation here too presents a tiered sequence, very clearly revealed along an interior forest footpath or along the bank of a hill stream. The forest canopy is formed of the spreading branches of tall trees, notably *Dipterocarpus macrocarpus* Vesque, *Terminalia myriocarpa* Heurck & Muell, *Pterospermum acerifolium* Willd., *Alnus nepalensis* D. Don, *Shorea assamica* Dyer, and with scattered less tall trees, middle-sized species form the second tier; of these mention may be made of *Albizia* spp., *Talauma hodgsonii* Hk. f. & Th, *Manglietia insignis* Bl., *Schima wallichii* Choisy, *Gynocardia odorata* R. Br., *Quercus lanceaefolia* Roxb. and *Castanopsis tribuloides* A.DC. In slightly open areas, clumps of the fan-leaved palm *Livistonia speciosa* Kurz, and the fish-tailed palm *Wallichia disticha* T. Anders can be seen occasionally. Other palms like the slender stemmed *Pinanga gracilis* Bl., the stout, fan-leaved *Licuala spinosa* Thumb., and the spiny large-leaved *Zalacca Secunda* Griff. also occur. Large clumps of giant bamboos *Dendrocalamus hookeri* Munro are also not infrequent. The trees are entwined by large woody climbers, often interconnecting adjacent trees and forming entangled festoons of branches hanging loosely from the top. These climbers are chiefly of the families *Menispermaceae*, *Annonaceae*, *Vitaceae*, *Connaraceae* and *Cucurbitaceae*. Amongst these, a particularly nasty member is the climbing palm, the cane or *Calamus*. There are several species in these forests, some with stout stems stretching to unusually long distances, and others with slender stems. All of them are to be dreaded due to their sharp reflexed prickles all over the plant, and particularly the very long whip like tip of the huge leaf. These canes are largely used by the local people.

The trees are further loaded with epiphytes and epiphytic climbers like wild pepper. Aroids are found practically on every tree trunk. Aroids

and orchids are predominant and the ferns and the fern-allies are mixed with them. Occasionally, some erect aroids and members of *Zingiberaceae* are seen. Amongst the common orchids mention may be made of the following genera — *Dendrobium*, *Coelogyne*, *Bulbophyllum*, *Aerides*, *Cymbidium*, *Rhynchostylis*, *Eria* and *Pholidota*. The prized Blue Vanda, *Vanda coerulea* Griff., also occurs as an epiphyte in these forests. Two other very colourful epiphytes are *Medinella rubicunda* Bl. and *Aeschynanthus* spp. The ferns are easily recognised by their very highly dissected large leaves and characteristic spirally coiled young leaf. The fern-allies include *Lycopodium* spp. with tightly overlapping small leaves, the plant resembling a small forked green chain. Some of these species occur creeping on moist rock faces and on ground like *Lycopodium cernuum* L. and *Lycopodium clavatum* L.

The low tree-tier and the shrub zone are more or less mixed up and include an enormous number of species, the chief among these are *Abroma angusta* L. with zig-zag outstretched branches and pendant flowers in a row, *Antidesma bunius* Spreng and *A. ghesembilla* Gaertn, with long spikes of small red fruits, *Alangium barbatum* R. Br. and *Bridelia cuneata* Gehram, both average-sized trees. Easily spotted in the greenery by its white leaf-like calyx-lobe is *Mussaenda roxburghii* Hk.f. Along stream banks or moist cool shady pockets are usually found gregarious patches of herbs of *Zingiberaceae* and *Marantaceae*, all easily identified by their large simple oblong leaves, and all beautiful to behold when in bloom. As in the tree zone, here too there are several wiry climbers often forming thickets, enveloping whole of the shrubs. These belong to the families *Aristolochiaceae*, *Dioscoreaceae*, *Oleaceae*, *Passifloraceae* and *Vitaceae*. The most common of these are *Dioscorea* spp. with huge underground tubers which the local people dig out for food. These *Dioscoreas* have great importance in modern medicines as sources of steroidal hormones.

The herbs forming the ground flora are most profuse. Most of them belong to families *Ranunculaceae*, *Balsaminaceae*, *Geraniaceae*, *Violaceae*, *Lamiaceae*, *Acanthaceae* and *Asteraceae*. The blooming herbs present a beautiful picture. In the moist dark spots particularly where decaying humus is present, there is usually dense growth of mushrooms, toadstools and other related fungi, often with highly coloured fructifications. Occasionally, the parasitic flowering plant with tuberous bases and fleshy spikes like *Balanophora* spp. are also seen. Mixed with other herbs are also found ground orchids like *Eulophia* spp., *Geodorum* spp., *Goodyera* and *Habenaria* spp. A rare saprophytic orchid *Galeola falconeri* Hk.f. is found under the trees on accumulated decaying humus. The herbaceous vegetation includes a host of fern species, all in various shades of green, but with a variety of dissected fronds. The most conspicuous of these is the tree

fern *Cyathea spinulosa* Wall, with stout erect trunk and huge gracefully spreading highly dissected compound leaves, and often in the centre of the crown with a cluster of young leaves in various stages of uncoiling. Usually these ferns occur in groups and lend great charm to the greenery. Other easily noticeable ferns are *Angiopteris evecta* (Forsk) Hoffm. with a low squat stem and arched large spreading leaves and gregariously growing, characteristically forked *Dicranopteris linearis* (Burm.) Underwood. Occasionally, the slender wiry climbing fern *Lygodium flexuosus* Sw. with the dimorphic sterile and fertile leaves can be seen spreading over other shrubs. In moist cool shady areas, along with the ferns, another common fern-ally *Selaginella* is noticeable.

As an index of the moist and clammy weather of the interior forest, the bark of trees and rocks and stones are all covered with a close coating of several species of mosses and liverworts.

Along the openings in the forests beside streams, there are usually gregarious growths of *Musa* or banana easily recognised by their huge oblong, upright or arched leaves much tattered in the wind and stout flowering or fruiting bunches. There are several species of *Musa*. These wild bananas offer good material for breeding and improving the cultivated bananas. Other gregarious fleshy herbs are species of *Hitchenia*, *Hedychium*, *Alpinia* and *Amomum*. Many of these bear large bunches of beautifully coloured fragrant flowers and deserve introduction into gardens.

In occasional placid pools, occur several aquatic plants, the most common being the lotus, *Nymphaea nouchali* Burm. f., and *Ottelia alismoides* Pers.

The grasslands have several species of grasses with an occasional admixture of some leguminous herbs like species of *Crotalaria*, *Desmodium* or *Alysicarpus*. There are also scattered plants of *Osbeckia* sp. and *Hypericum* sp. Their yellow, pink and mauve flowers look pretty in the vast green spans. Some common grasses are: *Themeda villosa* (Poir) A. Camus, *Panicum miliaecum* L., *Erianthus longisetosus* Anders, *Arundinella bengalensis* (Spreng) Druce and *Digitaria Violascens* Link. Of the larger grasses, frequent near stream, the most common is *Saccharum arundinaceum* Retz. Most of the grasses are good fodder.

Near hamlets, villages, camp-sites and road-sides the usual complement of weed species that follow the footsteps of man are common. These belong to the families *Amaranthaceae*, *Asteraceae*, *Lamiaceae*, *Oxalidaceae* and *Commelinaceae*. The weed species which has intruded and spread menacingly into the inside of forests is the climber *Mikania* spp.

The dominant species of temperate type are *Litsaea lancifolia* L. Thomsonii I tea chinensis. *Schima wallichii* *Rhododendron arboreum*, *Styrax serrulatum*, *Sarauja roxburghii*, *Quercus*.

The flora is of considerable interest since it represents a meeting point for the eastern Asia and the Burma-Malayan floristic elements. These phytogeographic points can be resolved after a comprehensive collection and study of the plants of the area. Further, since there are several spots with primary forests, a detailed exploration of these are bound to reveal many new species of botanical interest as also of practical utility as potential breeding material or even new kinds of foods, fruits or flowers.

Soil Erosion and Afforestation

A block on the Noa-Dihing river near Miao area occurred in 1946 due to heavy landslide. As a result, a considerable portion of the Miao and Namphuk Reserve Forests and those along the river went under water for a long period. This caused a good deal of damage to the forest vegetation. In 1951, the Forest Department started a regeneration programme to protect the forest from further damage. The extensive jhuming (shifting cultivation) has also damaged the forest wealth considerably. Here the jhuming cycle ranges from four to five years, and the fallow period is too short for the growth of the secondary forest and to provide an effective soil-cover. A heavy quantity of loose fertile top soil was washed away every year. Due to disappearance of top soil and the humus, the fertility of land in this area was on the decrease. To counteract the loss of fertility, remedial measures were taken at Khonsa, Niausa, Khela and other areas and about 209 acres of land were brought under afforestation till 1968.

FAUNA

The fauna of the district is rich and varied. It includes some rare species of wild animals. The area is frequented by some resident Palaeo-arctic species and migratory species of birds that breed in or north of the Sino-Himalayan area. Birds of Indian sub-regions are well represented.

Birds

The resident waterfowls that are commonly found in river waters and pools are the Spotbill Duck [*Anas poecilorhyncha* (J. R. Forster)], the Comb Duck [*Sarkidiornis melanotus* (Perman)], the Lesser Whistling Teal [*Dendrocygna javanica* (Horsfield)], the Large Whistling Teal [*Dendrocygna bicolor* (Vieillot)] and Cotton Teal [*Nettion coromandelianus* (Gmelin)]. The evergreen jungle on the flatland at the foot of the hills and the lower slopes harbour varieties of bird-life. In the denser part of the jungle which have tall trees laden with epiphytes, birds that are usually met with are the Fairy

Bluebird [*Irena puella* (Latham)]. Parakeets [*Psittacula eupatria* (Linnaeus)] *P. Roseata* Biswas, *P. Himalayana* (Lesson)] Broadbills, [*Serilophus Lunatus* (Gould), *Psarisomus dalhousiae* (Jameson)], Drongos, such as the Crowbilled Drongo [*Dicrurus annectans* (Hodgson)] and the Greater Racket-Tailed Drongo [*Dicrurus paradiseus Grandis* (Gould)], the Mountain Thrush [*Zoothera dauma dauma* (Latham)], the Streaked Spiderhunter [*Arachnothera magna magna* (Hodgson)], the Lesser Golden-backed Woodpecker [*Dinopium benghalense benghalense* (Linnaeus)], the Hill Myna [*Graeula religiosa intermedia* (A. Hay)] etc. The ground birds that are more common in these jungles are the Pittas [*Pitta nipalensis* (Hodgson), *P. Sordida* (P.L.S. Muller), *P. cyanea* Blyth], the Red Jungle Fowl [*Gallus gallus* (Linnaeus)] and the Kalij Pheasant [*Lophura leucomelana* (Latham)].

On the hill slopes between the lowland and montane jungles exists an evergreen forest in its natural state. The conditions are fast changing as the people of the area have started shifting terrace cultivation extensively during the recent years with the result that many portions of the slopes once covered with dense forests are now covered with dense secondary growth of scrub, grass interspersed with scattered trees of Bombax, Zizyphus etc. Such secondary shrub jungles are the home of Bulbuls (Pycnonotidae), such as the Red Whiskered Bulbul [*Pycnonotus jocosus* (Linnaeus)], Babblers (*Pelloneum* spp., *Timalia* sp.), Chats (*Saxicola* sp.), several species of Warblers (*Muscicapidae*), Spotted Dove [*Streptopelia chinensis* (Scopoli)] and Quails, such as the Manipur Bush Quail [*Perdica manipurensis* (Hume)], the Bustard Quails [*Turnix sylvatica* (Desfontaines) and *T. Suscitor* (Gmelin)], the Malabar Pied Hornbill [*Anthracoaros coronatus* (Boddaert)], the Red-headed Trogon [*Harpactes erythocephalus* (Gould)], the Malabar Whistling Thrush [*Myiophonus horsfieldii horsfieldii* (Vigors)] and the Indian Roller [*Coracias benghalensis affinis* (McClell)]. The steep precipitous slopes and river valleys with dense mixed flora shelter some interesting game-birds, such as the Peacock-Pheasant [*Polyplectron bicalcaratum* (Linnaeus)], Bamboo Partridge [*Bambusicola fytchii* (Anderson)] Green Pigeons [*Treron apicauda* (Blyth), *T. Sphenura* (Vigors), *T. phoenicoptera* (Latham)] and Imperial Pigeon, [*Ducula badia* (Raffles)]. The other birds that are frequently met with are the Blacknaped Green Woodpecker [*Picus canus* (Gmelin)], Rufousnecked Hornbill [*Aceros nipalensis* (Hodgson)], Maroon oriole [*oriolus traillii* (Vigors)], Minivets (Campephagidae) etc. Hodgson's Frogmouth [*Batrachostomus hodgsoni* (G. R. Gray)], the Long-tailed Nightjar [*Caprimulgus macrurus* (Horsfield)], the Barred Owlet [*Glaucidium cuculoides* (Vigors)] and the Whitecapped Redstart [*chaimarronis leucocephalus* (Vigors)] are also found in suitable places.

The montane jungles contain some typical high altitudinal birds, such as the Common Hill Partridge [*Arborophila torquicola* (Valenciennes)], Blyth's

Tragopan [*Tragopan blythii* (Jerdon)] and Mrs. Hume's Barred Back Pheasant [*Syrnaticus humiae* (Hume)]. Besides the pheasants mentioned above, some colourful birds are also present in montane forests, such as the Great Hill Barbet [*Megalaima virens* (Boddaert)] and the Blue Throated Barbet [*Megalaima asiatica asiatica* (Latham)], colourful finches (Fringillidae), Chestnut-headed Ground Warbler [*Tesia castaneo-coronata* (Burton)], the Siva [*Minla cyanouroptera* (Hodgson)], Tit-Babblers etc.

During the winter, migrating birds from Northern Asia have their temporary quarters in this area. Ducks, geese, teals and various kinds of waders visit streams, river valleys and pools, and smaller birds, such as swallows, wagtails, finches which are also migratory do not escape notice.

Mammals

Of the wild mammals the following species are the more important. Among the carnivora, the tiger [*Panthera tigris* (Linnaeus)] and the leopard [*Panthera pardus* (Linnaeus)] are frequently met with. They hunt their prey by night. They Marbled Cat [*Felis marmorata* (Martin)], the Jungle Cat [*Felis chaus* (Guldenstaedt)] and the Golden Cat [*Felis temmincki* (Vigors & Horsfield)] are also found in the forests of this district. The large Indian Civet [*Viverra zibetha* (Linnaeus)] is a solitary creature sheltering in woods under bushes, while the common Palm Civet [*Paradoxurus hermaphroditus* (Pallas)] is more abundant in the forest. The jackal [*Canis aureus* (Linnaeus)] is often found in low lands, sheltering in holes in the ground or in dense grasses.

The Indian Elephant [*Elephas maximus* (Linnaeus)] is fairly common in areas covered by bamboo and sal trees.

The Sambar [*Cervus unicolor* (Kerr.)] and the Barking Deer [*Muntiacus muntjak* (Zimmermann)] prefer to live near cultivation. Their food consists of grasses, leaves and various kinds of wild fruits. The Indian Bison or Gaur [*Bos gaurus* (Smith)] frequents this portion in quest of pasture. Herds of wild buffaloes [*Bubalus bubalis* (Linnaeus)] are found north of the Brahmaputra river. The Indian Wild Boar [*Sus scrofa* Linnaeus] live in the grassy and bushy jungles of this region.

The great Indian one-horned rhinoceros [*Rhinoceros unicornis* (Linnaeus)] are found in isolated areas of the plains. They prefer to dwell in swampy and grassy lands. In the past, one-horned rhinoceros were numerous, but they were killed in large numbers for meat, hide and horns. As a result, they are now almost extinct.

Among the other common mammals the Hoolocks [*Hylobates hoolock* (Harlan)] live in the hill forests where they eat fruits, leaves etc. Occasionally, the troupes of the Rhesus Macaque [*Macaca mulatta* (Zimmermann)] are also seen.

The Chinese Pangolin [*Manis pentadactyla* (Linnaeus)], a very interesting mammal, is also found in this area. It spends the day curled up in a burrow dug by it, or among rocks and boulders. Its food consists of termites and the ants.

Among the smaller mammals the insectivores and the rodents are very common. Rats are very harmful to crops and cause several kinds of human diseases. Among rats, the Indian Longtailed Tree Mouse [*Vandeleuria oleracea* (Bennet)], the Large Toothed Rat [*Docnomys millardi* (Thomas)], the House Rat [*Rattus rattus* (Linnaeus)], and the Manipur Rat [*Rattus manipulus* (Thomas)] are commonly found. Various types of squirrel, namely Pallas's Squirrel [*Callosciurus erythraeus* (Pallas)], the Irrawaddy Squirrel [*Callosciurus pygerythrus stevensi* (Thomas) and *C. pygerythrus blythi*, Tvtler], the Malayan Giant Squirrel [*Ratufa bicolor* (Sparrmann)] and the Orange-bellied Himalayan Squirrel [*Dremomys lokriah* (Hodgson)] are also found at different heights.

The shrews are also not less economically important. They are helpful to mankind in eradicating so many varieties of obnoxious insects, but they are also equally harmful to plantation. The common tree shrew [*Tupaia glis* (Diard)], the Eastern Mole [*Talpa micrura* (Hodgson)], the long-tailed shrew [*Soriculus leucops* (Horsfield)], the house shrew [*Suncus murinus* (Linnaeus)] and the burrowing shrew [*Anourosorex squamipes* (Milne-Edwards)] are of common occurrence.

Many kinds of insectivorous bats are found in old premises, caves and forests. The commonly occurring species are the Himalayan Horse-Shoe Bat [*Rhinolophus luctus perniger* (Hodgson)], the Indian Pipistrelle [*Pipistrellus coromandra* (Gray)], the Indian Pigmy Pipistrelle [*Pipistrellus mimus* (Wroughton)] and the Mustachioed bat [*Myotis muricola* (Hodgson)]. Another variety occasionally occurring is the Indian Vampire [*Megaderma lyra* (Geoffroy)], which is a blood sucking bat, feeding upon the blood of small pipistrelle.

Reptilia

Only two species of lizards—*Draco maulatus* (Gray) of the family Agamidae and *Takydromus sexlineatus khasiensis* Boulenger of the family Lacertidae, and a snake of the family Viperidae [*Trimeresurus monticola* (Gunther)] are the reptile fauna of Tirap as recorded so far. The Crocodilians and testudines must be altogether absent as there is no evidence of their presence in the adjacent areas.

Amphibian Fauna

Amphibians found in the bordering areas, namely Burma, Nagaland,

Assam and the Lohit District of Arunachal Pradesh may also occur in Tirap. The Skipping Frog [*Rana cyanophlyctis* (Boul)] and the Paddy-field Frog [*Rana limnocharis* (Weig)] of the area have been recorded, and the Tree-Frog [*Rhacophorus lencomystax* (Kuhl)], the common Indian Toad [*Bufo melanostictus* (Schn)] and the Himalayan Toad [*Bufo himalayanus* (Gunther)] may in all likelihood be available. The main food of all the amphibians is insects, but small animals like earthworm, young ones of frogs and toads and even small snakes are also relished.

It should be noted that whatever the habitat may be, all the amphibians must have to come to water sources for breeding.

Invertebrates and Fish Fauna

The following is a list of the specimens of invertebrates and fish fauna available in the Tirap District.

1. Fresh Water Fish

Scientific Name	Ecology		General Remarks
	Order	Cypriniformes	
	Family	Cyprinidae	
<i>Tor putitora</i> (Ham.)	Snow melt	torrential waters	Popularly known as Mahaseer, an important game and food fish, attains 9 feet in length.
<i>Chagunius chagunio</i> (Ham.)	Snow melt	torrential waters	An important food fish
<i>Labeo dero</i> (Ham.)	Hilly streams and	rivers	An important food fish
<i>Semiplotus semiplotus</i> (McCil.)	Hilly streams and	rivers	A common food fish of the Eastern Himalayas
<i>Barilius barila</i> (Ham.)	Hilly streams and	rivers	Small food fish
<i>Schizothorax plagiostomus</i> (Heckel)	Hill streams, rivers and	lakes	An important food and game fish, attains 2 ft. in length

<i>Schizothorax molesworthii</i> (Chowdhuri)	Snow melt torrential streams, lakes and rivers	An important food and game fish, attains a length of one foot
<i>Puntius tetrapagus</i> (McCil.)	Hill streams	A small food fish
<i>Rasbora daniconius</i> (Ham.)	Hill streams	A larvivorous fish, a food fish
<i>Acrossocheilus hexagonolepis</i> (McCil.)	Hill streams	An important food and game fish, attains 2 ft. and more in length
<i>Garra kempfi</i> (Hora)	Hill streams	A small food fish
<i>Gara lissorhynchus</i> (McCil.)	Hill streams	A small food fish
<i>Danio naganensis</i> (Chowdhuri)	Hill streams	A small food fish
<i>Danio acqipinnatus</i> (McCil.)	Hill streams	A small food fish

Family Homalopteridae

<i>Neomachilus manipurensis</i> (Chowdhuri)	Hill streams	A small food fish
<i>Neomachilus subfusca</i> (McCil.)	Hill streams	A small food fish
<i>Neomachilus rupicola</i> (McCil.)	Hill streams	A small food fish

Family Nandidae

<i>Badis badis</i> (Ham.)	Rivers and streams	A small food fish
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Family Sisoridae

<i>Exostoma labiatum</i> (McCil.)	Hill streams	A small food fish
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Family Psilorhinehidae

<i>Psilorhinchus homaloptera</i> (Hora and Mukherji.)	Hill streams	A small food fish
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2. *General Non-Chordata*

Phylum Annelida
Class Chaetopoda Order Oligochaeta Family Megascolecidae

Perionyx macintoshi Beddard. *Pheretima diffringens* (Baird)

Class Hirudinea Order Arhynchobdellae Family Hirudidae Subfamily Hirudinae

Peocilobdella granulosa (Savigny)

Sub-family Haemadipsinae

Haemadipsa sylvestris (Blanchard)

Haemadipsa ornata (Moore)

3. *Diptera*

Family	Name of the Species
Syrphidae	<i>Paragus serratus</i> (F)
	<i>Asarcina ericetorum</i> (F)
	<i>Melanostoma orientale</i> Wied
	<i>Paragus rufiventris</i> Brun
	<i>Sphaerophoria indiana</i> Bigot
Dolichopodidae Ephydriidae	<i>Dolichopsis angustinaruis</i>
	<i>Paralimna concors</i> Cresson

Sciaridae	<i>Sciara exaeta</i> Brun
Celyphidae	<i>Celyphus obiectus</i>
Sarcophagidae	<i>Sarcophaga hirtipes</i> Wied
Sepsidae	<i>Sipsis viduata</i> Thoms
Sepsidae	<i>Sepsis himalayensis</i> Brun
Asilidae	<i>Philodicus femoralis</i>
Tipulidae	<i>Nephrotoma consimilis</i> Brun
	<i>Conosia irronata</i> Wied
	<i>Nephrotoma serricornis</i> (Brun)
	<i>Tipula (tunatipula) styloëna</i> Alex
	<i>Tipula fasciculata</i> (Brun)
	<i>Holorusia fuluolateralis</i> Brun
Tabanidae	<i>Chrysops designatus</i> Ric
Muscidae	<i>Musca bezzi</i> Patton and Cragg
	<i>Musca paltoni</i> Austen
	<i>Musca inferior</i> Stein
	<i>Musca crassirostris</i> Stein
	<i>Stomoxys calcitrans</i> (L)
Calliphoridae	<i>Orthellia coerulea</i> (Wied)
	<i>Chrysomya megacephala</i>
Stratiomyidae	<i>Sargus mactus</i> Walk

4. Isoptera : Termites

Euhamitermes aruna Chhotani
Odontotermes giriensis Roonwal and Chhotani
Nasutitermes garoensis Roonwal and Chhotani
Nasutitermes moratus (Silvestri)

Only 4 spp. of termites from Arunachal Pradesh have been recorded so far. But many more species are likely to exist in this territory, since the presence of as many as 34 spp. of termites have been reported from the adjoining areas.

5. Orthoptera

Order Cictyoptera
 Family Blattidae

Blattella germanica (L.)
Blattella humbertiana (Sauss.)
Periplaneta australasiae (L.)

Order Orthoptera
 Family Pyrgomorphidae

Atractomorpha crenulata (Fabr.)
Taeata indica (Brunner)

Family Acrididae

Trilophidia annulata (Thunhag)
Ceracris negricornis Walker
Catantops gingnis innotabilis (Walk.)
Xenocatantops humilis humilis (Serville)
Stenocatantops splendens (Thunb.)
Chandracris rosea (Uvarov)
Choroedocus robustus (Serv.)

CLIMATE

The climate in this district is largely influenced by the terrain marked by high hills, deep ravines and valleys through which the streams and rivers flow. Generally, the elevation of land varies from about 200 metres in the north-west to about 4,000 metres over the mountains. There are peaks, which rise upto 4,500 metres above the sea level. The climatic conditions vary considerably from place to place due to the mountainous nature of the terrain. The climate is cool and highly humid at lower elevations and in the valleys. The cold season prevailing from the latter part of November to February is followed by frequent thunderstorms in the pre-monsoon season from March to May. The monsoon continues from June to about the middle of October. The latter half of October and November constitute the post-monsoon or the transition period. On the whole, the climate in the hill areas is moderate and pleasant and the constant breeze makes it salubrious. Three charts are appended to this chapter relating to rainfall, temperature and humidity.

Rainfall

The rainfall in this region is very much influenced by the elevation. Sharp contrasts in the quantity of rainfall have been recorded at different places. The annual rainfall ranges from 250 cm to 400 cm, increasing from north-west to south-east. The rainfall, however, decreases with elevation above 1,500 metres or so. The major portion of the annual rainfall is received during the period June to October. Heavy showers associated with

thunderstorms occur during the period March to May and in October. The rainfall is generally heavy and the variation from year to year is not much.

Temperature

Temperature varies from place to place, depending upon elevation and exposure to the sun. The diurnal range is large, particularly in the valleys during the winter.

The winter sets in towards the end of November and continues till about the beginning of March. The cold months are December, January and February of which January is normally the coldest when the mean daily maximum and minimum temperatures in the plains are about 23°C and 12°C respectively. In the wake of the western disturbances during the period November to March temperatures more than 5°C below the normal can be occasionally experienced. Both day and night temperatures rise rapidly in March and slowly thereafter till August which is the warmest month with mean maximum and mean minimum temperature of about 31°C and 23°C respectively over the plain areas. The maximum temperature may occasionally exceed 37°C resulting in an oppressive weather. From October onwards both day and night temperatures fall. Lower temperatures, depending on elevation, prevail over the hills and mountains. In the winter, the mean temperature goes down below 0°C at places with elevation of 3,000 metres or above.

Humidity

Humidity is high practically throughout the year, although in the winter months the air becomes comparatively drier.

Cloudiness

In the post-monsoon season, the sky remains clear or lightly clouded. In the winter, the morning sky is covered by a sheet of lifted fog, but it withers away as the day wears on. In the months of March to May clouding is greater in the afternoon. The sky remains heavily clouded and overcast during the south-west monsoon season.

Winds

Winds are generally light, increasing slightly in strength in the south-west monsoon months. But they become strong for short periods during March

to May and occasionally they are accompanied by thunderstorms. Strong katabatic winds through valleys are experienced.

Special Weather Phenomena

Thunderstorms occur frequently in the period March to June and towards the end of monsoon in October. These thunderstorms, especially those which occur between March and May, are similar to the norwesters and are often violent. Fog appears very frequently in the post-monsoon and winter seasons, especially in the valleys. Hill fog in the winter is common.

ANNUAL RAINFALL AT DIFFERENT PLACES OF TIRAP DISTRICT

Chart-1

(In centimetre)

Sl. No.	Rain gauge stations	1971	1972	1973	1974	1975
1	2	3	4	5	6	7
1.	Khonsa	417.30	370.27	365.46	509.40	391.00
2.	Vijonagar	325.60	292.24	216.60	350.50	317.90
3.	Bordumsa	228.10	214.16	224.08	150.60	NA
4.	Laju	80.02	NA	NA	NA	NA
5.	Soha	325.80	236.50	293.58	331.90	NA
6.	Changlang	237.90	88.68	19.25*	308.70	315.20
7.	Miao	177.80	225.80	248.62	303.70	250.70
8.	Namsang	269.40	246.45	235.75	242.10	301.50
9.	Deomali	233.50	236.87	235.00	253.70	205.20
10.	Nampong	132.90	255.78	274.19	305.70	173.00
11.	Longding	NA	NA	203.00	215.50	191.10

NA—Not Available.

*Data incomplete.

Source: (a) Statistical Hand Books of Arunachal Pradesh, 1973-74 and 1976-77

(b) Statistical Hand Book of Tirap District, 1975-76.

STATION-WISE MONTHLY RAINFALL IN TIRAP DISTRICT
DURING THE YEAR 1975

Chart-II

(In centimetre)									
Month	Khonsa	Deo- mali	Vijoy- nagar	Miao	Nam- sang	Nam- pong	Chang- lang	Long- ding	Diyun
1	2	3	4	5	6	7	8	9	10
January	Nil	NA	1.00	3.60	3.00	2.00	3.00	Nil	3.00
February	10.50	NA	5.00	10.16	4.00	7.00	7.00	1.60	7.00
March	3.50	7.00	12.50	6.76	6.00	6.00	4.00	3.30	6.00
April	32.50	10.00	39.00	30.67	30.00	21.00	36.00	7.00	18.50
May	52.50	34.00	17.00	24.52	26.00	23.00	36.00	32.80	24.50
June	73.00	53.00	58.50	29.14	75.00	28.00	35.00	31.40	49.00
July	88.50	53.50	90.00	69.06	52.00	74.00	78.00	76.60	59.00
August	50.00	NA	50.00	38.61	45.00	NA	50.00	20.00	33.00
September	47.50	24.00	24.50	19.75	32.00	NA	40.50	16.40	23.00
October	30.00	22.00	21.00	16.69	26.00	11.00	23.50	2.00	13.50
November	3.00	1.70	3.80	0.83	2.50	1.00	1.50	Nil	1.00
December	Nil	Nil	0.60	4.41	Nil	NA	0.70	Nil	0.40
Total	391.00	205.20	317.90	250.66	301.50	173.00	315.20	191.10	237.90

NA — Not available

Source: Statistical Hand Book of Tirap District, 1975-76.

Chart-III

TEMPERATURE RAINFALL AND HUMIDITY IN THE TIRAP DISTRICT
YEAR—1974

	(in centigrade) Temperature		(in millimetre) Rainfall	(percentage) Humidity
	Maximum	Minimum		
January	18.6	— 8.6	28.8	69%
February	23.6	— 9.1	18.8	41%
March	26.0	— 12.1	28.4	84%
April	28.3	— 13.0	82.6	85%
May	31.6	— 17.6	48.8	68%
June	31.0	— 20.1	817.2	91%
July	28.0	— 20.1	107.2	91%
August	32.8	— 19.6	116.2	88%
September	30.5	— 19.1	70.4	76%
October	30.0	— 18.6	102.0	90%
November	27.0	— 14.6	40.4	92%
December	20.2	— 8.6	0.0	93%

Source: Regional Meteorological Centre, Alipore, Calcutta.

CHAPTER II

HISTORY

Prelude

The area occupied by the present Tirap District is a part of the north-eastern extremity of India bordering Burma. It is the only district of Arunachal Pradesh on the southern bank of Brahmaputra, and in early times it was the gateway to India in the east. Placed between the plains of the Brahmaputra on the west and the valley of the Irrawaddy on the east, this area witnessed movement of peoples from across the Patkai ranges from time immemorial. Hordes of migratory tribes of the Mongoloids called *Kirata* in the ancient Indian scriptures were drifted to Assam through this district. It was in Assam and its neighbouring regions that these tribes were absorbed.

Literary and ethnological sources indicate that the early waves of the Mongoloid migration entered India in the east before 1000 B.C. at about the same prehistoric time as the arrival of the Aryans in the west. As no material proof of these movements and ancient settlements of the people has been discovered, we can, at the present stage of our knowledge, do little more than faintly trace the courses of tribal migrations that took place in comparatively later times.

Advent of the Ahoms

The history of the district emerged from obscurity and dubious traditions in the early part of the 13th century A.D. when the Ahoms came from North Burma through the Pangsau Pass over the Patkai, and made steady advance along the course of the Noa-Dihing in Tirap. The Ahoms, who ruled in Assam and its eastern regions for six centuries from A.D. 1228 to 1826, left a series of invaluable historical chronicles known as Buranjis, which throw a flood of light on the late medieval history of Tirap. A good deal of authentic information of the people living in this country and their relations with the Ahoms can be gleaned from the Buranjis. Although these sources are scrappy as historical documents, the recorded history, as distinct from archaeology, of the district may be taken as beginning from the days of the arrival of the Ahoms.

At the outset of their victorious campaigns, the Ahoms came into contact with the tribal people of Tirap called Eastern Nagas comprising the Noctes and the Wanchos. The term 'Naga' is a generic name applied to a large number of tribes and sub-tribes living in the present Tirap District and Nagaland. The Ahom Buranjis refer to them by the general term Naga (pronounced as Noga) and also by different Assamese names like Khamjangias, Aitonias, Tablungias, Namsangias etc. The Buranjis inform us that the Ahoms were led by their chief Sukapha (1228-1268 A.D.) who was the founder of the Ahom kingdom in Assam. On crossing over the Patkai, the Ahoms descended upon Tirap and through this land they forced their way to Assam. Their incursion led to a series of violent clashes in which the Ahoms had to first combat with the local Naga tribes, who strongly resisted their advance. According to the Buranjis, a number of Naga villages were destroyed. Although the Nagas remained quiet for some time, they rose in a number of revolts starting from the eighties of the 15th century. They committed raids as and when opportunities were open to them. In point of fact, the various tribal groups of the Nagas and the Ahoms were engaged in constant clashes.

History of the Tribes

Our knowledge of the early history of the district before the advent of the Ahoms is extremely vague, and no connected account of the events that took place in later times is available. Scanty information of various tribes in the district as given in the Ahom and British records is our only source of early history. Though fragmentary, these records give us some factual historical information about the tribal people of Tirap. The major tribes now inhabiting the district are four, and they are settled in different parts of the district—the Noctes and the Tangsas in the centre, the Wanchos in the south-west and the Singphos in the north. The Yobins (Lisus) migrated to this district in the early part of the present century, and are now settled in the Vijoynagar area. The Tibetans, the Chakmas and the Hajongs came recently as refugees.¹

NOCTE

The name Nocte means village people (Noc=village, te=the people). The Noctes trace their descent from a remote ancestor named Khunbao, a chief. Khunbao had two sons—Khunlung and Khunlai. They were succeeded by Tangthok and Tankam. The claims of the

¹ An account of the Yobins and the refugees is given in Chapter III.

Nocte chiefs to royal descent is based on this genealogy. The Ahom chronicles bear evidence to the fact of Nocte settlements in the district of Tirap as early as the beginning of the 13th century. In the Ahom period and the early British period, the Noctes were referred to as various groups of people known as Borduarias, Paniduarias, Namsangias, Jaipurias etc.

Ahom-Nocte-Wancho Relations

The Ahoms, as already stated, came across the Noctes of Tirap on their way to Assam. The salt springs and wells of the Noctes were a source of friction between them and the Ahoms and they clashed with each other over the question of occupancy. According to the Buranjis, the Ahoms seized a salt well in Mohong in 1536 A.D., and in course of time enjoyed either exclusive rights on several such wells or shares in the salt produced in them.

Some of the tribal groups appear to have entered into friendly relations with the Ahoms. "There is a story that a Banfera¹ (Banpha or Banpara) Naga Khunbao (i.e. chief) had made close friendship with king Supimpha (1493-97). His name was Karangpa. One day when Karangpa came to pay his tribute to king Supimpha, one of Supimpha's wives (married from the 'Chamua class'—a class of people below the nobility and above the rank of labourer) happened to see the Banfera Naga Khunbao from inside the palace and when the king went inside the queen praised the beauty of the Naga Khunbao in the presence of the king. The latter was so incensed at this that he gave her to the Khunbao who took her to the Naga village. She was pregnant at that time and subsequently gave birth to a son in the house of the Khunbao. In the reign of the next king Suhungmung, the Dihingia Raja (1497-1539 A.D.) that boy used to come to pay tribute to the Ahom king. Suhungmung was struck by his high-bred appearance and conversation and learning that his mother was already pregnant before Supimpha gave her to the Naga Khunbao, he took him into favour and as he was not the son of a queen of a higher rank so Suhungmung created for him the new post of Barpatra Gohain, which he made equal to those of the Burahagohain and the Bargohain. He named the boy Kancheng Barpatra. As Kancheng was born and brought up in the Naga village, his family came to be known as 'Naga Barpatra's ghar' or house. This incident serves as an example of intimate friendship with the Ahom king that was established by the Banfera Nagas."² The friendly relations between the Banfera Nagas and the Ahoms are also borne out by the fact that the

¹ Banfera is a Wancho Village.

² Lakshmi Devi, Ahom-Tribal Relations, (Gauhati, 1968), pp. 31-32.

Banfera Nagas sought help from the Ahoms repeatedly in 1549 A.D. and 1665 A.D. when they were attacked by another group of the Nagas called Banchang.¹ The help was given and the Banchang Nagas were defeated.

But, some other groups of the Noctes living close to the border of the Dibrugarh District of Assam committed occasional raids in the Ahom territory. To keep them in check, the Ahom king Pratap Singha (1603-1641 A.D.) constructed a rampart called Naga-garh. Scarcity of food was the main reason for these tribal raids. And this fact prompted the king to grant the tribal chiefs 'khats' or lands to make up their food deficiency. These estates, known as Naga-khats, were looked after by some Assamese agents called Naga-katakis. In return for the grant of these cultivable lands, the tribal groups of each 'duar' or pass were obliged to pay annual tribute to the Ahom king in the shape of mithun (an animal of the bovine species), elephant tusk, goat's hair, cane slips coloured in red, salt and various other articles produced in the passes.

During the reign of the Ahom king Gadadhar Singha (1681-1696 A.D.), the Namsangia Noctes committed a daring raid on a Ahom salt mine in 1692 and killed some twentythree persons. A punitive expedition was sent against them and it took a terrible reprisal. Another skirmish between the Ahoms and the Noctes took place in 1701 in the salt mine at Barhat in which both sides suffered casualties. The Ahom king Rudra Singha (1696-1714 A.D.) sent an army against the Noctes. No blood was, however, shed. The Noctes compromised and in the rapprochement the king gave them presents. No uprising against the Ahoms during the rest of the 18th century was recorded.

The Moamaria rebellion broke out in Assam in 1769 A.D. and continued till the early part of the next century. It gave a rude shock to the foundation of the Ahom kingdom, which was already on the decline. In the wake of the rebellion came the successive Burmese invasions of Assam (1816-1824 A.D.). The invading Burmese devastated the land and destroyed the state-power almost completely. The Ahoms were a spent up force by now. During this period of utter chaos and disorder, hostilities broke out anew, and we read again of a series of raids made by various Nocte and other groups of people of Tirap, and also of retaliatory expeditions sent out by the Ahoms to put them down. The Noctes raided and plundered some villages in the Ahom territory in 1807 A.D., when the reigning king of Assam was Kamaleswar Singha (1795-1811 A.D.). After the Burmese invasions, Assam was ceded to the British by the Treaty of Yandabo in 1826. Purandar Singha, the last of the Ahom kings, was installed by the British as tributary ruler of the whole of Upper Assam except Sadiya and

¹ Banchang is the present Wannu Village of the Wanchos.

Matak. During his reign (1832-1838 A.D.) Malauthupia (or Malamthupia) Nagas, who were probably Noctes, made a daring raid in the Ahom territory in 1836 A.D. An expedition was sent out immediately and the rebels were eventually defeated. Meanwhile, two groups of the Noctes, the Namsangias and the Bordurias, came into serious conflict in 1837 A.D. The Borduria Khunbao was killed. The Ahom king interfered and arrested the Namsangia Khunbao nicknamed Angulikata.

The history of the Ahom-Nocte relationship is, however, not only of enmity and friction, but also of friendship, commercial and cultural intercourses. The Namsangia, Borduria and Paniduria Noctes traded with the Ahoms for supply of salt to the plains of Assam. A nominal tax was imposed by the Ahoms on the salt brought from the hills. King Purandar Singha further employed his own men to extract salt from the wells in the lower hills. Later the British exempted the Noctes from the payment of salt-taxes. The Noctes extracted salt from a number of brine springs owned by them in their hills, and took keen interest in exporting it.

By the way of trade the Noctes came into close cultural contact with the people of the nearby plains area of Assam. It is believed that sometime between A.D. 1699 and 1745, one Lotha Khunbao of the Namsangia Noctes accompanied by his tribesmen came to meet Shri Ramadeva, the Vaishnava saint of Bali Satra near Naharkatiya, and prayed for initiation into Vaishnavism. The prayer was granted, and the saint initiated the Khunbao and his men into Vaishnava religion. Lotha Khunbao was given the name Naruttam meaning the best among men. Thus a section of the Noctes came under the influence of Vaishnavism, and it gradually spread out to other Nocte clans as well. The Noctes, however, adopted a very elementary form of Vaishnavism which is said to be a compromise between some tenets of Vaishnavism and the tribal ways.

British-Nocte Relations

From the middle of the 19th century, the Noctes started coming in large numbers to the nearby tea gardens of Assam as labourers, and also to the markets in the plains for purchase and sale of timber, bamboo, basket, ivory, hide, skin, bag, shawl etc. In 1841-42, Captain Brodie, the Principal Assistant to the Governor General's Agent, visited the Nocte area to ensure security of the frontier between the Dikhu and Burhi-Dihing. He met the Nocte groups of Namsangias, Bordurias and Panidurias. He persuaded them to refrain from committing outrages in the plains, and urged them for surrender of offenders and discontinuance of inter-tribal clashes. He also exhorted them to refer to the Government cases of assault on them from outside and

give up the practice of sending child-slaves to the British territories. The standing cases of feuds which were submitted to him were settled.

The efforts made for maintenance of peace and order were successful only for a short period. Inter-tribal feuds and outrages flared up again. In November 1853, the Namsangia chief demanded tribute from several villages ruled over by the Chief of Borduria. In the skirmish that followed the Namsangias killed a number of Bordurias. In 1872, the Namsangias made a massacre of another group of the Noctes called Boralinga. The British Government took various measures for maintenance of peace in the area. The long-drawn feud between the Namsangias and Bordurias was reconciled by negotiation. Capt. Holroyd held a meeting of the chiefs of the two groups, and it was decided that an European officer should be posted to Jaipur to deal with all tribal disputes as and when they might arise. But in 1884, the Namsangias, 6000 strong at that time, were still at feud with the Bordurias. Inter-tribal clashes were reported from time to time, and the Government was compelled to intervene. In 1888, a group of Namsangias carried away six persons from Dilli village and put one of them to death. The Namsangia chief was ordered to pay a fine of Rs. 1000/- for the offence. By an agreement, the chief was also required to let a plot of land in Hukunjuri at an annual rental of Rs. 450/-. By the same agreement the Chief of Borduria was allowed to hold 200 *bighas* of rent-free land near Jaipur. The Chief of Namsang was granted licence for purchase of arms and ammunition within restricted limits. The two chiefs agreed to send annual reports to the Deputy Commissioner of Lakhimpur District, and pay tribute to the Government and receive gifts in return. They also agreed to bring to the Government all cases of feuds for settlement. But, in spite of the agreement, the two Nocte groups were again engaged in a serious clash in 1900. Consequently, the Government stopped payment of the rent of Hukunjuri land for two years as a measure of punishment. The Chief of Namsang was also suspected of a conspiracy. He was summoned at Dibrugarh, and detained there for two years. Tribal feuds, particularly between the Namsangias and Bordurias, did not, however, come to a stop, they broke out occasionally, and as a result, peace in this area was disturbed till the end of the British rule.

The areas under jurisdiction of the Namsang and Borduria Nocte chiefs were hitherto 'partially administered'. The British Government was primarily concerned with the security of the frontier, and to ensure this they on the one hand exercised overall administrative control in these areas, and on the other conciliated the tribal groups. The policy was backed by a display of force and authority, but no regular administration was established until, it may be said, the formation of Tirap Frontier Tract in charge of a Political Officer in 1943.

WANCHO

The Wanchos, like many other tribes of Arunachal, have their own traditions about migrations. According to one tradition, original place from which they came is Nyannu Ofan. Another tradition traces the courses of their migration to their present abode through Tangnu and Tsangnu both in the Tuensang area of the present Nagaland. It is not known when they actually migrated. The Ahom Buranjis and the early British records, however, suggest that they came and settled in the south-western part of Tirap some hundred years ago.

British-Wancho Relations

The hard life of the tribal people living in the mountainous tracts in this area was, in the old days, marked by occasional outburst of inter-tribal feuds and internecine strife. In 1841-42, Captain Brodie visited the Wancho villages of Banfera, Joboka, Mulung, Jaktong, Tabong and Changno. The Wanchos appeared to be less turbulent than the Noctes. It was also reported that they fell victims to Nocte raids. In April 1844, the Bor-Mithunias, a group of the Wanchos who called themselves Chopnu after their own village name, made an attack on the Banfera village. The Banfera Wanchos, on the other hand, committed a murder in the Sibsagar border in April 1851, and fled to the Joboka village. In March 1853, they committed another murder at a place close to the border of Sibsagar District. The outrages continued, and in 1869, the Wanchos were again reported to have carried off three labourers from a nearby tea-garden in the plains.

In 1875, Lieutenant Holcombe, the Assistant Commissioner of Sibsagar District and Captain W. F. Badgley led a survey party to the Wancho area. They reached Ninu (Nginu), the famous and formidable Wancho village on the right bank of the Tisa river, on the 1st February, 1875. The Wanchos were suspicious of the outsiders. They did not know anything about the survey work, nor did they see any such party of outsiders intruding into their country. And it so happened that the villagers were then mourning the death of their chief who had just died. The dead body was still to be disposed. Moreover, some sepoy of the party treated the villagers contemptuously. As ill luck would have it, one of the sepoy of the party hit the corpse with his baton out of disgust at the method of disposal of the dead body. This was an offence unimaginable to the tribal people. Enraged at the crime committed, the Wanchos fell upon the survey party in the morning next day and killed eighty men of the ill-fated party including Lieutenant Holcombe. Captain Badgley escaped with injuries along with fifty other men of the party. A military expedition was immediately sent

to avenge the massacre. A strong force under the command of Brigadier Nuthall worked their way to Ninu. Senua was taken and destroyed and the villages of Ninu, Nisa and Longkai were burnt. Another expedition was sent the same year to destroy Ninu, which was rebuilt. The proud Wanchos of Ninu did not give way without a fight. An interesting passage from a description of the encounter given by R. G. Woodthorpe, who carried out survey operations in the Wancho area, is reproduced.

"As we marched along under burning sun, we saw large numbers of Nagas, in full war-dress, coming down through the fields on our left from Lonkai. We turned a corner, and found ourselves only half a mile from Ninu, which the long grass had hitherto hidden from our sight. As we continued on our way, a column of smoke rose slowly from some houses in front of us; at first we thought that the enemy intended burning their own village, and not making any stand, but seeing that these houses were a few detached from the main village, which would have afforded shelter to our skirmishers covering the attacking party, on the very strong stockade which surrounded the village itself, we gave them credit for their military skill, and hoped they intended to make a good defence, which hope was strengthened by their calling out 'come on; we are quite ready for you', and at once opening fire on us. We had caught glimpses of the 42nd approaching up the other spur; they arrived almost as soon as we did, and were received on their side by a body of Nagas stationed outside the stockade with a volley. When we, on our side, were close up to the stockade the firing ceased, and again an ominous cloud of smoke, followed at once by flames, rose again, this time within the stockade, which the Nagas had now abandoned. Had they stood up a little more boldly and fired more carefully, we must have suffered severely, as our advance was necessarily made over open ground, up very steep approaches, very thickly planted with *panjies*. We clambered over the stockade without delay, but the Nagas were quicker and before half-a-dozen of us were over, the greater portion of the village was in flames, the Nagas dispersing in every direction. After the fierce heat of the sun, the change to the fiercer heat of the burning houses closely built was not a pleasant one, and we ran through the village as rapidly as possible, our pace being accelerated every now and then as some large house subsided suddenly, threatening to involve us in its fall and covering us with a shower of fire-brands, while the hot, pungent smoke blinded us. At last we were once more clear of the village, and could see the Nagas rapidly retreating along all the slopes in the direction of Nisa, a village four miles distant from Ninu"

¹ Verrier Elwin, *India's North-East Frontier in the Nineteenth Century*, (London, 1962), pp. 81-82.

The retaliation taken for the Ninu massacre made an abiding impression on the Wanchos. The Wanchos, except in Banfera and its adjacent villages, were henceforth shut out from the plains. It is only after the independence of India, the administration has extended to all parts of the Wanchos area for their welfare and development.

TANGSA

The word 'Tangsa' means hill people, 'tang' for hill and 'sa' for people. The Tangsa story of migrations alludes to the fact that search for cultivable land and inter-tribal feuds impelled them to migrate from their abode across the Patkai and settle in Tirap a few centuries ago. The memories of migrations lived for generations, and they are still fresh in their minds. It is certain that the Tangsas came before the arrival of the Singphos as some groups of them are said to have been conquered and subjugated by the Singpho chiefs named Sombianong, Ningru, Samon, Bisa and Kheryam. During this period of Singpho domination, some of the Tangsa groups were deeply influenced by the Singpho culture and they adopted some of its traits.

British-Tangsa Relations

The Tangsas of Namchik were mentioned in 1836 as a polite and courteous people. A trade route to Burma passed through their land. They tried to maintain a friendly relation with both the Dapha Gum and Bisa Gum, the Singpho chiefs, although they were not happy with them. They were in need of protection, and the British Government gave them arms to defend themselves against the Singphos. But, in 1838, Captain Hannay found them still open to the depredations of the Singphos. The Dapha Gum, for instance, took away many of their properties as booty.

The Tangsas were a peace-loving friendly people. Occasionally, however, there were incidents of kidnapping of British subjects by a group of the Tangsas. To keep them in check, an outpost was opened at Tikak and the post at Ledo was reinforced in 1897. A labourer in the Makum Tea Garden was kidnapped by them in 1899. The Tangsa village responsible for it was fined Rs. 30/-. In the month of February, 1900, three labourers were again kidnapped, and only one of them was returned on demand by the Government. They even raided a *sarkari* village in the Lungchang Hill in June, 1901 in retribution for the assistance it rendered to the Government, and carried off the village chief, who was subsequently rescued. In 1902, the Tangsa group turned their attention to the Namsang area, where they killed the Khunbao and ten other men. Their next raid was on the village of Dingsong, and they continued to raid up to 1934.

In 1902, the Tikak and Ledo outposts were withdrawn, and a new post was opened in farther interior of the Lungchang Hill within the Naga *sarkari* area. In 1908, Williamson led an expedition to deal with a case of murder perpetrated at Wakpong. It was also alleged that the local people were involved in thefts of railway material stocked at the railway works at Ledo and in the vicinity of nearby mines. An outpost was opened at Tirap for surveillance. It was reported that during the harvest seasons, a number of people were regularly kidnapped. The Government took a serious view of this matter and decided to punish the culprits for each and every offence. Strong and effective measures were taken against the practice of kidnapping, and eventually it came to a stop. In 1926-27, another outpost was opened at Majum close to the Patkai.

SINGPHO

The Singphos made their first appearance on the eastern tip of this frontier towards the end of the eighteenth century, when Assam had fallen into a state of anarchy due to the Moamaria rebellions and the autocratic regime of the Ahom king Gaurinath Singha (1780-1795 A.D.). The decline of the Ahoms already began, and their administration in the outlying provinces of the eastern frontier was crumbling. At this time in about 1793 A.D., the Singphos broke through the Patkai Pass and came across the Khampis, whom they ousted from their settlement in the Tengapani area, east of Sadiya. Gradually, they spread out and occupied the whole level tract of the country watered by the Burhi-Dihing, the Noa-Dihing and Tengapani rivers.

The Singphos played an important part in the shaping of the history of this frontier. They were very war-like in the beginning. The Ahoms were engaged in a clash with the Singphos when the latter joined hands with the Moamaria rebels in 1797 A.D., and ravaged the eastern part of Assam. The Singphos fell back when the Ahoms stormed their fortress. An attempt was made by the Ahoms to win them over by a matrimonial alliance, but the Singphos turned a deaf ear to the overtures. The Singpho chief Bichanong was too ambitious to come to terms. He sought the assistance of the Burmese for his campaigns. During the Burmese incursions (1816-1824 A.D.) in the Assam Valley, the Singphos made violent raids on this part of the country.

British-Singpho Relations

The Singphos were a virile and vigorous people when they came. They,

were "by far the most powerful tribe bordering on the Valley", wrote Robinson in 1841. "They are generally a fine athletic race above the ordinary standard in height, and capable of enduring great fatigue; but their energies are greatly impaired by the use of opium and spirits, in which they freely indulge",² remarked Dalton in 1872. And, probably for this reason, their number was dwindling.

In 1825, a band of about 7,500 Singphos fell upon the Khamptis and the Moamarias. The Sadiyakhwa Gohain, the Khampti chief of Sadiya, was imprisoned within his stockades and the Bor Senapati, the ruler of the Matak country, south of Sadiya, between the Brahmaputra and the Burhi-Dihing, was attacked in his own country. At this stage the British Government had no firm decision as to its future policy in Assam. The Government was disinclined to undertake the defence of a tract so remote as Sadiya and to interfere with the hillmen so strange as those of the North-East Frontier.³ But when the Sadiyakhwa Gohain and the Bor Senapati appealed to the British for help, it was rendered strictly for defensive purposes. The alliance proved too formidable for the Singphos to combat. They approached the British authorities for negotiation lest they were not expelled from their possessions just as the Burmese were driven out. The Singphos had by this time occupied considerable tracts of land, and cultivated them by slave labour. They were anxious to retain the land and the huge army of slaves. In the course of negotiations, it was made clear to them that no settlement was possible unless they released the Assamese captives used as slaves and refrained from plundering the villages of Sadiya. The British Government was also eager to know whether they would protect the border in the event of a Burmese incursion. The Singphos were a disunited tribe under different chiefs, of whom Bisa Gam, Duffa Gam, Luttora Gam and Latta Gam were important.⁴ It was extremely difficult to deal with them as a whole, for they were guided by their own group interests. Hence, contrary to expectations the negotiation revealed that the Singphos needed British protection for themselves against the Burmese. But the British Government took an uncompromising stand in regard to the surrender of captives and booty. A reconciliation with the Singphos was, therefore, difficult. At this stage, a Burmese aggression seemed imminent, which impelled the Government to assure them of the

¹ W. Robinson, *A Descriptive Account of Asam*, 1841 (Delhi, Reprinted 1975), p. 375.
² E. T. Dalton, *Tribal History of Eastern India* (Descriptive Ethnology of Bengal), (Delhi, 1973), p. 10.

³ A. Mackenzie, *History of the relations of the Government with the Hill Tribes of the North-East Frontier of Bengal*, (Calcutta, 1884), pp. 61ff.

⁴ The word Gam is the affix indicating the elder branch or member of a family of a Singpho clan.

possession of their lands with a view to winning them over as allies against the Burmese.

Belying all speculations, the Singphos, who were left unprotected, made a common cause with the Burmese when they did actually appear on the Patkai in June 1825. Captain Neufville at the head of an infantry at once advanced up the Noa-Dihing, and by a series of gallant attacks drove out the Burmese from the Singpho villages of the Bisa and Duffa Gams which he destroyed. The Singpho chief including the Bisa Gam made their surrender and the Burmese were finally pushed back. With the assistance rendered by the Bor Senapati, the Khamptis and the Miris, Captain Neufville is said to have released about 6000 captives in the course of these operations.

Of the twentyeight Singpho chiefs, sixteen came to an agreement with the British Government in June 1826 when David Scott, the Governor General's Agent, visited Sadiya. The chiefs agreed to the release of captives and promised assistance to the British troops if called for in future. They also pledged to refer disputes to the arbitration of the local officers. Hostages were given for the due fulfilment of these engagements.¹

It was also subsequently decided in 1829 that Bisa Gam should have a general control over the sections of the tribe who had submitted, and that the twelve chiefs who did not submit should be warned that they would not be allowed to settle in Assam in case they failed to appear within two months. No revenue was, however, demanded from the Singphos, but according to the terms of the agreement, the Gam of Bisa was to provide, if needed, a contingent of eighty men, and to convey immediate information to the British authorities of any alarming development that might take place near the Patkai Pass.

In the early part of 1830, a combined force of the Singphos and the Khamptis was reported to have marched into the plains after crossing the Burhi-Dihing and proceeded towards Sadiya. Rumours were afloat that they were out to liberate Sadiya from the British rule, and the Sadiyakhwa Gohain was in sympathy with them. The attempt failed, and Captain Neufville succeeded in driving them out from the village of Luttora Gam on the Tengapani where they had established their headquarters. They retreated across the border. The Bisa Gam remained loyal throughout these operations.

The Singphos depended on their slaves, and hence they resented vehemently when they lost them. In spite of the agreement of 1826, the Singphos

¹ A. Mackenzie, *History of the relations of the Government with the Hill Tribes of the North-East-Frontier of Bengal* (Calcutta, 1884), pp. 61 ff. — reference: Verrier Elwin, *India's North-East-Frontier in the Nineteenth Century*, (London, 1962), p. 388.

continued to kidnap people from the plains and keep them as slaves. In July 1834, an European officer was posted at Sadiya permanently to prevent the Singpho chiefs from retaining their slaves.

Meanwhile, the Duffa Gam, the arch rival of the Bisa Gam, began to create serious disturbances. Perhaps, the favour done to the Bisa Gam by which he rose to the position of the permanent chief of the tribe provoked the animosity of the Duffa Gam. Taking advantage of the chaotic situation along the Indo-Burma border, the Duffa Gam carried on a series of raids from Burma on the villages under the jurisdiction of the Bisa Gam.

By the previous engagements, the British Government committed itself to protect the Bisa Gam, and to safeguard his rights and privileges. The British valued highly the friendly gestures of the Bisa Gam, who showed an unflinching loyalty to the Government since the agreement of 1826 was effected. The outrages of the Duffa Gam, which endangered the safety of the Bisa Gam, therefore, concerned the British Government seriously.

In 1835, the Duffa Gam launched a sudden attack from across the border on Bisa's village, killing mercilessly some ninety persons including women and children. He drew to his side most of the gams who were subordinated to the Bisa Gam in 1829, and built stockades inside the Indian territory. But he was not allowed to stay, and with his expulsion all the chiefs save the Luttora Gam reaffirmed their allegiance to the Government. The Luttora Gam, who next to Duffa Gam was the most powerful of the contemptuous chiefs, submitted in 1837.

But the smouldering discontent among the Singphos as was expressed during the following years in their endemic quarrel on the one hand and their occasional flare against the British overlordship on the other showed that it was more deep-rooted than was contemplated. An attempt was made at this time to bring all the Singpho settlements under administrative surveillance. In 1841-42, the Singpho frontier appeared so quiet that its management was transferred from the Political Department to the Revenue and Judicial Departments of the Bengal Government.¹

The peace was, however, short-lived. In 1843, a sudden attack on the outpost at Ningroo by a large band of the Singphos from Burma sparked off a widespread rebellion, in which all the Singphos of the Assam border and a large number of the Khamptis took part. The Bisa Gam was also suspected of having lent a helping hand to it. The uprising was believed to have been fomented by Tipam Raja, a scion of the Ahom royal family who was appointed Governor of Hukawng in Burma by the Burmese king

¹ A. Mackenzie, History of the relations of the Government with the Hill Tribes of the North-East Frontier of Bengal (Calcutta, 1884), pp. 61 ff — reference : Verrier Elwin, India's North-East Frontier in the Nineteenth Century, (London, 1962), p. 392.

with, it was said, instructions to take advantage of any situation that might arise for invading Assam. Prompt measures were taken to quell the revolt. The operations which dragged on for months ended in the surrender of all rebel chiefs and their accomplices, and in the complete submission of the Singphos as a whole. This was the last uprising of the Singphos against the British paramountcy, and since then they appear to have retired to peaceful pursuits of life.

An enquiry commission appointed by the Government found the following three causes of the rebellion:

- (i) encroachment on the lands and privileges of the Singphos,
- (ii) the seizure and punishment by local officers of some members of their tribes, and
- (iii) the orders of the Tipam Raja.

"The Governor General in Council in reviewing the report set aside the last two grounds, as it was certain that the orders of Tippum, if ever given, would have had no effect unless they had fallen on willing ears; and as to the second point it was shown that no Singpho had been punished save under the terms of their engagements, and in accordance with established usage. The real cause Government sought in the first point noticed. Although the Singpho agreements made with Mr. Scott are personal rather than local, yet it was clear they were meant to apply within certain limits, that is, within the ordinary habitat of the tribe. Unfortunately no such limits were ever regularly defined, and of late the extension of tea cultivation had made this omission of serious consequence."¹

The Governor General's Agent in a further report maintained that the main cause of the Singpho insurrection was the loss of their slaves. Accepting this report, the Government made it clear to the Singphos that there must not be any revival of slavery.

ADMINISTRATIVE HISTORY

The administration of India's North-East Frontier now known as Arunachal Pradesh has been consolidated through many decades of Government jurisdiction and effective control exercised and developmental activities undertaken in this area. "The first important step towards some kind of

¹ A. Mackenzie, History of the relations of the Government with the Hill Tribes of the North-East Frontier of Bengal, (Calcutta, 1884), p. 61, — reference : Verrier Elwin, India's North-East Frontier in the Nineteenth Century, (London, 1962), p. 393.

elementary administration, at least in the foothills, as well as for the establishment of more friendly relations, was the appointment of an Assistant Political Officer at Sadiya in 1882. This was J. F. Needham, who continued there till 1905. He was subordinate to the Deputy Commissioner, Lakhimpur District, and was succeeded by N. Williamson, who held office from 1905 to 1911. Williamson and Dr. H. Gregorson were murdered in 1911 during their visit to Pangi in the present Siang District. Both the officers made extensive tours into the interior of the present Siang, Lohit and Tirap Districts. After the 'Abor Expedition' of 1911-12, topographical survey of an wide area was carried out, and the administration gradually extended into the interior areas. In 1914, the entire hill tracts now known as Arunachal Pradesh were divided into three administrative units—(i) The Western Section, North-East Frontier Tract, (ii) The Central and Eastern Sections, North-East Frontier Tract and (iii) The Lakhimpur Frontier Tract. The first two units were each placed under the charge of a Political Officer, and the third unit under the Deputy Commissioner, Lakhimpur District. The headquarters of the Western Section was Charduar and that of the Central and Eastern Sections was Sadiya. The first Political Officer of the Central and Eastern Sections comprising the present districts of Siang, Lohit and a part of Tirap was W. Dundas. "It was decided that for the future the numerous hill tribes who border the plains of Assam from Bhutan in the west along the ranges of the Himalaya to the Mishmi country of the Lohit Valley, together with those south of the Lohit who inhabit the plains and western slope of the Patkai, should be dealt with by Political Officers working directly under the orders of the Government of Assam".²

In 1919, on the recommendations of the then Chief Commissioner of Assam, the Central and Eastern Sections was renamed as the Sadiya Frontier Tract and the Western Section as the Balipara Frontier Tract.

The above arrangement held good upto 1942. In the year 1943, the Tirap Frontier Tract was created with certain areas from the Sadiya Frontier Tract and the Lakhimpur Frontier Tract. The new administrative charge was placed under a Political Officer with headquarters at Margherita. In 1942, E. T. D. Lambert, Officer on Special Duty, was succeeded by G. E. D. Walker, who became the first Political Officer of Tirap Frontier Tract. It is important to note that in view of the inter-Nocte feuds the Namsang-Borduria was declared as a controlled area. The Chiefs of Namsang and Borduria owed allegiance to the Government.

As early as 1903-4, the tribal tracts in the plains of Lakhimpur were

¹ Verrier Elwin, A Philosophy for NEFA, (Shillong, 1964), pp. 2-3.

² Assam District Gazetteers (Vol. XI)—The Sadiya and Balipara Frontier Tract Gazetteer, Parts I & II (Shillong, 1928), p. 14.

brought under direct administration. The Tangsas, who were the main inhabitants of this area, were required to pay a tax of two rupees per house, and the Singphos of Bordumsa three rupees per adult.

In 1917, the Government received a perpetual lease of tribal land in the plains of the Sibsagar District of Assam on a compensation of Rs. 1,500/- paid to the Chiefs of Banfera and Chopnu. According to the agreement, all land in the Sibsagar District was placed entirely at the disposal of the Government with a proviso that the village of Zusa (Rusa) would retain its right to jhum lands on the Tanglam Range.

According to the Inner Line Regulation, 1873, passage from outside to the tribal areas now known as Arunachal Pradesh was not permitted without a licence in order to bring under more stringent control the commercial relations of the British subjects with the frontier tribes and prevent operation of speculators in caoutchoue (rubber) and also the spread of tea gardens beyond the fiscal limits of settled territories. The Regulation laid down rules concerning trade and the possession of land and property beyond this line. The Inner Line Regulation of 1873 still remains in force, although slight changes were made in its provisions from time to time.

The Tirap Frontier Tract was constituted during the World War II when construction of a motorable road, later known as the Stilwell Road, was undertaken for opening of a passage to Burma. The construction of this road and other developments connected with it, such as temporary stationing of troops, movement of evacuees from Burma, opening of medical-aid centres and other camps along the road, brought about significant changes in this frontier. In 1941, an outpost in this district was opened by the Americans. Political Officer Mr. Walker proposed to shift his headquarters to Kengku near Changlang. Another alternative proposal was made to shift it to Horukhuma near Tirap. Finally, it was decided that the Political Officer should continue to stay at Margherita for defence purposes. A large number of the Tangsas and Noctes living near the plains deserted their villages and dwelt in jungle camps during the war. In April 1942, a foot track from North Tirap to Burma was opened by the Assam Regiment and the Assam Rifles when the Stilwell Road was under construction. A few temporary medical aid posts along the road and an American Aid Centre at the 'Hell Gate' (Nampong) were opened at this time.

The administration was further consolidated after independence. In 1952, a large tract of the hitherto unadministered Wancho area was brought under administration. In the fifties, the civil administration extended effectively to the deep interior parts of the area. During this period, administrative centres and units were opened at Bordumsa in 1953, Khonsa, Changlang, Nampong, Niauxa and Wakka in 1954, Laju, Panchao and Kanubari

in 1955, Namsang in 1958 and Lu-Banfera in 1959. The extension of administration continued in the sixties. Reconnaissance of Vijoynagar, locally known as Jahu-Natu in the eastern extremity of the district, was done in 1961. In the winter of 1961-62, an expedition led by Major General A. S. Guraya, the then Inspector General of Assam Rifles, was sent to this place, which resulted in the opening of an Assam Rifles outpost at Vijoynagar and a check post at Chaukan Pass. At the same time, Hpugan Pass on the Kumon Range was reconnoitred. In January 1962, an administrative centre was established at Vijoynagar. Centres were also opened at Miao in 1964, Manmao in 1966 and Deban in 1967. With the opening of these administrative centres throughout the area, the whole of the district, constituted as an administrative unit, has been brought under regular administration.

Under the North-East Frontier Areas (Administration) Regulation, 1954, the administrative units were reconstituted with redefined boundaries. Accordingly, the Tirap Frontier Tract was renamed as the Tirap Frontier Division. In 1954-55, when Shri P. N. Luthra was the Political Officer (from January 25, 1954 to March 22, 1955), the divisional headquarters started moving from Margherita to Khela inside the district. Khela was the headquarters from August 2, 1955, when Shri B. N. Waghay held the charge of Political Officer, until it was changed for Khonsa as the new divisional headquarters from August 17, 1959, when Shri K. A. A. Raja was the Political Officer (from November 14, 1956 to September 25, 1959). The headquarters were shifted from Khela to Khonsa for the reasons that the climate of Khela, situated at a very low place, was not congenial to health and the place was not suitable enough for administrative purposes.

In 1965, the Tirap Frontier Division came to be known as Tirap District and the Political Officer was redesignated as Deputy Commissioner according to the provisions of the North-East Frontier Agency (Administration) Regulation of 1965. Shri R. K. Patir, then Political Officer, became the first Deputy Commissioner of the district on September 1, 1965.

CHAPTER III

PEOPLE

Population

According to the 1971 Census, 97,470 persons live in the Tirap District extending over an area of 6,907 sq. km.* The density of population is 14 per sq. km, which is the highest among all the districts of Arunachal Pradesh. The entire population is rural, interspersed in 312 villages.

The tables below are indicative of the decadal variation in the district population :¹

<i>Total Population Census Year</i>	<i>Male</i>	<i>Female</i>	<i>Total Persons</i>
1961	30,601	28,990	59,591
1971	51,774	45,696	97,470

Increase of population from 1961 to 1971=37,879

<i>Scheduled Tribe Population Census Year</i>	<i>Male</i>	<i>Female</i>	<i>Total Persons</i>
1961	27,423	27,681	55,104
1971	34,493	34,352	68,845

Increase of population from 1961 to 1971=13,741

The major section of the district population is constituted by different tribal groups. There is, however, no Scheduled Caste population in the district. During the period 1961 to 1971, the percentage of decadal growth of the total population is 63.56 and of the Scheduled Tribe population is 24.94.

* The area figure is provisional.
¹ Census of India 1971, Arunachal Pradesh, Part II-A, pp. xi, xii, 11, 20, 37.

According to the 1971 Census, the tribal population of Tirap District is as follows :

Name of Scheduled Tribe	Population		
	Person	Male	Female
1	2	3	4
Wancho	28,642	14,574	14,068
Nocte	24,292	12,104	12,188
Tangsa	13,448	6,526	6,922
Singpho	1,168	581	587
Yobin	929	487	442
Adi*	208	125	83
Khampti	108	57	51
Mishing/Miri	16	13	3
Nishi	9	5	4
Bangro	5	5	—
Deori	3	2	1
Apa Tani	2	2	—
Khamiyang	2	2	—
Meyor	2	2	—
Mikir	2	2	—
Momba	2	2	—
Monpa	2	1	1
Idu Mishmi	1	1	—
Khamba	1	—	1
Mishmi	1	1	—
Sherdukpen	1	1	—
Tagin	1	—	1
Total :	68,845	34,493	34,352

* Population of different groups of the Adis comprising the Gallongs and the Millangs as enumerated in the 1971 Census is included under their common name Adi.

In the table below is shown the distribution of the total population of the district according to the sub-divisions and circles:

Sub-division	Circle	Population (1971 Census)
1. Khonsa	(1) Khonsa	15781
	(2) Namsang	4297
	(3) Laju	6274
2. Changlang	(1) Changlang	11735
	(2) Nampong	5696
	(3) Manmao	2693
3. Miao	(1) Miao	12910
	(2) Bordumsa	2610
	(3) Deban	3997
	(4) Vijoynagar	1833
4. Longding	(1) Niauxa	9103
	(2) Wakka	6400
	(3) Panchao	8114
	(4) Banfera	6027
Total :		97,470

Villages and Rural Population

As already stated, the entire population of Tirap District numbering 97,470 is rural. Most of the rural settlements are diminutive and very small villages. The number of villages in the district classified by population in the 1971 Census is as follows :

(1) Number of villages with population less than 200	— 176
(2) Number of villages with population of 200-499	— 75
(3) Number of villages with population of 500-999	— 42
(4) Number of villages with population of 1000-1999	— 16
(5) Number of villages with population of 2000-4999	— 3

Total number of inhabited villages 312

According to the 1971 Census, the percentage of rural population living in villages of various population ranges in the district in 1971 is as follows:

Categories of Villages with Population	Percentage of Rural Population	Percentage of Villages
(1) Diminutive Villages (Population less than 200)	16.78	56.41
(2) Very Small Villages (Population of 200-499)	24.68	24.04
(3) Small Villages (Population of 500-999)	30.38	13.46
(4) Medium Villages (Population of 1000-1999)	20.76	5.13
(5) Large Villages (Population of 2000-4999)	7.40	0.96

Tribes

The major tribes of the Tirap District are the Noctes, the Wanchos, the Tangsas and the Singphos.

The Noctes inhabit the south-western and central parts of the district. The Nocte area is roughly bounded by the Tirap river in the east and the Tisa river in the west, the Patkai range in the south and the plains of Assam in the north.

The Wanchos live in the Longding Sub-division in the south-western corner of the district within the Tisa river in the east, Burma in the south and east, the Mon District of Nagaland in the west and south and the Sibsagar District of Assam in the north-west.

The Tangsas occupy the eastern hills about the centre of the district. Their main concentration north-east of the Nocte area is in the Tirap and the Namchik river basins 'extending from the Patkai range in the south to the border of the State of Assam in the north'.

The Singphos live in the foothill areas of the northern part of the district in the Miao Sub-division adjoining the southern boundary of the Lohit District. The tract is watered by the Noa-Dihing and the tributaries of Burhi-Dihing.

The Yobins or Lisus are settled in the Vijoynagar circle.

Apart from these tribes, the displaced people rehabilitated in the district are the Tibetans in the Changlang Sub-division and the Chakmas and the Hajongs in the Miao Sub-division.

Language

Tirap is a polyglot district. The major local languages spoken in the district are Wancho, Nocte, Tangsa and Singpho. The Tibetan and Chakma are spoken by the recently settled refugees. A peculiar form of Assamese is also spoken by the local people, which serves as the medium of inter-communication between the different tribes as well as between them and the plains people. Major Indian languages, such as Hindi, Assamese, Bengali etc. are spoken, but they are mostly restricted to the Government employees. English is used for official purposes.

The Singphos, the Chakmas, the Tibetans and the Yobins have their own scripts, but they are used very rarely now-a-days. The Singpho script is based on the Shan script and it is believed that they have adopted it from their Khampti neighbours. The Chakma language is written in an alphabet which is very similar to the Khmer character. The literate Chakmas also use the Bengali script. The Yobins, who speak the Lisu language, use archaic Roman script. The other tribal languages are without any script.

Considerable dialectal variations are noticed throughout the district. A tribal speech may occasionally vary from village to village. The Noctes, for example, speak in nine different dialects. Similarly, the Tangsas are divided into a number of sub-tribes, each speaking a particular dialect, which have close affinities with each other. The Wanchos appear to have a common dialect, but the Wanchos of the upper and lower regions differ in their speeches to some extent. So is the case with the Singphos, dialectal variations exist among them as well.

Social Organisation—Clan and Class System

The society of the Noctes and Wanchos is divided into classes, but there is no caste division in any tribe of the district. Among the Wanchos, the *Wangham* (chief) does not sit together with a *Wangpan* (commoner) at a village feast in the same way as in the society of the Noctes, where a *kepi* (a member of the chief's clan) does not sit with a *tangmo* (commoner) in the same row.

NOCTE

The Nocte society is patrilineal, patriarchal and patrilocal. It is organised under chiefs, each controlling a number of villages, and the major chiefs receive tribute from the subordinate villages. The chief is called lowang. The existence of chieftainship is an important feature of their social and communal life.

Two distinct social classes are found amongst them, though the class system is not so conspicuous as among the Wanchos. The chief and his descendants form a separate class called *lowangjat*, while the commoners are called *sanajat*. The *lowangjat* being the ruling class treats the *sanajat* as their subservient class. In the Laju area the commoner class is called *pansajat*. Each of these two classes consists of many clans or lineage groups called *ku* or *ru* with various names and numbers in each class. All the clans are exogamous, but the tribe itself is endogamous. The exogamous character of the clans regulates the marriage system of the tribe. A striking feature of the Nocte society is its *chums* or physical divisions of villages. A clan, as a rule, is exogamous, but marriage between members of different clans within a *chum* is, under some exceptional circumstances, prohibited. Marriage is also not possible between members of all *chums* as it is believed that certain clans constituting different *chums* have had a common ancestry. All clans within a particular *chum* have a common name. For example, in Borduria one of the biggest Nocte settlement in the district, there are four *chums* each having a number of clans within it. These *chums* are *lothong chum*, *kheti chum*, *mongsang chum* and *mati chum*. The *lothong chum* has *lowang ku*, *medam ku*, *pongte ku*, *rutum ku*, and *wangsam ku* clans. The members of the five clans under this *chum* are called *ngopu* and marriage between them is strictly prohibited. The *kheti chum*, consists of four clans, namely *homsa ku*, *lete ku*, *khetu ku* and *to-su-ku*. These clans have a common name *khosia*, and marriage between them is not possible. One interesting point to be noted is that marriages between the members of *ngopu* and *khosia* groups are restricted due to a belief amongst them that the clans under these two *chums* descended from a common ancestral origin. The *mongsang chum* contains four clans, *tangdong ku*, *mongsang ku*, *mowang ku* and *mema ku*, who are collectively known as *bangsia*. The *mati chum* comprises nine clans, namely *mate ku*, *ramba ku*, *dadong ku*, *heng-khe ku*, *lama ku*, *lamra ku*, *lokhu ku*, *tangjong ku* and *pangsang ku*. All these clans within the *chum* are commonly known as *basia*. It is a striking exception that marriage is not restricted between *mati ku* and *lokhu ku* clans of this *chum*, for it is believed that the members of the two clans migrated from different places and were included in one *chum* for some unknown reasons. The *basia* group of clans in the *mati chum* are regarded as of inferior status by the *ngopu*, *khosia* and *bangsia* groups.

The Noctes of Laju area also have class divisions amongst them. Here the society is divided into two distinct classes, one is called *kepi*, meaning the chief's clans, and the other is known as *tangmo* or the commoner's clans. Inter-marriage between the classes is prohibited, but the chief has the privilege of taking second wife from the commoner class. Both the classes have eight clans each as follows :

Kepi Clans

Wangdung
Wangsa
Ootai Wangsa
Nyamtai Wangsa
Janpi
Ransong
Sapong
Mophuk

Tangmo Clans

Hodung
Rumsa
Kongkang
Nokpa
Moniyak
Juja
Khosa
Kompas

Besides the regulation of marriage, the distinction exists between the two in other social matters as well. For instance, when a *kepi* kills a buffalo for a social feast, no meat from its head can be taken by a *tangmo* and vice-versa. The commensal restrictions are quite obvious. The members of the two classes, *kepi* and *tangmo*, do not sit together in a row in community feasts.

WANCHO

The Wancho society like that of the Noctes is characterised by the existence of class distinction, a system uncommon amongst the other tribal people of this district. The Wanchos have also the same kind of great chiefs as of the Noctes, each controlling a number of villages from which he receives tributes. There are four Wancho classes, each class is formed on the basis of marriage relations and each one of them receives social recognition according to their gradation and status in the social hierarchy. The highest of these classes are the *Wanghams*—the chiefs enjoying special privileges and position in the society, the lowest are the *Wangpans*—the commoners. Between these two classes, there are two intermediary classes—the *Wangshas* and the *Wangsus*, who have sprung from inter-class marriages. The *Wangshas* are the descendants of *Wangham* fathers and *Wangpan* mothers, whereas the *Wangsus* are said to have descended from marriages between *Wangpan* men and *Wangham* women. According to the social hierarchy in the Wancho society, the *Wangshas* occupy the second position and the *Wangsus* the third. The social position of the classes is, therefore, fixed, and it is determined in a graded scale. The offsprings of parents belonging to the chief's families would continue to be *Wangham*, that is to say members of the highest class. But those who are descendants from the *Wangham* men and the *Wangpan* women or vice versa would always occupy a lower and intermediary social position. A description of the class relations in the Wancho society is as follows:

"Determination of the class and the status a person belongs to, follows from his birth. This fact has certain implications regulating the norms of social behaviour and social relations. A chief's daughter born of a mother who herself is the daughter of a chief, is termed *Wangsia*. Now, a chief's son born of *Wangsia* mother is a *Wangham* because he carries pure royal blood in his veins. But a chief might have other sons born of wives taken from the lower classes of *Wangsha*, *Wangsu* and *Wangpan*. The *Wangsha* and the *Wangsu*, though lower in status than the *Wangham*, still have some royal blood in them, and consequently are entitled to hold certain positions in society. They might be appointed to look after the chief's *morung*.

"Social distinction in the ordinary course of life does not become obvious but it is recognizable during some social functions where the whole community participates. For example, on the occasions of social festivities, the *Wangpans* who are at the bottom of the society are not allowed to take meal sitting in the same row with the *Wanghams*. A *Wangpan* under no circumstances can aspire to marry a girl who is above him in status. But there is nothing to stop a *Wangham* from taking a *Wangpan* girl for his wife. The *Wanghams*, the *Wangshas* and the *Wangsus* practically control the society and the *Wangpans* merely obey and abide by the decisions of the higher classes. We cannot say how far this division of classes resembles the caste system of the Hindus, but perhaps, we notice here something like a nascent state of caste distinction".¹

TANGSA

The Tangsas comprise a number of sub-tribes of whom the more important are the Lungchangs, Yoglis, Mosangs, Ron-Rangs, Khemsings, Moklums, Tikhaks, Ponthais, Longphis, Sankes, Lungris, Taipis and Haves. The sub-tribes are divided into a number of exogamous clans which are all ancestral. Some of these clans are further sub-divided into several sub-clans, which may be called lineage groups. The clan exogamy does not, however, permit marriage between all clans within a sub-tribe, for instance, marriage between the *sidia* and *riadia* clans of the Lungri sub-tribe is prohibited. The clan organization regulates marriage but not the political life of the people. There is no class distinction amongst the Tangsas.

Amongst the sub-tribes of the Tangsas, the Lungris and Ron-Rangs have five clans each, the Khemsings have six, the Yoglis seven and the Mosangs have as many as eighteen.²

¹ J. N. Chowdhury, *Arunachal Panorama* (Shillong, 1975), pp. 238-239.

² See 'The Tangasas,' by Parul Dutta, (Shillong, 1969), pp. 1, 53 and 54 for details.

SINGPHO

The class-division in the Singpho society is not apparently as complex as in some other tribal societies. The Singphos are divided into a number of clans or groups, each under a chief. Their clan organisation is based on lineage or sub-lineage groups. All these groups are exogamous and patrilineal in character. Chieftainship is an important feature of the Singpho society. The chief has several privileges, but his authority is not absolute. He is in theory the lord of all lands in the territory under his jurisdiction, but in practice individual rights in land are also recognised. The distinction between the chief and his people is in some measure bridged by the elders who command great position and influence in the society and can exercise separate jurisdiction in the event of the chief's failure.

Religious Beliefs and Practices

The religious beliefs of some tribal groups are a kind of nature worship. It is, however, significant that starting from magico-religious beliefs, they have attained to a conception of high god regarded as the Supreme Creator, who is just, benevolent and good. They have other gods or deities and spirits, both benevolent and malevolent, whom they consider to be responsible for their prosperity and misery. These gods and deities are believed to have a direct influence on human lives, and hence propitiation of them is an important aspect of the ritualistic practices of the people. Sacrifices and offerings are made to appease them.

It is important to note that the tribal religion is more associated with social ethics than with the higher metaphysics and spiritualism. It has simple social ethical code that unites the people and fosters the characteristic tribal virtues of simplicity, truthfulness, hospitality and fidelity.

NOCTE

The Noctes believe in the existence of a Supreme Being whom they variously call *Jauban*, *Jongban* or *Tesong*, who is ambivalent having both good and evil aspects. He causes miseries and troubles as well as he brings happiness and prosperity to human beings. They also have a belief in a number of spirits and deities. These deities are both malevolent and benevolent. The benevolent deities dwell in houses and protect human beings from sorrows and miseries. They are propitiated regularly with the offerings of food and other things in order to get their continued support and protection from the malevolent spirits.

"They believe that, after death, the soul substance, called *mang* or *ja khang*, repairs to *ulim* or *balum*, a place in the sky. It may take the shape of a kite and appear the day when the dead body is disposed of. So when a kite is seen flying over the house, the relations of the dead pour water on the ground for the departed soul. In case of abnormal death they believe that the soul turns into an evil spirit. The method of disposal of corpses on platforms still has a vogue among the Noctes as among certain American Indians".¹

The Noctes came under the influence of Hinduism through Vaishanava movement in Assam. They are now the Vaishnava devotees of the Chaliha Bareghar Satra of Nazira in the Sibsagar District of Assam. Under the influence of the Bali Satra near Naharkatiya, Vaishnavism was carried to the Nocte area by one Naga Naruttam about 250 years ago when the Ahoms ruled in the Assam Valley. Naga Naruttam was the name given to Lotha Khunbao, a Nocte chief. The first converts to Vaishnavism were the Namsangia and Borduria Noctes. According to the Vaishnavite tenets, the Noctes do not take beef and they cut their hair in the *satriya* fashion.* A good number of Nocte pilgrims visit the satra in Sibsagar where they offer salt and get some ceremonial costumes in exchange.

WANCHO

The Wanchos have a vague belief in the Supreme God of the heaven called *Rang*, the benevolent creator. They believe that the benevolent sky-god *Rang* is eternally opposed by *Bau-rang*, a god of the earth and a malevolent destroyer. These two deities are brothers. The Supreme God *Rang* created men and animals and he takes care of them, whereas *Bau-rang* is a destroyer of human beings and animals. At times, *Rang* is at war with *Bau-rang* and the titanic conflict results in earthquakes. Sacrifices are offered to *Bau-rang* to save humanity from evil and destruction. He is invoked on the occasion of the annual clearing of paths after the rains.

Besides these two gods *Rang* and *Bau-rang*, there are a number of other gods and deities in the Wancho pantheon.

The religious beliefs and practices of the Wanchos are inextricably interwoven with the magical beliefs and practices in their every day life. On one occasion or the other they take resort to such practices. The Wanchos also propitiate a number of spirits by offering sacrifices on different occasions. At the time of propitiating the spirit, incantations are pronounced.

¹ J. N. Chowdhury, Arunachal Panorama, (Shillong, 1973), p. 237.

* In the *satriya* fashion, the hair is cut round the head keeping a tuft in the middle, which is allowed to grow long. This tuft of long hair is tied in a bun at the nape.

The incantations are a form of prayer. The spirits propitiated by the Wanchos are *Baua*, the benevolent jungle deity, *Lamlongkang*, the rainbow spirit, *Joka* a malevolent spirit, *Nam* or *Hung Wang*, a malevolent water spirit etc.

TANGSA

The Tangsas believe in an invisible Supreme Being, who lives in the heaven, and is personified by the names of *Sikia*, *Pra* or *Rang Kau Hawa*. He is considered to be the fountain of blessings for mankind. But they do not worship him nor do they propitiate him by offering sacrifices, for he does not harm human beings nor he desires anything from them.

The Tangsas believe in a number of deities and spirits called *Thangs* or *Sangs* or *Jubedis* to whom sacrifices are offered. The Tangsas appease the malignant spirits by performing a number of magico-religious rituals. At the time of propitiation, incantation for invoking a particular spirit is pronounced by the priests to ward off calamities and miseries. Pigs and fowls in all rituals performed for appeasing deities and spirits are indispensable items of sacrifices. The number of pigs and fowls necessary for each sacrifice depends on the particular spirit who is to be propitiated. Rice-beer is also an item of offerings.

SINGPHO

The Singphos are Buddhists by religion. A monk named Dingla Chrato was the first to introduce Buddhism among the Singphos about a century ago. The monk who is said to have come from the Hukawng Valley of Burma visited Buddhagoya and built the Buddhist monastery at Phakial village near Margherita. The Singphos call this temple Samuksing where they go on pilgrimage. The Singphos have, however, not given up their old shamanistic beliefs even though they are Buddhists. They believe in a host of spirits called *nats*, who are malevolent and responsible for causing miseries to human beings. There are quite a good number of such *nats*, who are worshipped on a number of occasions and regularly propitiated with sacrifices of bulls, cows and chickens.

Besides the Singphos, the Chakmas and the Tibetans are also Buddhists.

Priesthood

All the tribes have their own priests or shamans to conduct religious ceremonies. Among the Wanchos, there are certain gradations of priests and their assignments differ according to rank and position. The *gampa* or *gipa* or *rami* is regarded as the principal priest. Next to him is the *aupa*.

or *opa*, a village diviner. Then follows the *ngopa*, a household diviner and after him comes the *rampa* who performs the obsequies. The last is the *aje*, a medicine-man, who is also capable of falling into a trance. The priests treat the sick with their magical power as well as medicines. A priest is considered to be a person with superior spiritual powers. Among the Wanchos, a large number of such religious functionaries are found in the Wakka area.

In the villages in the Tangsa area, there are priests and diviners, who perform all the religious ceremonies. The priest is called *tingwa* in Mosang, *dingwa* in Lungri and Yogli, *changnati* in Ron-Rang and *thatang* in Khemsing. He is considered to be a pious man and is respected by all.

"*Taiteling* or *Talwa* (Mosang), *Pateti* and *Walati* (Ron-Rang), *Sama* and *Tarwa* (Yogli), *Tetalang* (Khemsing) and *Tibe* (Lungri) are terms for the diviner. The diviner performs divination with the help of a wooden wand which is pointed at one end. The chief aim of divination is to discover the spirit responsible for a particular case of illness. Amongst the Ron-Rangs, the *Pateti* performs divination in case of diseases, so does the *Tarwa* amongst the Yoglis.

"The *Sama* (Yogli) or *Walati* (Ron-Rang) consults the omens before going on hunting and fishing expeditions.

"The profession of a priest or diviner is not hereditary; anyone whether man or woman, having acquired sufficient knowledge of the procedure and paraphernalia of the craft may aspire to the position. The tradition is handed down orally to successive generations. Though there is no restriction to a woman becoming a diviner, provided she has mastered the knowledge, in usual practice the priesthood is a profession for men, and not women".¹

The Singphos call a village priest *dumsa*, while a Buddhist monk is called *punguya*. The Nocte priests conduct the religious ceremonies and other social festivals. They have adopted Vaishnavism. A representative of the Baregharia Satra called *mohanta* regularly visits their village to conduct the religious ceremonies.

Divination

A characteristic feature of the tribal religion is the observance of the divination before embarking on any important task, such as building of houses, sowing in the field, setting out on a long journey, organising a social festival, performing a religious rite, naming of a new-born child etc. The divination for ascertaining success of an expedition is examined by the priest after sacrificing a cock or a chicken or by breaking eggs. Various methods

¹ Parul Dutta, The Tangsas (Shillong, 1969), p. 68.

are applied by different tribes and the process of looking into the omen differs a good deal from one tribe to another. Among the Wanchos, the divination is observed by breaking eggs and sometimes omen of good or bad fortune is read by the position of the broken shells of the eggs, whereas, among the Tangsas, the omen is seen through the position of the legs of the sacrificed chicken or through the bamboos placed on the fire. It is considered to be a good omen if splitting of the bamboo takes place at knots when it is heated. The Singphos follow the same rules of divination as the Tangsas do. The Noctes also follow the system of looking into the omen and of observing divination. They normally see the omen from a sacrificed chicken or by breaking eggs. Their belief in Vaishnavite tenets is still rudimentary, and their religious practices may undergo a change.

Religious Ceremonies

NOCTE

The Noctes perform a number of religious ceremonies. One of the most important ceremony of the Noctes is called *Jauban Chuwom*. It is performed once or twice annually in each village. The time of the performance of *Jauban Chuwom* varies a good deal from one place to another and it is connected with the harvesting of the millets. At the time of the performance, rice-beer is prepared and kept in the house of the priest. All the entrances to the village are closed and the neighbouring villages are informed not to visit the village. A gate is constructed on the main entrance and spikes are fixed near the gate along the path so that nobody enters the village. A conical structure of bamboos is constructed at a distance of about ten yards from the gate and it is filled in with grass and leaves. On the day the villagers do not go out to work in the field. Whole day the priest observes fast and does not go out of his house. In the evening all the villagers assemble and the priest leads them to the entrance of that conical structure where he pours rice-beer and recites a long incantation invoking the spirit. Thereafter all the villagers go back to their houses and the whole village observes complete silence. On the following day the priest again offers rice-beer to the spirit in order to perform certain rituals. After offering the rice-beer, the residue is distributed to all the members of the village present on the occasion. Till noon the villagers observe *genna* (prohibition) and they do not sacrifice any animal during this ceremony.

Another important ceremony performed by the Noctes in the Duidam and Soha areas is called *hasom*. This ceremony is performed by the priest near the main entrance of the village. Chickens are sacrificed to

propitiate the spirit of *Tesang* (*Jauban*) and *Sangaam* (another spirit). The heads of the chickens are kept hanging on a platform and the villagers offer small quantity of powdered rice to *Tesang* on the platform. While doing so, all male members of the village untie their hair-knots. This ceremony is performed for the welfare of the village and protection against diseases and other calamities.

WANCHO

The Wanchos do hardly perform any ceremony which can be strictly termed as religious, but sacrifices and offerings are made to propitiate *Bau-rang*, the god of earth in order to please him and to save themselves from his curse and anger. There are a number of rituals observed in connection with sickness, disease and calamity and they are conducted by the diviner or the priest. At Longkai village some religious festivals called *Sangaam*, *Pagam* and *Gakgam* are performed annually, on which occasions the villagers collect their weapons—guns, spears, *dao* etc. in one place. A big red cock is killed by the priest and its blood is sprinkled on all the weapons. The cock thus sacrificed is taken to the paddy field by a priest called *Gipa*, who recites certain incantations while shaking the sacrificed cock in order to invite bumper crop and good fortune to the villagers in hunting and other expeditions. After this is over, the villagers go for hunting to the nearby forest and if the expedition becomes successful they rejoice it with a good feast. The appointment of a new chief by the villagers is one of the many occasions of their ceremonies.

TANGSA

The Tangsas also, like their brethren tribes, perform a number of religious ceremonies, but they are mostly connected with disease and its cure. The Tangsas believe in curing disease by propitiating the spirits who they consider to be responsible for various maladies. Before the ceremony is started, the diviner or the priest must discover the particular spirit responsible for the disease and give direction about the rituals to be followed. Pigs and fowls are sacrificed in almost all rituals performed for the appeasement of deities and the spirits. In the old days, the Ron-Rangs observed a religious festival called *dawan* for the welfare of the people. This was a very big festival of the Ron-Rangs, when human beings were sacrificed. The custom of human sacrifice performed on this occasion and also during another religious ceremony called *khatang* (stone worship) was stopped by the Government.

SINGPHO

The Singphos, as stated before, are Buddhists. *Sangken*, an important

Buddhist religious festival, is observed by them at the juncture of Chaitra and Baisakh corresponding to March-April. The occasion of the festival is the ceremonial bath of the image of Lord Buddha. The festival is observed for three days. On the first day, the images of Lord Buddha are brought out from the monasteries and placed outside in decorated pandals, where the ceremonial bath is performed by the Buddhist monks. The ceremony is observed with great enthusiasm and rejoicings. On this festive and holy occasion, the people dance and sing, sprinkle and splash water on each other, and entertain guests with cakes and sweets. Hymns from the holy scriptures recited continuously for all the three days mark the sanctity of the ceremony. Prayers and religious discourses held at the monasteries are largely attended by the villagers.

Death and Disposal of the Dead

NOCTE

The Noctes have diverse ideas about the nature of death. If a man dies in his old age or after a prolonged illness, it is considered to be a natural death according to the will of the God (*Jauban*). But if any death results from accident or a premature death takes place, it is regarded as an evil action of the malevolent spirits called *Jok*. The death of a pregnant woman or death during delivery is also considered as an accidental death caused by the evil spirit. Any disease especially of epidemic nature is very much feared and the cause is attributed to the evil spirit. After death, the dead body is not immediately disposed of, it is kept for one to seven days and in case of death of a chief, the dead body is kept for about one month or so. During this period, the relatives and friends of the bereaved family assemble and they offer items of food in respect for the dead. The death of a chief is considered important and it is lamented by all the villages under the chieftainship. The lamentation is followed by feast, drink and dance which continue for days together. Animals are sacrificed in honour of the deceased and the meat is distributed to those who assemble on the occasion of the chief's death. It is said that when the old Chief of Namsang died, the dead body was kept for several months and the obsequies continued for a very long period.

The Noctes follow different methods of funeral—cremation, burial and disposal of the death body by exposure. In the old days, the dead body was kept sometimes in the house and articles of food were offered to the dead. The Noctes of Kolam, Kothung and other neighbouring villages cremate a dead body over a pyre. An interesting feature of the obsequies is that the relatives collect the charred bones of the legs and skull of the dead body, which are brought to the house and kept there till final disposal.

The Soha group of the Noctes in the Duidam area cremate the dead body only in case of an accidental death, but when there is a natural death they bury the body just as Laju and some other Nocte groups do. The clan members dig the grave. Before burial, a lock of hair is removed from the head of the corpse for preservation in a bamboo tube placed near the grave. At the time of annual purgatory rites, the lock of the hair is brought out from the tube and the relatives express their sorrow over it.

The Noctes of Borduria group expose the dead body over a bamboo platform in the village cemetery under the shadow of a curb-roof suspended from the top for protection. Personal belongings and articles of food and drink are also placed on a crossed bamboo structure near the grave. In the Duidam area, an effigy of wood with tattoo marks is erected in front of the platform where the dead body is kept exposed.

In abnormal cases of death, such as death due to accident or premature death, the dead body is not kept exposed, it is either burnt or kept suspended from a tree. No offering is made to feed the dead, no villager visits the place. The personal belongings are sometimes thrown away near the tree.

The Noctes have a custom of feeding the bones of the dead. This is done in the harvest period after a lapse of one year. The skulls of all dead persons are taken out from the cemetery and after offerings of food to them they are placed together within a stone urn. Those who cremate the dead body, perform the rite with the bones or with the hair which have been preserved. Regular offerings of food are made to the deceased either in the house or near the gate throughout this period, and all connections with the deceased are severed by the family after the ritual is performed.

WANCHO

Like the Noctes, the Wanchos also believe that death due to old age or prolonged illness is a natural death willed by the God. But premature death or death due to accident or sudden illness is believed to be the evil action of the god of earth called *Bau-rang*.

The Wanchos do not dispose of a dead body before twentyfour hours or so and they keep it inside the house for the relatives to come and mourn. The dead body of a chief is placed in a wooden coffin, but that of a commoner is wrapped by a mat or a cloth. The relatives, family friends and villagers, both men and women, go together to the funeral ground where the dead body is placed on a platform of about five to six feet high above the ground. A small shed is made over the platform and near it an effigy of wood or bamboo is placed with the personal possessions of the deceased

hanging from a pole. Sometimes, the relatives of the deceased keep watch on the dead body for several days. At the time of the disposal of the dead body, an animal is sacrificed for a feast and the family members offer a share of their meal each day in the name of the deceased. Purgatory rites are performed after about a month when the dead body is completely decomposed. The skull, which is detached from the dead body by an old man and washed carefully, is wrapped in a red cloth. It is then placed under stones on an auspicious day. This occasion is celebrated with joy and gaiety throughout the village. Before the ceremony starts, a number of people set out to catch fish. They cook the fish with rice and offer it to the soul of the dead. They also tie a bundle of fish and rice to the skull as offerings to the soul.

The chief's corpse is retained for seven days, the skull is detached on the eighth day. After the skull is removed, it is exposed over a stone while the people go on singing and dancing around this stone. On this occasion, the villagers contribute their mite for a feast. When the feasting and rejoicings are over, the skull is placed in a stone urn. In abnormal cases of death, these rituals are not followed and the corpse is kept exposed in the jungle.

"The day when the skull is detached is marked with a ceremony called *rapoley* or *ja foalle*. Thereafter, every year, during the *poatak* festival (after new harvest), skulls of all the deceased members of a family are taken out and offerings of rice beer and cooked food are made to them. Here again, we notice the Wancho's reverence for human head not unrelated perhaps to his belief in its magical efficacy".¹

SINGPHO

The Singphos practise either burial or cremation. In the case of a burial the corpse is laid inside a trunk-hewn coffin, but in cremation, a special pyre is constructed where the corpse is burnt. The fire is lighted first by the head of the family. The charred bones are laid inside a fencing made of wood which serves as the repository for the mortal remains. A person died of an accidental death is not cremated in the village funeral ground, normally he is buried outside the village. Death of a new born baby is considered unlucky, and in such case the dead body is disposed of in a half-burnt condition outside the village perimeter near a tree.

No grave-goods are offered to the dead by the Singphos except clothes which are buried inside a pit near the cremation or burial ground where a piece

¹ J. N. Chowdhury, *Arunachal Panorama* (Shillong, 1973), pp. 253-254.

of white cloth is hoisted on a bamboo pole. The Singphos do not observe any uncleanness period after the death of a person.

The Singphos also follow the practice of feeding the bones and on the seventh day after death a feast is arranged. It is believed that the soul returns to his old house on this day to accept the food offered to it. Feeding of the dead on the seventh day is observed in case of both natural and unnatural deaths. To appease the soul of the dead, the Buddhist monk comes to the house of the deceased and conducts an elaborate course of ritual. He also takes away the personal possessions of the deceased, such as utensils, clothing, umbrella etc. to the local Buddhist monastery.

In the event of a chief's death, a special ceremony called *monglap* is sometimes observed for disposal of the dead. On this occasion food is offered to the deceased everyday, pigs and buffaloes are sacrificed and the people dance and sing near the dead body. A community feast is held in which the relatives, family friends and villagers participate. This celebration sometimes continues even for a month. On the last day of the ceremony, the dead body is cremated.

TANGSA

The Tangsas believe that death is not only the result of diseases caused by the evil spirit, but also an outcome of the natural phenomenon. Death due to old age is regarded as natural as an action of the God, but premature death is thought of as an unnatural event, and the evil spirits are held responsible for it.

A sick person is allowed to die inside the house. The dead body is normally disposed of after twentyfour hours. But if the relatives cannot assemble in time for the funeral then the dead body is kept inside the house for two to three days. As a matter of rule, the relatives are informed and they are expected to arrive for a condolence before the dead body is disposed of.

The method of disposal of the dead body is different amongst the different Tangsa sub-tribes. The Yoglis bury their dead, while the Moklums cremate. The Mosangs follow the methods of burial as well as cremation. Some bury the dead body with all its clothes on, while others do it with very few or without them. The Mosangs cremate the dead body almost in a naked state. The Lungchangs have cremation grounds, but the Moklums cremate near their house.

In normal cases of death, the dead body is buried under the platform annexed to the front side of the house. In abnormal cases like death of a pregnant woman or accidental death or in case of a still-born baby, the funeral is performed in the jungle outside the village boundaries. If a

pregnant woman dies, the dead body is taken to the burial ground where the foetus is first removed and buried separately.

Before the burial, a cooked fowl kept on a long post erected outside the house is offered to the dead. After this offering, the personal effects of the deceased are taken out of the house and suspended on a wooden post.

The grave is dug by the members of the clan to which the departed belonged. Others are not allowed to touch the dead body nor dig the grave. The head of the family delivers the first stroke of the spade. The dead body is washed with water before it is placed in a coffin.

The Mosangs cremate the dead body in the vicinity of their house on a pyre made with logs of wood arranged in nine layers. The body is placed on its back over the pyre and the clothes are removed. The head of the family first sets fire to the pyre which is followed by other members of the family. After cremation, the ashes are collected and covered with earth and logs of wood. Thereafter a fence is put up around the place of cremation.

All the articles used by a deceased person during his life-time are offered as grave-goods, which are kept suspended from a post near the grave or over it. These apart, rice-beer, cooked rice and drinking water are put on the ground near the grave. The participants in the funeral take bath after the burial. A pig is then killed near the grave. The head of the pig is offered to the deceased and a meal is shared by all those who are present.

In case of an unnatural death, the body is buried in the jungle outside the village boundaries for which an out-of-the-way place is selected. No coffin nor any bamboo structure is made. The body is buried naked, but before the burial the eyes and palms of hands and feet are pierced with thorns. The idea is that the spirit of the dead should not see anything nor should it be able to walk, nor touch anything with its hands, as otherwise it may come back to the village and cause harm to the family of the deceased and also to the villagers.

A still-born baby is also treated in the same way as described above. But the Ron-Rangs keep the body in a basket hung from the branch of a tree in the jungle so that it decomposes there. In such a case, no grave-goods are offered.

The Tangsas observe a period of uncleanness after the death of a person, which continues for three days in normal cases and from five to seven days in abnormal cases. During the period of uncleanness, none of the villagers pays a visit to the bereaved family nor do the members of the bereaved family go out of their houses.

In case of a normal death, a feast is held on the fourth day to which the villagers are invited. A pig is killed and offered to the memory of the

dead. A portion of the meat and the rice-beer are offered to the deceased by the priest. The inmates of the family go to the paddy-field and collect potatoes and arums. These are hung on a post of the house as offerings to the deceased.

In case of an accidental or unnatural death, the members of the bereaved family observing uncleanness take certain precautionary measures to guard themselves against the attack of *chawthang*, the evil spirit. They surround the house with thorny branches of trees and pointed bamboo spikes. At the entrance to the house, just over the wooden ladder, a basket is put with its mouth downwards. A fishing net is spread out across the entrance. On the main door of the house, thorns and bamboo spikes are fixed with their points facing away from the house. The Ron-Rangs cover the front of the house with a big bamboo mat.

It is a common belief of all the Tangsas that if such precautions are not taken, the spirit of the dead will return at night and create trouble to the members of the family.

Family, Property and Inheritance

Among all the tribes of this district the father is the head of the family. The property passes on to the son. A system of joint family is also followed by most of the tribes although in some cases it breaks up after marriage of the sons.

WANCHO

The smallest unit of the Wancho society is the family consisting of father, mother and their children. They also follow a joint family system. The grown up boys of the village sleep apart in bachelors' dormitories called *morungs*. There is no separate dormitory for unmarried girls. But they also do not spend the night in their own houses. They sleep in some widow's house who is distantly related to them.

An exception to this system is found only in case of the chief's family where girls cannot go to sleep in others' houses. There is a separate compartment for the girls in the chief's house itself. When a family becomes too large and it is difficult to accommodate all the members in a house, the married younger sons establish separate houses for their families. The eldest son occupies the ancestral house and continues to look after his old parents. Married girls leave their parents' house when they are pregnant. The Wancho custom does not permit delivery of the first child at the wife's parents' house. In the joint family all the members take their meals from a common hearth. The management of the kitchen and the cooking

of food are the responsibilities of the eldest female member of the family, who is either the wife of the head of the family or the eldest son's wife. In the family of a chief, one of his wives is given the privilege to cook for the chief, who takes his meal from her hearth only. Other wives take their meals from their separate hearths and they have also their separate accommodations in the same house. All the inmates work together for the common interest of the family.

All movable and immovable properties, such as cultivable lands, bamboo groves and *tokopat* gardens, livestock, granary, utensils, ornaments and guns are held in common by the family. The father is the sole owner of the property which is inherited by the eldest son after his death. Female members have no claim over the family property except for the articles given to a daughter in her marriage. Besides the family property, the individual members can have individual property consisting of personal possessions which on his death are given as grave-goods. No property held by the family can be sold or distributed without the permission of the head of the family.

According to the partrilineal social system of the Wanchos, property is inherited in the male line. Primogeniture is the general rule of inheritance whereby the eldest son becomes the owner of the property. The family property is not distributed when it breaks up with other sons establishing their own households. The eldest son who inherits the property may, however, donate plots of land to his brothers to help them build their houses, but they do not have any legal claim on the family property. The family bond demands that all other members of the parental family should render help to the new family until it stands on a good stead. Daughters have no claim whatsoever on the property. A daughter is entitled only to ornaments, clothing, one basket, one scraper, one iron stick, one *dao* and a rainproof which are given at the time of her marriage. She cannot even lay any claim to the property of her husband.

NOCTE

The Nocte family consisting of father, mother and their unmarried children is the basic unit of the society. The sons except the eldest one leave the ancestral house after marriage and establish their new houses. The married sons are, however, permitted to stay in the ancestral house with their wives if there is sufficient accommodation for them till they attain parenthood. It is difficult to classify the Nocte family system as a joint family or a single-unit family. The father is the head of the family and he is succeeded by his eldest son.

The members of a family work jointly for all of them. They take

their meal from a common hearth served by the eldest female member of the family. Each member has his allotted duties and responsibilities, which he should strictly adhere to. The kinship tie is very rigid which binds all the members of the family in a bond of unity. Besides this, the male members have also the right to express themselves freely in all important matters of decision concerning the family. The father or the eldest brother as the head of the family is given precedence over others and his decision is considered final.

The family property, both movable and immovable, is regarded as common and all male members enjoy equal right over the property so long as they live together. But when a younger brother separates and establishes his new house, he cannot claim any property except those which are given him by his father or eldest brother. Some household articles and a portion of cultivable land are normally lent to the younger brother for a period so that he may be able to maintain his new household.

The position of women in the family is low. They are subservient to the male members and hardly do they enjoy any individual liberty. They cannot inherit any property of their parents nor have they any right over the property of their husbands. They can neither purchase nor sell property. They are only entitled to the articles given them in marriage as dowry. The women are, however, allowed to use freely the property of their husbands or their fathers without any claim over it. They have the right to use, not to own.

TANGSA

"The Tangsas live in joint families. A common house is shared by a whole family consisting of parents, married sons and daughters. Even after the death of the father, the family does not break up as a general rule but continues to live in the same house as previously including the widow with her children. A single family sometimes may consist of more than twenty members.

"In exceptional cases, the family breaks up, and unmarried sons then establish separate households, each with an elementary unit of family. This usually happens when a single household cannot accommodate an expanded family or some quarrel amongst the members disrupts its unity. Even then the family tie never ceases to exist.

"In the Tangsa joint family, each of the married couples occupies a separate cubicle in the house. All the members participate in joint efforts to earn their livelihood, and husbands and wives have equal responsibilities. A single hearth cooks food for all of them".¹

¹ Parul Dutta, *The Tangsas* (Shillong, 1969), p. 51.

The property, movable or immovable, is held jointly by the family. The father who is the head of the family exercises authority over the property, but he cannot sell or distribute the property without the consent of other members. The authority descends on to the eldest son when the father dies. The head of the family is obeyed and respected by all members of the family. An individual member can acquire personal property consisting of his personal requirements apart from his share in the family property. The female members have hardly any authority over the family property except for its use.

SINGPHO

The Singpho family system is patriarchal. Normally, the Singphos live in a joint family, but if there is any misunderstanding among the members, the family breaks up and the married sons establish separate households. In case of such separation the youngest son remains with the parents, although any son who is trusted and liked by the parents can also stay with them. The property of the family is divided amongst the sons at the time of their separation. All of them get equal share of the family property, but the one who stays with the parents gets more in addition to his own share. Even in normal conditions while living in the joint family, if any member of the family is not co-operative, he is separated from the joint family. When a family property is required to be divided, the old and responsible members of the village are invited for a settlement.

The Singpho chieftainship is hereditary. The youngest son "is entitled to two shares of the movable property which consisted formerly of cattle and slaves. Other brothers receive one share each. The parental home falls to the share of the youngest son and he may also rightfully claim his father's wives (excepting of course his own mother) in the absence of his father's brothers. The elder brothers are not obliged to leave the parental homestead but it is usual for them to set up their own households separately. The same law of inheritance is also said to hold good for the commoners".¹

The father is the head of the Singpho family. Age commands respect. It is obligatory for the sons to take care of their mother and step mothers. All the members of a joint family work together to make their living and have equal responsibilities towards the family. In a joint family, meal is prepared in one hearth by the eldest female member. There are small compartments in the house for each individual family.

The family property, both movable and immovable, such as cultivable lands, utensils, clothing, livestock etc. is held in common. The Singpho society is

¹ J. N. Chowdhury, *Arunachal Panorama* (Shillong, 1973), p. 216.

patrilineal and the property is inherited by the sons. The head of the family, the father or a son, as the case may be, is the guardian of the property. A female member has no right to the family property, but she can use it freely. The widow has, however, a share in the property left behind by her husband. Earnings of an individual member are his own, but when he lives in the joint family he has to give half of his income to the head of the family, and he can keep the rest for himself.

Marriage and Morals

Clan exogamy is the general rule that regulates the marriage system of the tribes of this district. Both monogamy and polygamy are socially and legally recognised by the society. Monogamy is the general rule of marriage, but polygamy is also in vogue among the chiefs of the Noctes, Wanchos and Singphos. A commoner may take a second wife only when the first one is barren or suffers some prolonged disease or she is regarded as a liability in the family for some reason or other. Polyandry is not practised by any tribe of this district. Among all the tribes (except Lungri Tangsa and Khemsing Tangsa), the daughter of the mother's brother or of the father's sister is considered as the potential wife.

WANCHO

Clan exogamy is the fundamental rule of marriage among the Wanchos. If anybody violates this rule and marries within his own clan, he will not only be excommunicated but may even be exterminated. As already stated, monogamy is the general rule, but there is no restriction on the part of the commoners to have more than one wife and it all depends on the social and economic status of the individual. A plurality of wives enhances one's social status. Moreover, the women are economic assets in that they are additional hands in cultivation. A chief can have as many wives as he can afford.

The Wancho society is very much class conscious and marriage is not permitted in normal circumstances between boys and girls of different social status. The sons and daughters of a chief generally marry in another chief's family.

The tribe itself is endogamous and marriages are mostly confined to the same village, except in the case of chiefs, who by custom marry at least one wife from another village.

The social law governing the sexual behaviour in the Wancho society is very liberal and they allow free premarital relations between girls and boys. Free mixing of the girls and boys gives them an opportunity to choose their

partners in life, but generally marriages are arranged by the parents. In all sexual relations, incest is the most dreaded and its horror is deep-rooted in the mind of the young Wanchos. Stray cases of incest are reported, but they are very rare. The rule laid down for the prohibition of incestuous marriage applies also to endogamous marriage within the clan. Inter-tribal marriages are discouraged and such incidence is rare.

Cross-cousin marriage is socially recognised and preferred. A man is permitted to marry his mother's brother's daughter or father's sister's daughter who by custom is regarded as the potential wife. In the absence of such girls, a bride is selected from another family. Marriage by exchange of sisters between two families is considered to be beneficial. Both sororate and levirate marriages take place, but a man cannot marry the sister of his wife during her wife's lifetime. Divorce is permitted on payment of fines.

NOCTE

The rule of tribal endogamy and clan exogamy also operates among the Noctes. Inter-village marriage is not encouraged. But the chief takes two wives, one from his own village and the other from another village, for in accordance with the custom, a chief has to take a wife from another chief's family. Of these two wives, the one who is from a chief's family enjoys a higher status than the other. Except in the case of chiefs, monogamy is the general rule although there is no restriction on polygamy. Like other tribes of this district, the Noctes also have a system of levirate, sororate and cross-cousin marriages. "Marriage with the maternal uncle's daughter is most favoured and, in fact, she is considered as a potential wife of the father's sister's son. Similarly, mother's brother's son is the prospective husband for the father's sister's daughter".¹ Widow remarriage is also recognised by the society. There are incidences of marriage between a widow and a widower with the approval of the society. A man can marry the widow of his deceased elder or younger brother and it is customary for him to treat the children of his brother as his own.

SINGPHO

In the Singpho society the rule of clan exogamy which governs the marriage system is fundamental. The bride-price is very high, and the possibility of marriage is determined by the amount of bride-price which a man can pay.

Although monogamy is common, yet there is no restriction for a man

¹ J. N. Chowdhury, *Arunachal Panorama* (Shillong, 1973), p. 226.

to have more than one wife provided he can pay the high bride-price. Polygyny prevails, but only the chiefs can afford to have many wives. Cross-cousin marriage has a social preference. If a man marries his mother's brother's daughter, his wife gets a preference over other girls. But marriage with mother's sister's daughter is prohibited as such marriage falls within the forbidden degree of consanguinity. The Singphos also follow the system of senior levirate (i.e., the younger brother can marry the widow of the elder brother, but the elder brother can not marry the widow of the younger brother) and sororate marriages.

TANGSA

The Tangsas also follow the fundamental rules that govern the marriage system of other tribes of this district. The only difference is that there is no polygamy amongst them. But in the Mosang and Lungri sub-tribes of the Tangsas a man can have more than one wife only when the first wife is barren or she cannot help her husband in agricultural work. Some forms of preferential cross-cousin marriage such as between mother's brother's daughter and father's sister's son, sororate and levirate are current among the Tangsas. Marriage with the father's sister's daughter is, however, prohibited among the Lungri and Khemsing groups of the Tangsas.

"A person is allowed to marry the widow of his elder brother, but not that of the younger brother. Only among the Khemsings, can an elder brother marry the widow of his younger brother. In case of widow marriage, a nominal bride-price is paid to the parents of the widow by the new husband in order to secure social recognition of the marriage. If the bride-price is not paid, the parents of the widow never visit the new couple's house. Amongst the Yoglis, the amount of bride-price in such marriages is generally fixed at thirty rupees. A widow having no children can marry a second husband of her choice, provided her deceased husband does not have a younger or elder brother. A person, after the death of his wife, can marry the sister of his deceased wife, on payment of the bride-price".¹

"In Tangsa society, the possibility of a marriage is virtually determined by the amount of bride-price which is demanded by the parents of the girl. The rituals performed in the marriage appear to be of secondary importance. The price is the main factor and a high price makes a Tangsa father proud of his daughter. . .

"The amount of bride-price varies according to the types of marriage. Normally, the bride-price is fixed at one hundred rupees and a buffalo. But in the cases of love marriage without a prior consent, the parents of the

girl demand a higher bride-price which may rise from a hundred rupees to two hundred fifty, two buffaloes, and a bucket of rice-beer in addition. In cases of elopement, the demand may be exorbitant. The actual amount depends on the decision of the villagers. . .

"Divorce is not allowed in the Tangsa society. Desertion of a wife is considered a crime".¹

Forms of Marriage and Rituals

Forms of marriage may differ in different tribes or even in different sub-tribes, but there is a general uniformity in the system of marriage common to all the tribes. Marriage by negotiation between the parents of both the boy and the girl is the recognised social norm among all the tribes of the district. Marriage by love is also recognised in the society, but the consent of the parents is taken in such marriage. This rule is particularly strict in the Tangsa society, where if the parents of the girl do not approve of the love-marriage, the boy is fined heavily. It leads to elopement in extreme cases, when the couple run away to another village. Such case is settled by the parents of both the parties in the village council on payment of heavy compensation by the father of the boy to the father of the girl. If the boy is unable to pay the fine, he shall have to work in the field of the parents of the girl for one year or so. Marriage by elopement was very common in the old days. There is no fixed age for marriage. It is usually arranged after the boy and the girl attain puberty.

WANCHO

In the case of a negotiated marriage in the Wancho society, the girl is betrothed at a ceremony called *hawanle* or *toimonmonk*. Since then the girl pays a ceremonial visit to the house of the boy who is socially recognised as her husband. She, however, continues to live with her own parents till she conceives. At this time she is tattooed on one of her thighs. A feast is arranged on this occasion and all the relatives, friends and villagers are invited. This is called *hutu*. Thereafter the girl is taken to the house of her husband by her relatives and friends. On her arrival in her husband's house, she is again tattooed, this time on the breast. This tattooing is called *khahutu*, and the occasion is also celebrated with a feast for the relatives and friends. From now on the bride stays with her husband and the bridal party return to their respective houses. The couple pay a brief visit to the bride's parents after a week. In cases of levirate, sororate

¹ Parul Dutta, *The Tangsas* (Shillong, 1969), p. 59.

¹ *Ibid*, pp. 60-63.

and love-marriages or in any other form of marriage no such ceremonies and rituals are performed.

NOCTE

In the Nocte society a negotiation for marriage begins with the exchange of rice-beer and *sali* (a jungle creeper presented with betel-leaf, betel-nut, lime and tobacco) between the parents of both the boy and the girl. The preliminary initiative is usually taken by the boy's parents. A day is fixed for the performance of marriage ceremony if the negotiations become successful. On the day of marriage, a group of men and women carry rice-beer and a piece of cloth to the house of the bride and formally request her parents to give their daughter in marriage to the boy. A feast is then held to celebrate the occasion to which all the villagers are invited. The bride accompanied by some of her girl friends and relatives goes to the house of the boy on a short visit. She offers betel-leaves to all the members assembled in the house of the groom and then returns to her parents. Libations are offered in the name of the clan deity in order to obtain his blessings for a happy and prosperous life of the married couple. The marriage is thus solemnised. The next day the bride goes to the house of the groom. After a few days the couple go to the field and work together and since that day they are considered man and wife. The bride, however, stays with her parents till she conceives, visiting her husband's house only casually to help him in the fields. In the eight month of pregnancy she comes to her husband's house with her personal belongings, articles of seeds, utensils etc. given her as dowry to live with him permanently.

In cross-cousin marriage amongst the Noctes of Borduria, betrothal takes place at an early age. In other cases of marriage, early age betrothal is not strictly followed. Divorce is a rare occurrence, although it is allowed when there are sufficient justifications for it. A man may divorce his wife with the approval of the village council, and it can be sought and obtained by either party.

TANGSA

The Tangsa marriages are also negotiated and arranged by the parents in normal cases. As for their procedure of marriage, it is worthwhile to quote the following :

"The procedure of marriage differs in the different sub-tribes. The rituals generally extend over three days. The day of the marriage is fixed to suit the convenience of the two parties after the amount of the bride-price has been agreed upon.

"The first day is called *milamwang* (Mosang), *gunlang* (Ron-Rang), *rogui* (Lungri), and so on. On this day, the bridegroom goes to the bride's house accompanied by his relatives and friends. He takes with him one pig and few chungas of *laho* to offer to the bride's parents. The bridegroom's party is entertained by the bride's parents with drinks and meat. The bride is taken to the bridegroom's house on the same day together with two girls of her family. A feast is arranged there. At night the bride sleeps with the two girls in a separate compartment.

"The second day is called *khrosai* (Mosang) or *gunsa* (Ron-Rang). On this day, the bride-price is paid to the parents of the bride.

"In the morning, the bridegroom's party along with the bride goes to the bride's house. The parents of the bridegroom also accompany the party on this day. On arrival the party is entertained with drinks and food. On this day, the marriage thread is tied on the left hand of each of the newly married couple. This signifies their eternal union. The father of the girl ties round the wrist of the boy and the girl a string made of the fibre of a plant called *raiban* (*riha* in Assamese). On the string is tied the tip of the tail of the pig killed for that purpose and a bead. While tying the string, the father says '*Ahe mon nu wangla*' (meaning, from today my daughter will be your's). Amongst the Yoglis, this string is tied by the mother of the girl. This system of tying the marriage thread is called *ja-khak*. After this ceremony, the bridal party goes back to the bridegroom's house.

"On the third day, which is called *khairu khun* (Mosang) or *roo-gup* (Ron-Rang), the new couple comes together to the bride's house and stays there for the whole day. A feast is given at the bride's house in honour of the visit. On the same day, both of them go back to the bridegroom's house. The bride takes with her a dao, a spear, a piece of cloth, and a basket from her parent's house.

"Amongst the Yoglis, the ceremony lasts for five days. On the first day, which is called *jamung-rang-nai*, the bride comes to the bridegroom's house. She stays there the second day which is called *lang-khung-pero*. On the third day, accompanied by the bridegroom, the bride returns to her parent's house. On this day which is called *rong-hul-ban* the bride-price is paid by the bridegroom. A party, consisting of the brothers and sisters of the bridegroom and a few relatives, accompanies the couple to the bride's house and then, returns to its village, leaving the couple there. In the evening of the fourth day, the bride and the bridegroom return to the bridegroom's house. On this day, the mother of the girl ties the marriage string on the newly married couple before they return. On the fifth day, they again go to the bride's parents' house, and return the same

day. The bride, on this day, brings with her a few articles necessary for her use, from her parents' house.

"This procedure is followed only in the cases of marriage by negotiation. In other cases, the ceremony ends with the payment of the bride-price only".

SINGPHO

Amongst the Singphos negotiated marriages are more common than other forms of marriage. The negotiated marriage is called *mutung-ti-fi-dai*, and it is conducted by a go-between called *khumbang*. Like other tribal marriages, the Singpho marriage is also preceded by a series of customary rites and rituals. It begins with the acceptance of marriage-proposal when the father of the girl receives some amount of money and a costume as presents from the boy's father, which is followed by a ceremony called *khumbangchum*. On this occasion, a bundle of reed is collected from the jungle and planted near the house where a pig and a chicken are sacrificed. The settlement of the marriage is then celebrated with a feast. On the date of marriage, three girls of the bridegroom's village and a few elderly persons go to the bride's house with some presents including the amount of bride-price. Accepting the presents the girl's father performs divination to find out the auspicious day for the girl to go to the bridegroom's house while the bridegroom party stays on. On the fixed date, the bride moves on to the bridegroom's village where she is received at the village boundary and the party accompanying her is entertained with food and rice-beer. They are taken to a house near the residence of the bridegroom, where they stay until the bride is taken along with her relatives and friends to her husband's house on an auspicious day.

A number of ceremonies follow thereafter. The first is the sprinkling of water from bamboo tubes by the priest on the bride. A pig sacrificed on this occasion is offered to the father of the bride in respect. It is customary for him to return the pig after taking only a piece of meat. The next ceremony begins with the cooking of rice by the bride for all members of the family. In another ceremony called *chaken*, the conducting priest formally presents to the brother of the bridegroom two swords in sheaths on behalf of the bride's father. The bride lifts one of the swords over the shoulder of her husband and utters "from today you are my husband". The rice ceremonially cooked for this occasion by the mother of the bridegroom is taken by the couple and then by the relatives. The *indobe* — a ceremony for the handing over of costly presents to the bride's parents and their relatives is performed the next day. After a month the bride's

¹ Parul Dutta, *The Tangsas* (Shillong, 1969), pp. 62-63.

parents come to meet the couple, and subsequently the couple also pay a short visit to the bride's paternal house.

No elaborate marriage rituals are performed except in negotiated form of marriage. The bride-price is in fact the determinant factor of marriages. A boy and a girl are socially recognised as the husband and wife only after the payment of bride-price.

Houses, Furniture and Decorations

The dwelling-houses of the people, except the Government buildings, are all bamboo and wooden structures. No metal and brick are used. The houses are strengthened and secured with cane strings. The level for the floor is obtained by driving stilts, wooden or bamboo, into the hillside. The floor-level is of different heights according to the fall of slope. On these stilts are tied wooden beams and battens leaving small square gaps in between where they cross one another. On this framework are placed thick mats of split-bamboo to make the floor. It is walled on all sides with rough hewn wooden planks of bamboo-matting. The roof is thatched with grass, *toko* leaves, bamboo leaves or straw supported on framework of bamboo or wooden rafters, cross beams and purlins resting on posts and a triangular framework often of wood. An open bamboo platform, generally rectangular in shape, extends outwards from the main house on one side in the front. This serves the purpose of a courtyard as well as for drying of food-stuffs. The walls of the front room, which serves as a common room or sitting room, are decorated with hunting trophies, heads of *mithuns* and other animals sacrificed on different occasions. The main house is a long hall with small partition walls dividing the rooms. The houses are spacious. The roof is high and slanting, and the interior of the house without windows appears dark.

Generally, houses are built by the local people on co-operative and reciprocal basis. The building materials are collected from the nearby forests by those who want to construct a house, and the labour is supplied freely by the villagers. The owner of the house feeds those who help.

The site for construction of a house is selected ceremonially through a process of divination conducted by a priest. A suitable date for commencement of the work of construction is also fixed by him. The first entrance into the newly constructed house is ceremonially observed.

NOCTE

"The house style (of the Noctes) is of the usual *chang* pattern. They are built on stilts high above the ground. The Noctes, as a variation, however,

make use of huge blocks of wood and wooden pillars, sometimes with carved designs on them, as the frame-work for the house. Toko leaves, which are abundant in the forests around, are used for thatching. The eaves come down so low on the sides that the walls are scarcely visible. The roofless projection of the platform serves as a verandah. There is a fairly spacious room in the front part of the house, used as a kind of reception room, while the ladies' apartments are at the back. The chiefs have very large and spacious houses, probably the largest in the whole of Arunachal Pradesh according to Dr. Elwin.¹

A Nocte house raised on bamboo piles and rectangular in shape has two main parts—a front room which serves as a parlour and inner rooms for the women. The front room is used by the head of the family. A small portion in the front room with a hearth in the middle for the head of the family is enclosed with a partition. When the family is large enough with a number of wives, the inner rooms are partitioned into small compartments or cubicles with a hearth in the middle of each for each wife. The rear portion of the house is used for keeping household articles. The extreme end of the house has a small enclosure which is used as a latrine cum urinal. There is only one door in the house in the front entrance. In some houses there are small compartments made for keeping valuables, and occasionally there is a separate room for unmarried girls.

WANCHO

The Wanchos generally build their houses at the ground level, the eaves almost touching the ground on two sides. The rear portion of the house is, however, raised on piles depending on the slant of hills. The frame-work is built of solid logs and beams. The front portion of the house is used as a common room. Behind the common room there are compartments and cubicles on both sides or on one side of the house with a wide passage running all along the house. The number of such compartments depends on the number of the families. Each compartment has a hearth in the centre. In the rear there are rooms for the unmarried girls.

TANGSA

"The Tangsa houses are of the usual chang type built on stilts, rectangular in shape with a double sloped roof of jengupat. Unlike Nocte houses, the common room in front or the portico (*ran*) is open and has only side walls. The open machan or platform (*kha-ra* or *ranko*) characteristic of the tribal

¹ J. N. Chowdhury, Arunachal Panorama (Shillong, 1973), pp. 226, 227.

houses, is not always found in front of every house. This is either built at the back of the house or slightly off the main house.

"The house is divided into three main parts. The front part is used as a common room, the middle one with a number of small compartments is called *jumong* or *himong*, and the back part, where generally the paddy pounder is kept, is called *jumchang* or *himkha*.

"The front room has a fire place or hearth (*tap*) about the middle of the room but slightly to one side. Besides being used as a common room, it is also used as a guest room. Guests who do not belong to the same subtribe should not enter the *jumong*. The walls of this room are hung up with heads of buffaloes, skulls of pigs, and other animals killed on various festive occasions. One corner of this room is partitioned off and used as a urinal.

"The middle room is divided longitudinally into two parts, one of which is used as a long corridor running along the length of the room and the other is divided into a number of small compartments with a fire-place (*tap*) in each. The number of compartments varies from house to house according to the number of members in each family. Married couples, unmarried young girls and the old parents, if alive, occupy separate compartments. Unmarried young boys sleep in the front room until their marriage. Each compartment has an attached latrine. There is no separate cook-shed, but one of the compartments is utilised for this purpose, where food for the whole family is cooked.

"The long corridor serves many purposes. In one corner of it, they keep their bamboo water tubes, and in the other, they clean their utensils. In some of the houses, the paddy pounder is kept in the middle of the corridor. The rear side of the house, which is called *jumchang* or *himkha*, is used mainly for housing the paddy pounder.

"Tangsas also keep their poultry on one side of this part. This part also serves as a parlour for the women folk. The Tangsas utilise the open space beneath the chang as a pigsty, enclosed on all sides with logs".¹

SINGPHO

The Singpho houses are large in size, and the length of some may extend even upto 30 metres. Usually, however, the size of a house is about 5 to 6 metres in breadth and 15 to 18 metres in length. The houses have three main parts, the front, the middle and the rear. The middle part is divided into a number of cubicles for the members of the family. There are two platforms, one in the front and another in the rear with doors leading to

¹ Parul Dutta, The Tangsas (Shillong, 1969), pp. 12-13.

each. The front and the rear have the same appearance and sometimes it is difficult to distinguish the two. The houses are raised on piles. Wooden posts are often used instead of bamboo. The front veranda of every Singpho house has a secluded place for worship—the object of worship being an image of Lord Buddha.

A note on the household sites and ceremonies connected with the house-building of the people as appended to the 1971 Census Reports¹ is quoted in this context :

“Wancho

Household site—The household site does not belong to the village commonland. Whenever a new village is established, plots of land are allotted to the individuals. The individual constructs his house on a suitable site within the limits of the land allotted to him by the community. The individual exercises full and heritable right of ownership over the land allotted to him.

Ceremonies—No ceremony is observed either during the selection of site or at the time of construction of a house.

“Singpho

Household site—When a village is established each family is allotted with a plot of land. One can construct house in a suitable site within the limits of the plot of land allotted to him. But he will have right over the land only so long as he occupies it. If he abandons it to settle in another village, he loses the right of ownership. But if he shifts to another site within the same village, he retains right over the permanent nature of cultivation such as, takou-leaf trees (Palmina Palm), jack-fruit trees, bamboo (Bambusa Tulda) groves etc. planted by him in his previous site.

Ceremonies—There is no specific ceremony observed during the selection of site. However, when occupying a new house, deities like ‘Natkun’, ‘Ninglche’, ‘Pungphoy’ etc. are propitiated by offering sacrifice of a fowl, or a pig, or a cow, or a buffalo, according to the capacity of the owner. The village Dumsawa or Pujaree, decides which of the deities are to be propitiated. On being converted to Buddhism many Singphos do not observe these ceremonies.

“Tangsa

Household site—Most of the villages are situated on the slopes of hills.

¹ Census of India 1971, Arunachal Pradesh, Part-IV A & B, Appendix X, pp. 194-195.

Proximity to the water source is the main factor in selecting a site. Abundance of suitable land is also considered by the villagers. The Tangsas give less importance to a systematic layout for their village. In most cases houses are very close to each other in the form of clusters. There is no easy approach to some of the villages.

The household site is selected by the individual concerned for which usually no permission is required from anyone. Once the house is constructed on the site, he acquires right of ownership over it which is heritable through the male issues.

Ceremonies—There is no specific ceremony laid down for construction of a new house. However, the individual concerned consults a village priest to know whether the site would be auspicious. The village priest performs some ceremonial process of divination to select the site”.

Village Dormitories

An important social institution which plays a vital role in the communal life of the tribal people of this district is the *morung* or village dormitory. There may be a number of *morungs* in a village according to its size and need. The *morung* is a centre of training for the young people as well as a council and guard house. A *morung* is also a sleeping-place for the bachelors, where they sleep at night.

The Noctes and Wanchos have separate sleeping-places for boys and girls. The Wancho chiefs have their own special *morung* called *wanghampa* or *panu* which is in fact a council house. It was used in the old days as a repository of human heads collected during head-hunting expeditions resulting from tribal feuds. The Wancho *morungs* are also storehouses of antique wood-carvings and of animal heads. Usually, there are separate *morungs* in a Wancho village for separate village units called *jong*. The bachelors' dormitories of the Noctes are called *paa* or *pang*.

“In the past, the *morung* organisation played an important part in the political life of the Tangsas. They had well organized dormitories called *looppung*, which served the purpose of guard houses and of places of recreation for the bachelors. Each village had a *looppung*, constructed at the entrance to the village, as there was fear of frequent attacks from outside in those days. All the bachelors of the village used to sleep there. It was equipped with all kinds of arms for war, and a big log drum, similar to those found in the *morungs* of the Noctes. These *looppungs* are no longer in existence.

“Girls' dormitories which are called *loops* or *likpyas* are still in existence in some villages. It is a centre of recreation and a sleeping-house for the

young unmarried girls of the village. Young bachelors pass their evenings in these, gossiping with the girls."¹

Dress and Ornaments

Every tribe has its own distinct set of dress and ornaments, which they wear in various modes and patterns. The Wanchos are averse to the use of a full dress, yet they are fond of body decorations. Dalton said of 'the Eastern or Upper Naga Group' in 1872 that "in fantastic eccentricity of costume the Nagas take the lead of all the tribes. Their love of decoration is only equalled by their antipathy to clothing. They study ornamentation and manage to produce a very picturesque effect. The materials chiefly used are shell, ivory, boar's tusks, beads of agate and other pebbles, goat's-hair dyed scarlet and other colours, brass and glass."² In contrast to the scanty dress of the Wanchos, the Tangsa style of dress of both men and women is quite elaborate. All of them, young and old, garment the body completely.

WANCHO

The dress of a Wancho man consists of a loin cloth and a coloured shoulder band. A wrapper is used during the cold season. The female dress comprises a waist cloth and a shawl. The exposure of the body above the waist by both men and women is common. The Wancho men and women are very fond of head-dresses and ornaments. Head-dresses of various designs are made of cane slips decorated with beads and stones. An ordinary head-dress is called *khupong* and the costly one *likhasan*, which is decorated with beads, furs and tusks of wild boars. A specially made fillet is used by the chiefs. Hair-pins of cane and bone are also used with the head-dress. The Wancho women as well as the chiefs use necklaces of coloured beads. Both men and women wear armlets. Armlets of ivory are used by men and those of lead by women. Earrings, ear-plugs and belts made of cane, some of which are studded with wool and beads, are used by both men and women. Men also put on leggings.

NOCTE

The original dress of the Noctes is very similar to that of the Wanchos.

¹ Parul Dutta, *The Tangsas* (Shillong, 1969), p. 58.

² E. T. Dalton, *Tribal History of Eastern India* (Descriptive Ethnology of Bengal), (Delhi, 1973), op. cit., note on Plate XVI.

The male dress consists of a long piece of cloth tied round the waist and worn like a *langut* with rings of cane belts above it. Rings made of cane and reed are also fastened round the legs and arms. The women wear skirts hanging from the waist to the knees covering the loins. Generally, the upper part of the body is kept exposed by men except in the cold season when they use wrappers. The old dress is now slowly changing for the new. The young girls are now occasionally seen using wide skirts and blouses with shawls, but in the fields they keep to skirt and often dispense with the shawl and blouse. In lower regions adjacent to the plains of Assam, the girls have started using blouses, sarees, brassieres—the mill-made clothes tailored in the style and fashion obtaining in the plains of Assam. With the passage of time the young boys also are giving up their traditional dress, they now wear shirts, shorts and trousers.

The Nocte men and women are very fond of ornaments, head-dresses and body decorations. The women wear ear-rings, bead-necklaces, finger-rings, metal bangles, armlets and head-gears made of beads, canes and bamboo slips. The Nocte chiefs wear bead-necklaces, ear-plugs and head-gears. The ceremonial dress of the Noctes is quite gorgeous. The head-dress is decorated with the tusks of wild boars, feathers of hornbills and flowers. A hair-pin of bamboo or bone with a tuft of goat and fur dyed in red and black are used to tie the hair-knot at the back. The decoration of the ear is done with ear-plugs and flowers. Necklaces of coloured beads, leggings of cane and bead are also worn. Besides the ivory armlets, wrist-band of plaited basketry decorated with cowrie shells and head-gear made of conch-shells also form part of their dress and ornaments.

TANGSA

"The dress of the men is generally a home manufactured chequer-patterned *lungi* of green and black colour, lined with red, yellow and white yarn; and a shirt of mill-made cloth..."

"The original dress of a Tangsa man consisted of a loin cloth or *langut* (*rai*), a sleeveless shirt (*samtong*) open in front and a piece of cloth (*khuphak*) for the head, all of their own manufacture. The Tangsa women also had their own typical dress. The skirt was a single piece of cloth of about 39 inches in length and 12 inches in breadth, with beautiful geometric patterns, such as zigzag band with internal repetition, rectangular cross-hatching, chequer and lozenges, which was worn round the loins reaching down to the knee joint. This beautiful skirt of their own make is called *khosa* or *khatsa*, and is woven in red, black, white and blue colours, though today, only a few of the Tangsa ladies, generally the older ones wear this

skirt as a petticoat. Two pieces of cloth, of 34 inches in length and 18 inches in breadth, made of blue yarn, designed with narrow stripes with in-between thin stripes of white and yellow yarn, make the upper garment of the body. These two pieces of cloth are hung on the neck, one in front and the other at the back of the body. They are spun and decorated with a rough band of needlework sewn across the breadth. This upper garment is called *maipa* or *khapia*.

"With the march of time, Tangsa women have changed their costume greatly. Although they are expert in weaving, the cheap quality mill-made cloth has today become very popular among them. Nowadays they wear a black skirt (*khailung*) tied round the waist, reaching below the knee joint and sometimes coming down to the ankles; a blouse (*cham phung*), a *pungmen*, a piece of white cloth worn over the blouse covering the body, and a *khuphak*.

"The Tangsas do not possess any traditional ceremonial dress. On festive occasions, however, they like to wear new clothes. . .

"Tangsa men and women wear various ornaments for personal adornment. These ornaments are unlike those used by the Wanchos and the Noctes. Men put in their ear-lobes a few coloured beads, strung on a copper wire, and wear a legging of fine cane strips dyed black with the juice of a kind of jungle fruit called *riyak*. Formerly they used a waistband of cane strips steeped in colours of red and black, and a cleverly made helmet (*kanglikhugup*), decorated with feathers of hornbill and boar's tusches. The latter was used only on ceremonial occasions.

"Women adorn the body with various types of ornaments. The ear ornament, *patnato* or *patnatei*, made of a transparent crystal (*jangphai* in Assamese) is worn by all women as a proud possession. Formerly, they used a kind of earring called *phimrong*, made of either cane or wood of black colour, which looks like the horn of a goat, but the *jangphai* has now taken its place. Round the neck they wear a number of bead necklaces of different sizes. The necklace made of coins, particularly of four anna nickel bits, is a valuable ornament to them. The Khemsing women wear a particular type of ornament called *kamlolak*, made of round discs of brass with circular incised marks, spined with a cord. The most valuable necklace is made of two types of beads, one oval-shaped with black and white spots (*semaklag*) and the other, elongated drum-shaped, and white in colour, with a small hole. Another type of very costly bead called *laksu*, purchased from Burma, is also used by them. They also use a pair of bangles (*yaksan*) made of metal and leggings made of beads."

¹ Parul Dutta, *The Tangsas* (Shillong, 1969), pp. 16-19.

SINGPHO

E. T. Dalton described the dress of the Singphos as it was a century ago thus: "The men tie the hair in a large knot on the crown of the head, and wear a jacket of colored cotton and chequered under-garment of the same material or of silk, or the Burmese 'patso'. The respectable chiefs assume the Shan or Burmese style of dress, and occasionally short smart jackets of China velvet, with gilt or amber buttons. They also wrap themselves in plaids of thick cotton much in the fashion of Scotch Highlanders.

"...Their (women's) dress consists of one piece of coloured cotton cloth, often in large broad horizontal bands of red and blue fastened round the waist, a jacket and a scarf. The married women wear their hair, which is abundant, in a large broad knot on the crown of the head, fastened with silver bodkins with chains and tassels. Maidens wear their hair gathered in a roll resting on the back of the neck and similarly secured. They are fond of a particular enamelled bead called *deo-mani*, and all wear as ornaments bright pieces of amber inserted in the holes in the lobe of the ear."

Now-a-days the men wear a *lungi* woven in different patterns and colours, a jacket and a white turban. The women wear a skirt, ornamented with designs on the lower border, a black jacket, a beautifully embroidered scarf and a waist band. They also put on a turban, but does not cover the knot as the men do. The dress of a chief is different. He wears an under-garment of muga, a long coat and carries a bag decorated with designs of snake, tiger and lion.

The Singphos are expert weavers and they make their dress themselves. Even now, almost all the Singphos use hand-spun and home-made dresses.

The only ornament for men is an earring made of brass, but this is no longer in vogue. Women use many kinds of lavish ornaments. A fine long silver-chain fastened with a hair-pin of silver colour is used to adorn the hair-knot. The necklaces are made of valuable beads of different colours. The bangles are of silver. Silver rings are commonly used by the Singpho women.

Tattooing

Tattooing is an old custom of the Noctes and the Wanchos. The Nocte women tattoo their arms and portions of body near the spine. Tattooing was also in vogue among the Nocte men in the past, but today a few of them

¹ E. T. Dalton, *Tribal History of Eastern India* (Descriptive Ethnology of Bengal), (Delhi, 1973), pp. 10-11.

are seen with tattoo marks. The Wanchos, in particular, have a complex and elaborate system of tattooing.

"Both Wancho men and women heavily tattoo their bodies. Distinctive of women is a cross over the navel, besides other designs on different parts, of the body. Men have spectacle designs round the eyes apart from other patterns on the neck, throat, chest, arms, back and the stomach.

"Tattooing in fact has a very special significance for the Wanchos. Besides being personal decoration, it has both social and ritual import. Tattooing is locally called *hu* but *chu* is the more common term. Apart from the rank and social status of a person, different designs of tattooing on different parts of the body signify attainment of different stages in life, particularly in case of women.

"A man from the chief's family has very elaborate designs all over the body while others, lower in rank, have simple ones. A head-hunter had special designs on the face and body as marks of bravery.

"The process of tattooing is very laborious and demands great patience and physical endurance on the part of the person undergoing the operation. In the first place, tattooing can be undertaken only on a special day fixed by divination or augury, a fact which signifies its ritual importance. A feast has to be arranged for the occasion. Designs are first drawn with black paint prepared from soot over the desired parts of the body and these are pricked with thorns. During the process, some one keeps the skin stretched. Then the juice of a particular plant mixed with blue colour is applied over the designs. The juice is also said to have a healing effect on the wounds. The wounds sometimes become serious turning septic, and usually confine a man who can hardly move about for a couple of days or even longer because of intense pain and swelling of the affected parts. There are experts who perform the operation; they are not paid in cash but are honoured with offer of rice, rice-beer and meat.

"Tattoos of different parts of the body have different names; that on the face is *thun hu*, on the chest *kha hu*, on the neck *ding hu* or *chakhu hu*, on the back *tock hu*, on the umbilicus *chung hu* or *chum chu*, on the thigh *betam hu* and on the calf *chichin hu*. Men get tattooed on the face, neck, chest and back but women on the chest, arms, back, umbilicus, thigh and calf but never on the face. The patterns of tattooing are also different for men and women.

"Tattooing in women has quite special significance marking different stages of life, and it is a part of the marriage ritual. The first tattooing over the umbilicus is done at the age of about 6 or 7 years when a girl is betrothed or just before betrothal. When a girl attains puberty or immediately prior to it, tattooing is done for the second time on the calf. The design is either circular lines or diamond designs covering the tibia. The

chief's daughter might have more elaborate designs. This is also the occasion when formal betrothal takes place. The girl is now free to mix with the boy to whom she has been betrothed. A nominal ceremony signifying marriage precedes this second tattooing. The third tattooing on the thighs just over the knees is done before the girl leaves her parental house for her husband's home. In some villages, this is done after the girl first conceives. The design is parallel lines upwards from the knee. In case of chief's daughter, eight small dots in two rows are marked across and over the parallel lines.

"The last and the fourth time, a broad 'M' design is tattooed above the breasts during the seventh month of pregnancy or, in some places, after the first child is born. This time the tattooing is done in the husband's home. The girls of the chief's family, in addition, get their forearms tattooed along with that on the chest. There are adept women who undertake the task of tattooing in case of girls, and are remunerated in kind."

E. T. Dalton wrote of the Singphos that "the men tattoo their limbs slightly, and all married women are tattooed on both legs from the ankle to the knee in broad parallel bands."

Food and Drink

The basic diet of the people consists of cereals, millets, vegetables and meat. In places under wet-rice cultivation, especially in the Singpho area, rice is the staple food. But job's tear, millet and maize are more commonly taken, and they are supplemented by sweet potatoes, arum or *kachu*. A very large variety of wild leafy vegetables, roots, tubers and fruits as well as pumpkins, brinjals, gingers, onions, mustard leaves, chillis, the flowers of plantain, mushrooms and bamboo shoots are also included in the diet. The people are fond of fish, but there are restrictions on meat. The Noctes do not take beef and some of them do not eat goat's meat either. The domestic animals, pigs and chickens are regarded as special items of meal on sacrificial occasions. Meat and fish are often dried up and stocked for future consumption, especially during scarcity. The food-stock is kept on the rack built above the hearths in almost every house.

Most food is boiled, though meat is sometimes roasted. Rice and millet are boiled with vegetables to which chillis and salt are added for flavour. Local spices are used but oil or fat is not. Food grains are pounded into

¹ J. N. Chowdhury, *Arunachal Panorama* (Shillong, 1973), pp. 241-244.
² E. T. Dalton, *Tribal History of Eastern India* (Descriptive Ethnology of Bengal), (Delhi, 1973), p. 11.

powder and then mixed with hot water for making a paste. The paste is poured into bamboo tubes for baking and the baked food is taken with salt, chillis, vegetables, meat or fish. Condiments of bamboo-shoots are also edible.

Method of food-preparation is peculiar to different tribes. The Tangsas boil the rice, which is their staple food, in water and sometimes cook it by a steaming process. Pounded dried fish is a special item of food of the Tangsas. The Singphos know of a better method of meat preservation whereby they keep dried meat for five or six months. They make a special preparation of meat mixed with chilli, salt and ginger by baking. Fish is preserved by steaming process and is either fried or made into a curry for a meal. Sometimes they bake the fish over the hot charcoal fire. They also take boiled fish.

Local beer is brewed from rice, tapioca and millets. Liquors are prepared by special process of fermentation and distillation. The people also take tea without sugar or milk. They are accustomed to chewing arecanut with betel and lime. A creeper plant called *sali* is used as a substitute for arecanut.

Festivals

Various festivals, mostly seasonal, are observed by the people. These festivals are characteristic features of the tribal society. They impart a sense of joy and fraternity amongst the people. Observance of fertility rites relating to agriculture is the main occasion of the local festivals which are celebrated with customary rejoicings.

WANCHOS

The Wanchos have a number of agricultural, social and religious festivals. The names of the festivals vary from village to village and also among the different groups of the Wanchos. The number of festivals also vary. For example, sixteen different festivals are celebrated in a year at Wakka, whereas, in Pumao area, only six festivals are observed. Similarly, Ninu village observes fourteen, Longkai twelve and Pongchau seven festivals.

One of the most important festivals observed all over the Wancho area is *Ojiyele*. This festival continues with great enthusiasm for six to twelve days during March-April every year just after sowing of jhum paddy. Pigs, buffaloes and mithuns are sacrificed and feasts are arranged in each and every morungs (dormitories). Songs and dances by boys and girls in ceremonial costumes make it joyous and colourful. The people put on clothes specially on this occasion, as the festival also signifies donning of new garments. Farm houses are constructed for new harvest. *Ojiyele* takes a

very festive look at Pumao where dances are held around a long ceremonial pole called *jangban* planted for this occasion.

The Wanchos also observe many other festivals connected with sowing and harvesting rites. *Sakila* and *Chachai* festivals are held to celebrate the sowing of millet and paddy seeds in the field. Successful harvesting of millets is the occasion of another festival called *Chachaban*. *Laudongle*, *Chachiywan* and *Poatak-le* are also harvest festivals. On the occasion of *Chachiywan* festival, seeds of millet mixed with a sacrificed hen's blood are sprinkled before the millet is brought home from the field, and at the time of *Poatak-le* a few grains of millet are thrown over the earth by the mistress of the house, apparently for a better crop next time.

NOCTE

The prime festival of the Noctes is called *Loku*.

"The word *Loku* is derived from '*Lofe*', meaning to drive out and '*Rang-Ku*' or season. *Loku* therefore literally means to drive out the old season or year. This festival is celebrated in the month of July-August, just after harvesting finger millet. In some villages *Loku* is celebrated after the reaping of *Ahu* paddy in the month of October-November. After calculating the digits of the waxing or waning moon, the date for starting the *Loku* festival is fixed by the village elders...

"The *Loku* festival starts with sacrifice of buffaloes and pigs for the communal feasts. The real merry-making begins from the second day when families invite each other for drinks. It is a happy sight to see young men visiting houses and the housewives busy in receiving and serving guests. "*Chya-Chaam* or the starting place for the dance is away from the village. On the second day all male-folk assemble there and some prayers are offered. Feasting and drinking start followed soon after by dance. The dancers come back and visit the Chief's house especially arranged for the festival (*Ngongwahum*) where the dance is performed by children, youths and maids. The dance continues with short intervals for drinks. At night a big bonfire is lighted round which they continue the dance. So the feasting and dancing go on for several days.

"The songs sung during *Loku* describe the past history of the battles fought and also social laws.

"On the concluding day either early in the morning or after sun-set, the *Loku* dance comes to an end. Young boys then go to their dormitory (*Paang*) and beat the long-drum to announce that the *Loku* festival with the songs and dances is over for the year.

"Next day villagers go out for communal hunt in the forest and this hunt is meant to drive out the evil spirits and lethargic feelings.

"Loku festival is really captivating. It is so centred round people's lives that they yearn for the days of the festival even after it is ended. In the concluding song of the festival, people therefore sing:—

"The flower has fallen off,
The fruit has mellowed,
Loku has also ended!
Go away
Wherever from you came
Till the next year;
And do come again in the next year with a new spirit!"¹

The sowing festivals of the Noctes are called *Kopkhut* and *Challiwan*. These festivals continue for four days during which games for children, exhibitions of the local chiefs' possessions, cock fights etc. are arranged. The *Ronglo* (harvesting of millet) and the *Chalow* (harvesting of paddy) are two important festivals, which are observed on the successful reaping of harvest. On these occasions, community feasts and dances are held in the morungs, and an air of gaiety and rejoicing pervade throughout the village. The Noctes have some other minor festivals, namely *Tobi* or *Pobi*, *Pitsa* and *Charom* concerning agricultural rites.

TANGSA

The Tangsas celebrate three major agricultural festivals in a year. Before sowing of seeds one festival is held, and after sowing, when the paddy seedlings grow a foot high, they hold another festival. The first festival is called *Samfang*. It is observed individually in the months of March and April for two or three days during which a woman from each house goes to her paddy field, taking a few grains of paddy seeds, a bamboo mug (*chunga*) full of rice-beer, a small quantity of cooked rice and some pork in a basket. At the paddy field, she clears a patch of land in which the seeds are sown ceremonially after grafting a small flowering plant and fixing a wooden post with notches cut on it. Rice-beer, rice and meat are put on the post. The occasion is celebrated by the villagers with feast and drinks.

The greatest festival of the Tangsas is called *Lamra* or *Perong*, which is held after reaping of harvest. This festival is observed in every village in the month of August for two to three days when one can see the women going to their respective fields to collect sheaves of paddy plants. The paddy bundles are tinged with the blood of a sacrificed pig before they

¹ 'Loku' by Wangpha Lowang in 'Our Festivals' compiled by M. N. Bardoloi (Shillong, 1968), pp. 37-38.

are brought home. On this occasion, the young boys of the village arrange a feast of rice and pork, which is followed by merriments, drinks, songs and dances.

Mol and *Kukjong* are other minor festivals of the Tangsas. The *Mol* is held in June-July after the sowing of paddy and before the harvesting of millet. It signifies the final food offering to the dead, prayers for a peaceful life and for a bumper crop. During this festival each bereaved family slaughters a pig and gives the last food offering to the departed soul. Throughout the day the villagers visit each other's houses and enjoy the feast. After dusk men and women start dancing together rhythmically with the accompanying drums and gongs. *Kukjong* festival is celebrated on the occasion of a successful hunting.

The greatest agricultural festival of the Lungchang Tangsas is *Mo*. This festival is held in the month of May every year at the time of harvesting of millet, and it continues for about six days. On this occasion, they perform a worship called *Romrom* with this prayer:

"Oh Great God, you are protecting our agriculture from the sowing to the ripening. From today we would seek permission to collect these crops for our maintenance. May you be pleased with our offerings and help us to harvest safely".¹

Mo is celebrated in a festive manner, and the rejoicings of the people are expressed in songs, dances and drinks. The festival is followed by a community hunting in the forests.

SINGPHO

Like the other tribes of the district, the Singphos also have their festivals relating to agriculture. One of their festivals is called *Sanjo* which is held before sowing of seeds. On this occasion, they sacrifice one pig and four hens to appease the deity of agriculture. It is observed house-wise. Another festival called *Namangchhole* is characterised by offerings of rice-grains and sacrificed animal to the deity of agriculture in order to protect the plants from pests and insects.

Dance and Music

The culture and the corporate social life of the people inhabiting the district of Tirap are vividly reflected in their festivities and merriments of which dance and music are important features.

¹ 'Mo' by Pratap Chandra Barua in 'Our Festivals' compiled by M. N. Bardoloi (Shillong, 1968), p. 21.

The local people are fond of music, and their songs are rich in melody, rhymes and rhythms. The life of the people, their love and emotions, find expression in their songs. The compositions are many and varied for different occasions. There are group songs sung on the occasions of pounding rice, harvesting crops, performing the group dance and so on. These apart, the young people sing love-songs in the form of dialogues. It is a pleasure to listen to the tribal nursery rhymes and the children at play reciting them. Similarly, their cradle songs sung at a low pitch with melody predominating over rhythm are pleasing.

Festivals, as stated before, are the special occasions of dances performed by various tribes. All the tribes have their own traditional way of performing dances as they befit and convey the underlying idea of a particular occasion. The dance is generally performed in a group. The dancers wearing colourful costumes keep balance and rhythm in harmony with songs and music maintaining the tempo of the dance. Drums and gongs are commonly used as musical instruments. On some occasions boys and girls dance together. A characteristic feature of the tribal dance is that it is a communal rather than an individual performance. Indeed, the hard life in the hills is in a way greatly redeemed by the rapturous, colourful and invigorating communal dances expressing the feelings and emotions of the people.

The war-dance of the Wanchos performed on the occasions of a victory or a successful head-hunting expedition of the old days is now held to commemorate the old tradition and to keep up the high spirit of the tribe. Before the commencement of the dance, the dancers arm themselves with weapons and armours, and dress in special costumes. The war-dance is preceded by a mock head-hunting. Drums are beaten vigorously and voices rise up when the dance is on. Excitement increases as the dance goes faster to reach a climax. The whole atmosphere becomes grave and tense and it reminds of a great war incident of the past.

The Wanchos perform dances on many other occasions, such as a chief's death or construction of a new house. Both boys and girls participate in the dance performed during the Ojiyele festival. Songs and beating of log drums accompany some of the dances. Some dances are organised in the *morungs*.

The Noctes are also fond of dance on festive occasions. Their war-dance as that of the Wanchos is reminiscent of the old feuds and head-hunting expeditions. With the passage of time the dance has lost its force and vigour. Now there is no drum-beating at the time of a war-dance.

During the Nocte festivals, dances are held. In some dances the singers and drummers stand in the middle while dancing girls and boys move in a circle round them. The 'Bamboo Dance', or *Khong Khong Khep* as it is

locally called is one of the most popular dances among the Nocte boys and girls. The players are divided into two parties—one party keeps up the rhythm on bamboos, and the other performs the dance. "As the bamboos are beaten rhythmically on the ground, the dancers jump over the bamboos and back again and again. The point is to jump back and forth faster and faster as the bamboos are thumped with increasing tempo."¹

The Tangsa dances held during the festivals of *Samfang*, *Lamra*, *Mol* and *Kukjong* are participated by both men and women. Drums and gongs are the accompanying musical instruments. Most of the dances are organised on communal basis. *Shamma*, a solo dance of the Tangsas, is performed on some special occasions. This dance has a ritualistic significance as it seeks to diagnose an illness and to find its cure. A diviner is consulted when a person falls ill. If the omens indicate that the *Shamma* rite is to be performed for curing the illness, a priest or priestess comes to the house of the patient, performs certain rites in the day, sings and dances at night and exorcises the disease from the patient's body.

The Singphos depict various activities, such as husking of paddy, hunting etc, through some dances. They perform a ritual dance after the death of a village chief in order to pay their last homage to his memory, and to pacify the soul of the departed so that it goes to its eternal resting place and does not come back to haunt the inmates of the household or bring sufferings and diseases to the family.

Games

The indigenous games are simple, jovial and inexpensive. Some of these games as they are locally called *phelhle* ('endurance test'), *jipu chhahvat* ('the rope hop'), *vakih khowom* ('the parrot walk'), and *yugkawshai* ('going under backwards'). Besides these, there are other games which may be described as 'swinging to a tree on a rope', 'standing on the head', 'sitting on the hands', 'finger-opening competition' etc. In some of these games the players display wonderful agility, balance and physical stamina. To an uninitiated onlooker the games may appear to be acrobatic feats. A brief description of some of these games as gleaned from the 'Games of NEFA' is as follows:

"*The Parrot Walk*—The 'Parrot Walk', locally known as *Vakih Khowom*, is a popular game among the boys and girls of Tirap. A single bamboo pole is laid on the ground. With hands folded or tied at the back, the players walk the length of the pole one at a time. Should a player lose his balance, he is 'out'.

¹ Marion D. Pugh, Games of NEFA (Shillong, 1958), p. 14.

"*The Rope Hop*—The 'Rope Hop', or *Jipu Chhahvat*, can be played by any number of players. A cloth rope held at each end is swung by two players in pendulum fashion. The other players with hands and feet on the ground, leap across the swinging rope each time it touches the ground. This game is popular among both boys and girls.

"*The Turban Stunt*—The 'Turban Stunt' is a display of wonderful agility and balance. This acrobatic feat is known as *Biyapai* by the Tikhak and Rongrang tribes who perform it.

"A bamboo is placed on the shoulders of two men, and then a third player runs up, grasps the pole tightly, and with a few swings jerks himself up on the pole and stands upright on it; maintaining his balance, he unwinds his turban, thus completing the stunt.

"*Swinging to a Tree on a Rope*—'Swinging to a Tree on a Rope' is another display of agility especially by the Tikhak and Rongrang tribes. A rope is hung from one tree so that it dangles to the ground. This tree should be near another tree. One by one, individual players swing on this rope and, gathering momentum, swing right onto the other tree from which they climb down. The Rongrangs call this feat *Soyingwang*, and the Tikhaks call it *Sulego*"¹

THE YOBINS

The Yobins, also called Lisus, migrated from across the Patkai range in the forties of the present century and settled in several villages along the Noa-Dihing river in the Vijoynagar area of Tirap District. According to the Census of 1971, there are about 929 Yobins living in this area.

Captain B.E.A. Pritchard wrote of the Yobins in 1912 that "Both sexes of all ages wear short untidy queues . . . Long hempen overcoats are worn and bags of langur, cat, cow and other skins are in fashion . . . The women wear a double row of white buttons round the head, from which one inch strings of beads and seeds hang in a fringe, terminating in a tiny metal bell. They also wear bone ornaments round the head and on the straps of their skin satchels. Their earrings are of silver with a piece of coral attached. The head-dress is picturesque. The men all carry the formidable Lisu cross-bow and the boys have miniature ones . . . While both sexes are particular as to their dress and comparatively clean in their persons, it is curious to find their houses rickety, draughty, small and dirty. They are built on piles of varying height and have only one partition in them".²

¹ Marion D. Pugh, *Games of NEFA* (Shillong, 1958), pp. 14-15.

² Captain B.E.A. Pritchard, Report on a journey from Myitkyina to Sadiya via the N'Mai Kha river and Hkampti Long (Simla, 1912), p. 42.

This old account do not, however, portray the present-day life of the Yobins of Tirap. Their ways of living seem to have undergone a remarkable change during the decades following their migration. Their conditions have greatly improved. They are an industrious people. Their labour and initiative have paved the way for development of the area.

The society of the Yobins is divided into a number of clans, and every clan-name suggests a kind of trade or profession; for example, the *Ngaza* clan represents the fishermen, the *Jeza* clan denotes the beekeepers and so on. The Yobins are patrilineal, and an Yobin family normally consists of parents, sons and daughters. A married son usually leaves the family after marriage, but the youngest son remains in the family. The property, both movable and immovable, is generally inherited by the youngest son after the death of his father.

Marriage in the Yobin society is normally performed through negotiations. Levirate, sororate and cross-cousin marriages are recognised. Divorce is a rare occurrence.

Burial is the traditional method of disposal of the dead. The dead body, laid in a coffin, called *legu*, is buried in the burial ground on the village outskirts.

The Yobins live in well-demarcated villages, each comprising a number of houses built according to a systematic and uniform pattern. The Yobin houses resembling the common *chang* pattern are built on platforms raised 1.20 to 1.80 metres above the ground. The breadth is usually 5.40 to 6 metres, but the length varies according to the number of rooms. The floor and the walls are made of split bamboos tied with cane. The houses are generally not well-ventilated. They have doors, but no windows. Normally, a house is divided into two parts, the one in the front used as a common or guest room and the other for dwelling purposes.

The Yobins, like other tribes, have their own style of dress. They weave their own garments at their looms. The men wear a shirt reaching above the knees and at times a long coat extending upto the ankles. They may also use a kind of loose breeches called *myuche*. A turban and a waist-belt are also worn. A sheathed sword or *dao* tucked in the belt, and a cross-bow with a bag of arrows hanging from the shoulder are carried by men when they go for hunting. The female dress consists of a upper garment called *Zabech* and a loose petticoat or skirt. The married women put on an additional piece of cloth over the frontal part of the petticoat. The Yobin women are fond of ornaments. They adorn themselves with necklaces of white, red and blue beads. Earrings of multicoloured beads and bracelets are also worn. Besides these, the women wear a long chain of beads and conch-discs which passes over the left shoulder to the

right side of the waist. Attractive ornaments made of beads and conch are used by them as head-dress on some special occasions.

An Yobin village has its own arable land. Besides agriculture, hunting and fishing are their important means of livelihood, whereby they supplement their main diet. The staple food of the Yobins consists of rice, millet, vegetables and meat.¹

REHABILITATION OF PEOPLES

More than 16,000 persons — the Tibetans, the Chakmas and the Hajongs migrating from various places have been rehabilitated in the Changlang and Miao Sub-divisions of this district. The Tibetan refugees have been resettled in the villages near the sub-divisional headquarters at Changlang. The Chakmas and the Hajongs have been rehabilitated in the Miao and Deban circles of the Miao Sub-division.

THE CHAKMAS

The Chakmas of Bangladesh migrated to India in the months of June and July 1964, and came to Silchar (in Assam) through the Mizo Hills. They were allowed by the Government to resettle in the Miao Sub-division of the district of Tirap. The influx of the Chakma refugees into the district continued up to March 1966. The total Chakma population in the district is about 15,000.

The Chakmas were also allotted plots of land for cultivation, and they have proved themselves to be expert agriculturists in terrace cultivation, which they had been practising in their former homeland. Their farms have shown considerable productivity of food-grains, particularly maize and paddy.

Race and Language

The Chakmas are an Indo-Mongoloid race. The name Chakma is sometime spelt as Tsakma, Tsak or Thek. The tribe is divided into forty clans, and each clan had a hereditary *dewan* or chief. In place of old dewanship, the leaders of each village are now concerned with the welfare of their own village.

"In the central portion of the Chittagong Hill Tracts, in the Chakma

¹ The account of the Yobins is almost wholly based on the article 'A Little Known Tribe of Tirap' by D. K. Dutta, published in the Resarun (Shillong, 1979), Vol. V, No. 1, pp. 61-67.

Chief's Circle, situated in the country round the Karnaphuli River, a broken dialect of Bengali, peculiar to the locality, and of a very curious character, is spoken. It is called Chakma, and is based on South-Eastern Bengali, but has undergone so much transformation that it is almost worthy of the dignity of being classed as a separate language. It is written in an alphabet which, allowing for its cursive form, is almost identical with the Khmer character, which was formerly in use in Cambodia, Laos, Annam, Siam, and, at least, the southern parts of Burma. This Khmer alphabet is, in its turn, the same as that which was current in the south of India in the sixth and seventh centuries. The Burmese character is derived from it, but is much more corrupted than the Chakma".¹

Folk Songs and Singers

The Chakmas have a rich treasure of folk songs and folk tales. The roving folk singers, who are called *ganguili*, are very popular. The *ganguilis* tell the tales of heroes and battles of the past in their songs. They are devotional singers as well. They would make offerings to their deities before a ballad is sung. The Chakmas have great regards for the *ganguilis*, and they believe that prophecy of the *ganguilis* always comes true.

Religion and Beliefs

The Chakmas are mostly Buddhists with a regular Buddhist priestly order. But due to their long association with the Bengali Hindus of the Chittagong plains, certain Hindu rites and cults have been mingled with their Buddhist religious tenets. They have also preserved some age-old tribal religious practices. The Chakmas have their own version of Buddhism, which is strongly permeated with both Hindu and animistic rites. They worship Kali — the Hindu goddess. Magic and sorcery are also practised. Apparently, the Chakma religion is a blend of Buddhism, Hinduism and tribal animism.

The main religious festivals of the Chakmas are *Baisakhi Purnima*, *Kartika Purnima*, *Maghi Purnima*, *Phul Bihu* and *Bara Bihu*. The Chakmas believe in the existence of the other world, according to which the good souls go to heaven, while the evil ones are sent to hell. They have also a belief in ghosts and spirits, for whose propitiation sacrifices are offered. The mystic rites performed by the Chakma *Vaidyas* (medicine-men) are believed to have had its origin in the Buddhist tantricism. The *Vaidyas* prescribe wearing of powerful magic thread, which they prepare themselves after per-

¹ G. A. Grierson, Linguistic Survey of India, Vol. V, Part I, (Delhi, 1968), p. 321.

forming some rites for protection against the evil spirits. The help of a *Vaidya* is sought for dispelling an evil spirit, welfare of the community and of family, for good harvests and matters like that.

Medicines and Cures

The Chakmas have their own school of medicine. They consult their *Vaidyas* to get rid of diseases and evil spirits causing illness. Various jungle roots are prescribed by the *Vaidyas* as cures. It is stated that their treatments of leprosy and snake-bite are very effective.

Death Rites

The Chakmas dispose of the dead bodies by cremation. The corpse-followers walk around the dead body seven times before it is given to the fire. The head of the male corpse is placed eastward while that of the female westward. The pyre is arranged in five and seven layers respectively for male and female dead bodies.

No cremation is held on Sundays and Wednesdays. A Sunday cremation, according to the Chakma belief, has evil effects on the family of the deceased, while that on Wednesday brings evil to the village.

When a distinguished man of a village dies, his body is taken to the cremation ground in a big and ceremonious procession, in a well-decorated chariot, on the top of which is placed a wooden crow and a wooden monkey.

Marriage and Morals

Marriage among the Chakmas is arranged through negotiation, although love marriages are frequent. Free mixing of boys and girls are allowed in the Chakma society and the young people get ample scope to make their choice. But consent of the parents for both sides is essential. Caste system does not exist in the Chakma society, intermarriage among the sects is allowed. But cross-cousin marriage and marriage between nephew and aunt are forbidden. If sexual relationship exists between the cross-cousins, they are punished by the village elders. A fine of one or two pigs, some bottles of rice-beer and cash money is imposed on the culprits. If it happens to be a case between the aunt and her nephew, the woman is held mainly responsible for the relationship. She is put to shame publicly. Her hair is cleanly shaved, a hen-cage is tied to her neck and she is taken round the village in a procession, herself uttering the sin she has committed. A fine is also imposed on her. Polygamy, is not unknown among the Chakmas. But only those who have plenty of wealth and property can

afford to have more than one wife. Widow marriage is common but elaborate ceremony is avoided in such a case. In case of a widow who is a mother of one child, the intended husband is required to promise before the village elders to look after her child as his own. Divorce is allowed, and the reason in most cases is adultery for which the man who is guilty for the divorce is required to marry the divorced wife, and feed the community as a punishment.

Birth

During pregnancy a Chakma woman observes certain restrictions in her movements. She wears a magic thread prepared by the Chakma *Vaidya* for protection of the child to be born from all evil influences. According to the code of restrictions, the pregnant woman must not answer a call at night even if she knows the voice of the person calling her. She should not go near certain trees nor visit the house of a widow and so on. At the time of delivery, a midwife together with some elderly women of the village helps her. After delivery she is considered unclean. Nobody visits her till the purification ceremony, performed by the midwife, is held, on the seventh day after the child's birth. Gold, *kojoi* (a jungle root) and a feather of hen are used in purifying the mother. The midwife gets a big hen, a bottle of liquor and some cash money when the ceremony is over.

Dress and Ornaments

The dress of the Chakma men is an adoption from that of the Bengali Hindus. They wear *dhoti* and shirt. But the female dress is typically tribal resembling that of the Burmese. The Chakma women wear Burmese *lungi* stretching from the waist to the ankles, and a long narrow piece of cloth on the breast. The skirt (*lungi*) and breast-cover are woven by the women themselves. Their ornaments are made of beads and silver.

Naming of the Child

Naming of the child is usually done by the elderly members of the family. The Chakmas like to give their children mythological names. But peculiar names, such as Aijal Devi (born in Aijal), NEFA Chandra, Indira Gandhi etc. are also found among the children, which are suggestive of the environmental changes they are undergoing.

THE TIBETANS

The Tibetans living in the district are all refugees emigrated from their homeland in Tibet. When his Holiness the Dalai Lama fled and took

asylum in India in 1960, a large number of his followers migrated to India during the period 1960 to 1965. Extensive stretches of land were allotted by the Government to rehabilitate many of them in this district.

The Tibetans are good farmers. They cultivate by slash and burn method. Their technique of shifting agriculture is remarkably fruitful. They have improved types of agricultural implements. Their farming system is so developed that the fertility of the soil remains unaffected for a long time. The Tibetans are an enterprising people. Small markets have grown in the areas where they have settled.

About 215 families numbering 887 persons were rehabilitated in the Changlang Sub-division. The Tibetans settled in this district are divided into several tribes of which the one called Poma is numerically the largest. This tribe came from Pemang area of South-East Tibet. The Khambas are the second largest. They are divided into different sub-tribes. The Khambas are a brave people. Other tribes are Popei and Kongbo, each consisting of a few families only.

Religion and Beliefs

Buddhism was taken to Tibet from India, but it developed there on its own line without being deviated from the main teachings of Lord Buddha. The Tibetan Buddhists do not make a sharp distinction between the teachings of Hinayana and Mahayana forms of Buddhism, they have a general faith in both of them. For moral guidance, they follow the Vinaya rules, while for esoteric practices they adopt the methods of the Mahayana and Tantrayana or Vajrayana (also called Mantrayana) schools. Hinayana and Mahayana represent the two schools of thought concerning the true path for attaining the Nirvana, but these doctrinal paths must be followed as preparatory to the practice of Tantrayana.

The Tibetans believe that they are under the ecclesiastical rule of Dhyani Bodhisattva Avalokiteshvara or Chenrezig as called in Tibetan (a form of Dhyani Buddha Amitava) of whom the Dalai Lama is regarded as an incarnation.

The spiritual guides of the Tibetans are the Lamas, to whom they look for help in all matters. The Lama hold a very influential position in the Tibetan society. A Tibetan would consult a Lama before marriage, birth of a child or a long journey. Belief in magic, oracle, evil stars and spirits etc. shows that Tibetan Buddhism has many shamanistic elements in it.

Death Rites

According to their traditional custom, the Tibetans dispose the dead-body by exposing it to the vultures. This practice is banned in the Tibetan

villages of Arunachal Pradesh, where they throw the remains into a river or just leave the dead body on a hill-top.

Soon after the death of a person, the Lamas arrive and perform some rites to satisfy the spirit of the dead. The auspicious date and time for the final disposal of the corpse within seven days from death are calculated from the horoscope of the deceased as well as of the family.

Domestic and Social Life

The Tibetans are a good-natured, peace-loving, simple folk with a very strong religious belief. The Tibetan family is a joint system, patriarchal in form. The father is the head of the family and the eldest son takes family responsibilities when the father becomes old. The Tibetans have the institution of polyandry amongst them, in which a wife belongs to more than one husband, who are generally brothers. There is no segregation of women, both the sexes can mix freely. Men and women dance together on ceremonial occasions.

The woman is a great asset in the Tibetan society. She occupies an important position in the domestic, economic and social life. She is a good weaver and also helper in farming. She participates in religious functions and goes to the monastery to offer prayer. It is, however, a disgrace for a married woman to remain childless, and often such woman seeks refuge in a nunnery.

As already stated, the Tibetans have great confidence in their Lamas to whom they take all of their problems for solution. The Lamas together with the village elders help the village chief to maintain law and order and settle disputes which are not beyond his powers. The representative of the Dalai Lama acts as a liaison between the Tibetans and the local administration.

Inheritance of Property

In a Tibetan family, the sons normally inherit the land and property. But the daughter also can be the heir if there is no son or if the son goes away from his parental home to live with his wife. The institution of polyandry helps in some way to prevent the family property from being broken up.

House

The Tibetan refugees who lived in houses of stone and wood in their original home in Tibet are now adapting themselves to thatched houses built on piles in conformity with the house-pattern followed in the district.

Their houses are generally furnished with stool, chair, table and cot on which beautiful designs of flowers, dragons etc are carved. The walls are decorated with paintings and pictures. The picture of Dalai Lama is displayed in almost every house.

Dress

The Tibetans, both men and women, wear *chuba* cloak made of thick cloth. It reaches the legs for men and down to the ankles for women. The women sometimes wear a sleeveless cloak over a long blouse with sleeves. The cloak is a loose garment with a sash at the waist. The men wear rings in their fingers, earring called *along* and a small box called *khon* which is tied to the neck and contains the image of Lord Buddha. The girls dress themselves with a beautifully designed apron. They are fond of ornaments made of gold and silver and use precious stones.

Marriage

The existence of polyandry in the Tibetan society is an important factor of the marriage system. Normally, the marriageable age is 22 to 25 years for the boys and 20 years for the girls. According to the polyandrous marriage, the younger brothers of a married man, who is generally the eldest son in a family, may also be regarded as the husbands of their eldest brother's wife. The idea behind this custom may have originated from attempts to prevent fragmentation of the family land and property. Complications may, however, arise when a woman takes a husband outside the family of her first husband which she has the liberty to do. The girl cannot be married against her will and there is no compulsion that she must marry all the brothers of her husband.

A marriage proposal may come from the parents of either side. When it is initiated from the girl's side, the marriage ceremony takes place at the bridegroom's house and vice versa. Negotiations begin when a formal proposal for marriage is made. The auspicious date and time of the marriage ceremony are invariably fixed by a Lama. Divinations and calculations are done on the basis of the horoscopes to see if the boy and girl would match each other. On the marriage day the bride or the groom, as the case may be, rides on a horse and goes to the wedding place in a procession. There the couple take their seat on a dais to receive presents from relatives and guests. The Lamas make prayers and perform divination for the God's blessings on the newly married couple. The ceremony is concluded with a feast for all those present.

Payment of the bride-price is not insisted upon in a Tibetan marriage.

but a sort of bargain is done where a brother marries the sister of his brother-in-law in exchange for his sister.

The Tibetan society does not generally permit marriage between those who are having close blood relationship. Cross-cousin marriage, paternal or maternal, separate by a gap of seven generations may, however, take place. Widow marriage is common, but a childless widow is looked down upon and no man would like to marry her. Theoretically, there is no question of a widowhood in a polyandrous system, but normally, a wife does not remarry during the life-time of her husband. It should also be noted that cases of divorce are very few.

Although inter-tribal marriage is not much discountenanced in the Tibetan society, each tribe prefers to marry within its own. Love marriages are often inter-tribal, and for the aristocrats exogamy is not a taboo.

Birth

The Tibetans, like others, have their own rules and restrictions concerning birth, according to which a pregnant woman is to take certain precautions in her movements. She should avoid looking into the face of a barren woman lest it is unlucky. Offerings are sent to the Buddhist monastery, and the bhikshus (Lamas) are given a feast for blessings for the safe delivery and well-being of the child to be born, and also for protecting the mother from the influence of evil spirits.

It is the privilege of a very close relative or friend to look first into the face of the new-born child. The Lama is called in immediately to record the date and time of birth for ascertaining the position of different stars so that the baby could be taken to the monastery at an auspicious moment and a name is given him. The horoscope of the baby prepared on that very day is the most important document for all future references. Prayers are held and sacrifice of cows and chickens made to dispel the influence of evil spirits on the child.

Amusements

The Tibetans are a jolly, merry-making people. They have a keen sense of humour and wit. Their recreational activities are participated and enjoyed by persons of all age-groups. In almost every alternate month they hold a cultural function. Their popular classical drama is called *Achi-Lamo*, which is staged in the open air. Losar, the Tibetan new year festival, falls in February-March, and is continued for about 20 days.

Musical Instruments

The Tibetans have a variety of musical instruments which produce solemn as well as strange and quaint notes. Their instruments are mostly played on in the functions held at Buddhist monasteries. Small drums and rattles are commonly used. A three stringed long-necked guitar is played by the wandering musicians who sing the old ballads.

THE HAJONGS

The Hajongs had migrated from the Mymensingh District of Bangladesh to India as refugees. They came to the Goalpara District of Assam in 1965, where they stayed for some months until 150 families of them numbering about 662 persons were sent to Tirap in 1966-67 for resettlement in the Miao area. Some 424 Hajongs were rehabilitated in the Miao Sub-division by 1969-70.

The Hajongs are said to be a section of the Bodos. Although they have a dialect of their own, their medium of language is Bengali which they adopted. The Hajongs are a Hinduised people. They seem to have evolved a sort of caste system based on religion. There are two castes or sects amongst them, namely the Sakta and Vaishnava. The Saktas are worshippers of Kali, Durga, Lakshmi, Saraswati etc. and the Vaishnavas are devotees of Vishnu. The Hajongs follow the traditional Hindu system of inheritance of property. They cremate their dead in almost the same manner as the Hindus do. They construct thatched houses without the familiar *machang*. The Hajongs have a number of religious ceremonies and a kind of devotional song called *sankirtan* as sung in Bengal and Assam. A variety of musical instruments, namely *mridanga*, *kartal*, *tal*, *khanjari*, *tokari* etc. are played by them.

CHAPTER IV

AGRICULTURE

*Mode of Agriculture*

Almost the entire local population of Tirap makes its living by means of agriculture. But only a minor section of it is settled on permanent or sedentary cultivation. The people, in general, follow a system of shifting cultivation called *jhum*. It is an old traditional method of cultivation devised by the hill people to adapt themselves to the ecological conditions. *Jhuming* is done by the 'slash and burn' method. "In *jhuming* the people cut the trees and plants on the hill-sides during the dry season and burn them, along with the organic deposits accumulated through many years of leaf-fall, before the rains set in ... They use a *jhum* clearing for two years and then abandon it to allow the natural recuperation of soil fertility, returning to it after a period of years, which varies according to the pressure of population and availability of land".¹ The fertility of land under *jhum* tends to decrease rapidly, and the yield per acre is low. Wet-rice cultivation is also practised, but it is limited to some areas inhabited by the Singphos, Tangsas and the Chakmas, who are comparatively advanced cultivators.

"Although appreciable progress has been registered in the field of economy due mainly to various development schemes initiated by the Administration, it will still be true to say that the economic activities of the people of Arunachal Pradesh continue to be largely of a subsistence nature based on agriculture. Traditional trade in indigenous products of however limited scope is no doubt still carried on; some local people own shops and do brisk business in the market areas of the District and Sub-divisional headquarters. We have, therefore, to take notice first of agricultural activities as almost all the tribes here practise some form of agriculture... which is either of a supplementary nature to other activities such as hunting, food-gathering, trapping, fishing, raising of animals, and trade, or is supplemented by such activities. It accordingly follows that dependance on agriculture varies from tribe to tribe, consequent on the availability of land, nature of the terrain, and climatic conditions.

¹ Verrier Elwin, A Philosophy for NEFA (Shillong, 1964), pp. 80-81.

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"As has been pointed out by some writers, the form of agriculture practised by any people is often the result of social progress, and not the cause of progress itself. It is also absolutely wrong to attribute the backwardness of the type of agriculture practised to the inherent inertia or lethargy of a tribal group, who are often the prisoners of their own environment and circumstances. This is nowhere so evident as in Arunachal Pradesh, because the terrain and the climate here differ greatly from one region to another. It has been noted by one author that, in Arunachal Pradesh, the single factor that determines the type of agriculture followed is variance of rainfall. In areas where it is very heavy as in the valley floors, the lands are swampy and area malarial. Here cultivation is carried on the upper slopes which are usually steep. Agricultural operations on steep hill sides conform to the shifting type and the pattern of land-ownership is communal. In areas where rainfall is favourable, not generally exceeding 60", particularly in lands located on gentle lower slopes and also on valley floor, permanent type of cultivation is often possible. Lands coming under permanent cultivation are usually privately owned".¹

With the introduction of improved methods and techniques of cultivation, use of fertilisers, supply of implements to progressive farmers on government subsidy and opening of various farms, a change towards development of agriculture on scientific lines is now taking place.

Land Ownership

In accordance with the environmental conditions — ecological and climatic, the people have evolved their own methods of agriculture, which are of three types: shifting or *jhum*, permanent or sedentary, and mixed type of agriculture — partly shifting and partly sedentary. Corresponding to these types, land is held by the people under three categories — individual, clan and village.

"In the areas, where the shifting method of cultivation is followed, all land as a principle belongs to the clan or village.² It should be mentioned that in the past, villages used to be coextensive with single clans. Where, however, exception occurred, the right of cultivation of communal land was adjusted within the framework of village lands ... It will be wrong to think that communal ownership of land does not countenance individual rights of possession of any sort. It only means that such rights, when acknowledged, do not run counter to the principle of clan or communal ownership, and

¹ J. N. Chowdhury, Arunachal Panorama (Shillong, 1973), pp. 258-260.

² According to the *Jhum Land Regulation, 1947*, the members of a village or a community have a customary right to cultivate *jhum* land by the shifting method.

are actually recognized within the limits of this principle. The individual right of cultivation and possession continues through the cycle of agricultural operation, and remains suspended during fallow periods. All fences are removed during the fallow season and the land is thrown open to pasturage for all village animals. The pattern of individual possession of land, where communal ownership is the rule, also varies from tribe to tribe".¹

Agricultural Regions

There are in the main three agricultural regions in the district as follows :

- (1) The Singpho Region — In the low riverine areas of Noa-Dihing, Burhi-Dihing and Namphuk rivers, wet-rice cultivation is practised. It is a heavy rainfall area inundated by floods when the monsoon sets in.
- (2) Tangsa Region — This region comprises the valleys of upper Namphuk, Nampong, Namchik and Tirap, which are inhabited by the Tangsas. This is a mountainous terrain rising upto 1219 metres against the background of the main Patkai ranges. The lower region of the hills is covered with dense jungles. Rainfall is rather heavy in this area. Wet-rice cultivation is done here on a limited scale.
- (3) Nocte-Wancho Region — This region is contiguous to the Konyak area. Gradual slopes and intermittent jungles are its main physical features. Rainfall is less compared to other regions. Here the *jhum* cycle varies from four to eight years.

Irrigation

Irrigation is done by means of gravity channels, particularly in the Singpho wet-rice area. Bamboo tubes are used for the purpose of irrigation on the hills-sides. Upto the month of March 1974, three minor irrigation projects with a command area of 125 hectares were implemented in the district. The progress made in this sector in the next three years is as follows :²

Year	Number of Minor Irrigation Project		Command area (in hectare)
	Implemented	Work in progress	
1974-75	4	13	70.00
1975-76	5	10	115.00
1976-77	7	6	287.75

¹ J. N. Chowdhury, Arunachal Panorama (Shillong, 1973), pp. 263-264.

² Source : Statistical Hand Books of Arunachal Pradesh, 1973-74 to 1976-77.

Rural Water Supply

The progress of execution of Rural Water Supply Schemes in the district upto the month of March 1975 is as follows :¹

Number of Water Supply Schemes Implemented	Work in progress	Number of villages	Population benefited
		provided with water supply	
57	21	59	9170

Soil Erosion

Soil erosion is considerable in this district. The local people are yet to adopt advanced methods of soil conservation. Afforestation, land development, log-bunding, contour-bunding, terracing and strip-cropping are some of the measures taken to prevent soil erosion.

Nature and Variety of Soil

The soil in the hills is of a variegated nature varying from sandy to clay loam, but there are patches of peat soil rich in *humus*. On hill-tops, the soil is generally deep and it varies from clay to heavy loam. On the slopes it is loamy, more developed and of slightly open texture. In the foothills, it has mixed features. The hill-tops are more suited for the cultivation of fruit trees ranging from sub-tropical to temperate deciduous plants. Cereals and other root crops grow on the slopes, paddy can also be cultivated. Apart from orange and banana which are planted and nurtured by the local people, other fruits can also grow at various altitudes as follows :

about 1372 metres	—	temperate fruits
" 914 "	—	sub-tropical fruits
below 914 "	—	tropical fruits

Major and Subsidiary Crops

Rice is the chief cereal crop. The local names of the indigenous varieties of paddy are *champo*, *chanchek*, *cha*, *chadung*, *ching* etc. The yield of paddy in the *jhum* lands is comparatively low, 4 quintals more or less per

¹ Source : Statistical Hand Books of Arunachal Pradesh, 1975-74 and 1974-75.

acre. In the *jhum* lands millet is grown in rotation with maize. The harvesting of early maize and millet crops takes place in the summer season followed by the cultivation of potatoes and root crops like yam, tapioca and arum, but for paddy a separate *jhum* land is required. The local millet varieties are the finger and fox-tail millets. Tapioca and sweet potatoes are also cultivated. A few other fruits and vegetable varieties have been introduced in the district.

The important local vegetables are the mustard leaf, spinach, onion, gourd, pumpkin, brinjal, and chilli. Towards the foothills indigenous varieties of oranges and lemons are grown. Tobacco is another important crop, betel-vine is also cultivated. Plantain grows wild, but special care is also taken by some villagers to cultivate improved plantains. There have been attempts to introduce the cultivation of pear, pomegranate, grape, *lichi*, papaya etc. Experiments for the cultivation of arecanut are also made in various places. Field crops newly introduced are pepper, mustard, ginger, turmeric, potato, sugar-cane and garlic. The other crops being cultivated by the local people are paddy, millet, maize, yam, tapioca and *kochu* or arum.

Opium is cultivated by some people. In 1955-56 there were 323 registered opium licence holders and the total quantity of opium required for the licence holders was 463 tolas per month. Opium-trade with China and Burma was carried on previously by the Kachins. Trade in opium is now prohibited by law. The cultivators are required to restrict the opium production within prescribed limits. This measure has put an effective check on the illicit trade and smuggling of opium across the border.

Mustard is cultivated on experimental basis in the Tangsa area. Upto 1965, 130 acres of land at Nampong and 50 acres at Bordumsa were reclaimed for mustard cultivation. Oil extraction from mustard seeds is done on a limited scale. A variety of pulses are also grown in this area.

Agricultural Practices of Different Tribes

The Singphos, who are comparatively advanced agriculturists of the district, use better implements for tilling. They practise both dry and wet-rice cultivation for sali and ahu paddy by transplantation and broadcasting. Millet and arum are grown in rotation. The other main crops are maize, potato and mustard. The Singpho area yields good crops annually and consequent on the introduction of improved methods in agriculture, the area is likely to attain self-sufficiency in food.

The Tangsas adhere to *jhum* cultivation. Near the plain areas, permanent cultivation has also been started. Main crops are millet, sweet-potato and ginger. Vegetables include brinjals, pumpkins, cucumbers and other varieties. Seeds of fox-tail millet are sown broadcast. The Tangsas use

dibble or digging stick for making holes for plantation of paddy. The paddy fields, it may be mentioned, are often frequented by herds of wild elephants causing extensive damages to the crops.

The Noctes also rely on jhuming, although some of them have been doing wet-rice cultivation on a small scale. Their crops are paddy, millet, arum, tapioca, maize and a few local pulses. The jhum cycle in the Nocte area varies from ten to twelve years. In the first stage of jhuming, millet, arum, tapioca and vegetables are grown and then the land is prepared for paddy cultivation. Harvest by hand-plucking is a method common to both the Tangsas and the Noctes.

The Wanchos cultivate millet, paddy, maize, arum, tapioca and pulses. Chilli, gourd, brinjal, mustard, onion, garlic and potato are the vegetables grown by them. They have eleven varieties of paddy and millet and four varieties of arum or *kochu*. Poppy is grown on a very limited scale. Millet and paddy are cultivated in the same way as the Noctes do. Harvest is mainly done by hand-plucking. Wet-rice cultivation is very limited.

Main Crop Seasons

The seasons for sowing and harvesting of different crops vary. This variation also occurs according to the gradation of land at different altitudes.

Crops may broadly be classified into two groups — kharif season crops and rabi season crops. The kharif crops include paddy (ahu and sali), maize and millet. The rabi crops are mustard, potato etc.

A crop calendar is given at the appendix to this chapter.

Agricultural Implements

The indigenous tools used by the people for farming are simple, such as *dao*, hand-hoe, and weeding implements made of iron or bamboo, besides a crude type of garden rake. These implements were good in the old days for limited agriculture, but they are inadequate for large-scale farming. The Singphos, however, use better implements than those of other tribes. For wet-rice cultivation, they use a plough with a broad shear. Their rake is made of bamboo. The spade is called *kosak*. *Dao* is most commonly used, and the sickle is used for harvesting.

The old Tangsa *dao* is called *jangkep*, the handle and blade of which were made of a single piece of iron. This implement was also used as a felling axe. The Tangsa axe (*jangkho*) with a wooden handle is now out of date. The Noctes use a wooden digging stick, which is about two and a half feet long for making holes. Iron-scraper is used for weeding. Some other implements used by the Noctes and Wanchos are similar to those of the Tangsas.

As a first step towards promoting the agricultural production, better implements, such as sickle, spade, shovel, rake, felling axe, jumper, hammer, fork-hoe, paddy-thrasher have been distributed to the progressive farmers. Some of the tools used in improved terraces have been manufactured by the local people in the smithy section of the Craft Centres. About 8,546 tools and implements were distributed to the farmers of this district during a period of five years from 1971-72 to 1975-76. The distribution of modern agricultural implements and machinery as standing in March 1977 is as follows:¹

Sl. No.	Type of Implements/Machines	Number
1.	Massey Ferguson Tractor — 35 HP	3
2.	Ford Tractor — 35 HP	1
3.	International Tractor — 35 HP	2
4.	Fordson Tractor — 35 HP	1
5.	Satoh Power Tiller — 7.5 HP	1
6.	Kubota Power Tiller — 10 HP	2
7.	Jaykaysato Power Tiller — 7.5 HP	1
8.	Pumping set — 5 HP	14
9.	Khapsak Power Sprayer-cum-Duster — 1.2 HP	11
Total		36

Seeds and Fertilisers

An important aspect of the schemes for development of agriculture is distribution of improved seeds and fertilisers. Seeds of paddy, maize, millets, potato, mustard, vegetables, arhar (pulse), ground nut etc. are distributed annually to the farmers. A total of 2,391 quintals of improved seeds were distributed from 1971-72 to 1975-76. The area brought under improved seeds and high yielding varieties in the district is as follows :

(in hectare)		
Year	Improved Seeds	High Yielding Varieties
1973-74	76	502
1974-75	1035	1286
1975-76	368	685
1976-77	425	705

¹ Source : Statistical Hand Book of Arunachal Pradesh, 1976-77.

Demonstrations on the proper use of cow-dung are conducted to impress upon the people the importance of manuring. They are also persuaded to prepare compost pits. About 55 hectares of land were brought under green manuring in 1976-77. Green manure seeds are distributed free of cost. Manure and fertilisers supplied during 1971-72 and 1972-73 are 563 tonnes and 27 tonnes respectively. About 118 hectares of land in the district were brought under fertilisers during 1973-74, 353 hectares during 1974-75, 86 hectares during 1975-76 and 317 hectares during 1976-77.

Horticulture

The gradient of the mountainous terrain of Tirap is found suitable for horticulture. There were three horticultural nurseries and in 1977-78, 20 people's horticultural gardens in the district.

Grafts of mango, lichi, sapota, orange, sweet lime, grape, guava, pomegranate and banana were planted in the horticultural nursery at Khonsa. Plantation of pine-apple, banana, sweet lime, guava and pomegranate was also done at Khela and Khonsa villages. Pear-grafts, arecanut seedlings, mango grafts, paddy seeds and sugar-cane were raised on an experimental basis in the nursery at Borduria.

Agricultural Crop Diseases and Pests

Crop diseases are not frequent, but crops are ravaged by pests. The common pests are rice-bugs, rice-case worms, white and red ants, citrus aphids, and vegetable aphids. In their erstwhile helplessness at the time of pest attack the people offered sacrifices to the deities to drive away the pests. Some remedial measures are, however, taken by the Singphos, who in serious cases of insect infestation cut the citrus fruits into pieces and scatter them in the fields. This acts as an insecticide.

To deal with the problem of pests and insects, a number of plant protection units have been formed. Various fungicides and insecticides, gammexane and DDT powder are used effectively against the pests. Zinc phosphate baiting has also been successfully used to combat the rat menace. During the years 1973-74 to 1976-77 the area brought under plant protection annually is as follows:

1973-74	—	112.00 hectares
1974-75	—	1217.50 "
1975-76	—	1272.00 "
1976-77	—	1050.00 "

Progress of Scientific Agriculture

The agricultural activities in the district today are directed towards a better system of cultivation on modern scientific lines. This is evident from the standard tools and implements which the local cultivators are increasingly making use of, reclamation and development of land, irrigation of fields and the gradual introduction of improved methods in agriculture. The newly constructed irrigation channels have paved the way for more food production. The terrace cultivation for rice is yielding good output. Horticulture gardens are new of their kinds in this area and they have widened the scope of agricultural activities. Although *jhum* is still the main mode of cultivation, other modes are gradually gaining ground. The achievement of land development under permanent cultivation during a period of six years is as follows:¹

1971-72	—	1323.10 hectares
1972-73	—	286.00 "
1973-74	—	313.00 "
1974-75	—	532.00 "
1975-76	—	912.22 "
1976-77	—	267.60 "

Demonstrations on improved methods of cultivation are held on the following subjects:

- (1) Terracing for wet-rice cultivation and dry terracing.
- (2) Kitchen gradening.
- (3) Bunding.
- (4) Ploughing in the valleys and terraced fields.
- (5) Hoeing and other interculture.
- (6) Uprooting of stumps of trees and transplantation of sali paddy.
- (7) Composting.
- (8) Rearing of improved cattle and upgrading.
- (9) Planting of mulberry cuttings.
- (10) Introduction of new crops like tapioca, black pepper, mustard, potato etc.,
- (11) Improved jhuming and
- (12) Sowing of improved vegetable seeds.

No hasty change from jhuming to permanent cultivation is possible in this mountainous terrain. *Jhum* is the traditional mode of cultivation of

¹ Source : Statistical Hand Books of Arunachal Pradesh, 1971-72 to 1976-77.

the local people and a change over to other modes may take place only with the passage of time. But, by all means, attempts at introduction of permanent cultivation wherever possible side by side with improved *jhum* cultivation are being made. Although the *Jhum Land Regulation of 1947* has given the local people customary rights over the *jhum* land, they have been showing willingness to adopt the new methods and techniques of sedentary cultivation.

In the district of Tirap today, one may come across the local farmers taking an active interest in the present agricultural developments. Their co-operation for implementation of the agricultural schemes is noteworthy. The agricultural shows, exhibitions and demonstrations on the modern system of cultivation have stimulated in them a curiosity and enthusiasm. The development of communications and the establishment of administrative centres in different parts of the district have opened new horizons for social and economic progress of the people, and this is apparent in the field of agriculture.

To inculcate a sense of healthy competition among the cultivators, exhibitions are organised on some auspicious occasions, such as the Independence Day and Republic Day, and they are attended by the local people in large numbers. On these occasions, the good cultivators receive awards.

A project sponsored by the Regional Research Laboratory, Jorhat has been undertaken at Senua village near Longding for cultivation of medicinal and aromatic plants with involvement of the villagers. A plot of land adjacent to the Soil Conservation Training-cum-Demonstration Centre at Senua has been brought under cultivation of *solanum khasianum* to provide planting material for commercial cultivation by the villagers. The Laboratory would also give necessary technical guidance to the villagers and associate them with various stages of demonstration and operation of the project.

Animal Husbandry and Veterinary

Animal husbandry is a new sector of development in the district. It is significant to note that the art of milking which was hitherto very uncommon in this area is now gradually becoming a common practice in the villages. In the past, milk was not used and even now a few tribal groups, in keeping with the old habits, abstain from milking the cows. But they lend their cattle to milkmen. One cattle farm and six cattle multiplication-cum-upgrading centre have been established in the district. There is also one fodder farm.

Cattle Disease—Rinderpest occurs frequently in the plains belt. foot-and-mouth disease and anthrax are common among the livestock in all parts of the district. Mention may also be made of swine fever. Ranikhet

and fowl-pox break out occasionally among the poultry. The most common contagious disease menacing the poultry is coccidiosis. These diseases often spread out from the livestock purchased from the plains. A Rinderpest Eradication Unit was set up at Khonsa.

Seven veterinary dispensaries and twelve veterinary aid centres were opened at various places of the district till the month of March, 1978. There is also a mobile veterinary dispensary. The first veterinary dispensary in the district was opened at Bordumsa, which was subsequently transferred to Khela. The veterinary movement has had a good effect on the people. The villagers are now often found bringing their animals to the veterinary staff for treatment. Organised teams of veterinary workers go to the remote areas for vaccination of birds and animals. In the following table, the number of animals and birds treated, castrated and vaccinated is shown¹:

Year	No. of Veterinary Dispensaries and Aid Centres	General Case	Castration	Innoculation/ Vaccination
1	2	3	4	5
1968-69	7	5467	363	747
1969-70	7	5379	324	4522
1970-71	7	5535	297	6469
1971-72	10	8592	437	14866
1972-73	10	7019	595	4796
1973-74	12	3750	1980	1410
1974-75	10	4700	2100	6800
1975-76	17	11575	1046	22007
1976-77	17	14609	1615	24342

Livestock

Animals are domesticated by the people for food and sacrifices. trade and payment of bride-price. They are also means of barter in the tribal economy. Compensations are realised in terms of animals. Cattle and pigs are the most familiar domesticated animals. The Singphos rear cows and buffaloes for ploughing their fields. They also catch elephants. The Tangsas and Noctes rear cows, pigs, goats, buffaloes and poultry. The animals domesticated by the Wanchos are pigs, fowls and *mithuns*. The pig in particular is very important as it is often used as a medium of exchange. The *mithun*, an animal of the bovine species, is a valuable asset.

¹ Source : (a) Statistical Hand Book of Tirap District, 1972-73.
(b) Statistical Hand Books of Arunachal Pradesh, 1973-74 to 1976-77.

This semi-domesticated animal is not reared at home, it is allowed to roam at will in the jungle. In the same way, the Noctes let their buffaloes loose. The Wanchos take more care of pigs, which provide them food.

An inventory of livestock existing on March 31, 1977 in the district is as follows :¹

CATTLE

(In number)								
Males over 3 years			Females over 3 years			Young stock	Grand Total	
Working	Others	Total	In milk	Others	Total			
7,500	600	8,100	18,500	800	19,300	17,900	45,300	

BUFFALOES

(In number)								
Males over 3 years			Females over 3 years			Young stock	Grand Total	
Working	Others	Total	Working	Others	Total			
4,000	3,000	7,000	2,500	500	3,000	2,500	12,500	

OTHER LIVESTOCK AND POULTRY

(In number)								
Sheep		Goats		Horses and Ponies	Pigs		Poultry	
under 1 year	1 year and above	under 1 year	1 year and above		under six months	Six months and above		
—	—	700	11,000	500	3,800	10,000	34,500	

Fishery

There is a Government Fish farm and forty village fish ponds in the district. The area brought under pisciculture is one hectare. During the period 1972-73 to 1976-77 about 1,51,000 fingerlings were released.

FORESTRY

In 1962, seven forest areas in the district were reserved. Thereafter four more forests were reserved — one in 1965 and three in 1970. There were

¹ Source : Statistical Hand Book of Arunachal Pradesh, 1976-77.

eleven reserved forests comprising a total area of 2,574.20 sq. km at the end of 1973-74, and they are as follows :

- | | |
|---------------|-------------|
| (1) Koriapani | (2) Namchik |
| (3) Miao | (4) Kathang |
| (5) Namphuk | (6) Namsang |
| (7) Borduria | (8) Honkap |
| (9) Pangsau | (10) Diyun |
| (11) Namdapha | |

The Namsang and Borduria forests belonging to the Angs (tribal chiefs) were brought under the management of the Forest Department by virtue of an agreement for a period of 50 years with effect from the 3rd November, 1948. In 1962, these forests were declared "Village Forests" as well as reserved forests under the provisions of Section 4 to Section 28 (2) of the Assam Forest Regulation of 1891 (Regulation 7 of 1891) which was made applicable to these forests in pursuance of the Agreement of 1948.¹ In 1972, the reserved forest of Namdapha was declared a Wild Life Sanctuary.²

There are two territorial and three functional forest divisions (as existing in the year 1976-77) in the district as follows :

Territorial

- (1) Khonsa Forest Division,
- (2) Changlang Forest Division.

Functional

- (1) Wild Life Forest Division
- (2) Silviculture Forest Division.
- (3) Working Plan Forest Division.

The headquarters of the Conservator of Forests, Eastern Circle comprising the forests in the districts of Tirap, Lohit and Siang (excluding the forest areas of Tirap under the Arunachal Pradesh Forest Corporation Ltd.) is at Tezu in Lohit.

The total forest area in the district is about 3,200 sq. km³ as on March 31, 1977 as follows :

(a) Reserved Forests	.. 2,656.16 sq.km.
(b) Protected Forests	.. 1.04 sq.km.
(c) Unclass State Forests	.. 542.80 sq.km.

Total : 3,200.00 sq.km.

¹ Vide the Assam Gazette Notification No. FOR. 132/62 (a) & (b) dated the 3rd October, 1962.

² Vide the Assam Gazette Notification No. FOR. 119/62 dated the 2nd October, 1972.

³ The area figure is provisional.

Substantial revenue is earned from the forests under the following heads :

- (i) Timber and other forest produces removed by Government Agency,
- (ii) Timber and other forest produces removed by consumers,
- (iii) Revenue from forest not managed by Government (USF),
- (iv) Drift and confiscated wood,
- (v) Profit on depot operation and
- (vi) Miscellaneous items.

The total amount of revenue derived from the forests in the district during the period of five years from 1971-72 to 1975-76 is Rs. 4,69,58,000. Exploitation of timber has been undertaken on a large scale in the reserved forests. The trend of outturn of timber from the two territorial forest divisions in the district during a span of six years 1968-74 is as follows :

Year	Timber (in cubic metre)
1968-69	45,583.24
1969-70	46,573.69
1970-71	62,452.18
1971-72	54,602.12
1972-73	69,858.22
1973-74	59,973.65

The timber is supplied to the Indian Railways, Army, Navy and the local engineering departments. The timber supplies consist of sleepers — broad gauge and metre gauge, logs, sawn timber, floor boards, bottom boards, hard wood squares and scantlings. The sleepers supplied from the Tirap District during the period from 1968-69 to 1975-76 were as follows :¹

Year	Sleepers (in thousand pieces)		
	BG	MG	Total
1968-69	12.51	25.30	37.81
1969-70	20.92	17.60	38.52
1970-71	30.94	17.44	48.38
1971-72	41.13	36.39	77.52
1972-73	54.45	49.37	103.82
1973-74	79.39	99.04	178.43
1974-75	78.09	79.54	157.63
1975-76	68.60	72.25	140.85

¹ Source : (a) Office of the Chief Conservator of Forests, Govt. of Arunachal Pradesh.
(b) Statistical Hand Book of Tirap District, 1976-77.

The forest produces are classified under two categories — major and minor. The major produce includes timber and allied items like posts, poles and fuel-wood. The minor produce consists of cane, bamboo, agar, elephant, boulder, shingle, gravel, jang and other leaves, thatch, fodder, dhuna, charcoal, honey, black pepper, coffee, cinnamon, broomstick, fish etc.

NAMSANG AND BORDURIA FORESTS

Meikle John, who was appointed as Forest Adviser to the Governor of Assam in January 1946 to advise on forestry of the erstwhile North-East Frontier Tract, recommended, *inter-alia*, the taking over of private forests belonging to the Angs (lowangs or chiefs) of Namsang and Borduria in the Tirap District for management by the Government.

On the 3rd November, 1948, the Government entered into an agreement with the Angs of Namsang and Borduria for a period of 50 years for the development and management of the forests owned by them. It was provided in the agreement that the development of these forests would be financed by the Government, and the net revenue derived therefrom would be shared between the Angs and the Government on a proportionate basis of 75% and 25% respectively.

In accordance with the provisions of the 1948 Agreement, a set of rules were framed in 1967 for the administration of the fund raised from the revenue collected from these forests. It is laid down in the rules that the net revenue payable to the Angs would be distributed at 1 : 2 ratio between the Angs and the people subject to the Angs' share being limited to Rs. 50,000. Subsequently the limit has been raised to Rs. 75,000. The rules further stipulate that if the amount payable to the Angs in a year exceeds their limit of share, the entire excess amount would be credited to the People's Fund.

As already mentioned, the private forests of Namsang and Borduria were constituted in 1962 as 'Village Forests' as well as reserved forests. The area of these 'Village Forests' is as follows :

Namsang	—	108.88 sq. km.
Borduria	—	38.54 „ „
		147.42 sq. km.

According to a Trust Deed, the Deputy Commissioner of Tirap District and the Chief Conservator of Forests, Arunachal Pradesh are authorised to act as trustees of the Angs and the people of Namsang and Borduria. The responsibility for maintenance of accounts in respect of the Angs and the people, however, rests with the Deputy Commissioner.

In 1967, a Development Committee was formed for utilisation of the People's Fund for the welfare of the community in the Tirap District. The Committee is headed by the Deputy Commissioner, who in consultation with the peoples representatives and the Angs, constitutes the committee. The heads of development departments in the district are attached to the committee as technical advisers.

According to the programme drawn up by the Development Committee, various schemes to promote social, economic, cultural and educational progress of the people are implemented. It has been envisaged that the People's Fund should be operated for such schemes as would bring about the all round development of the community. Keeping this object in view, the fund is expended for construction of roads and buildings, charitable and educational institutions, development of arts and industries etc. The following institutions are financed from this fund:

- (1) The Ramkrishna Sarada Mission Girls' School at Khonsa—a residential school for tribal girls.
- (2) The Ramkrishna Mission School at Deomali—a residential boys' school.
- (3) Weaving Centres at Borduria, Khonsa, Doidam and Laju.

Substantial investments have also been made from the People's Fund for the wood-based industrial enterprises, such as Assam Saw Mills and Timber Company at Namsai in the Lohit District, the Nocte Timber Company Ltd. and the Narottam Co-operative Industries Ltd. at Deomali in the Tirap District. Expenditure on schemes for development of land for permanent cultivation, improvement of water supply, sanitation etc. can also be met from the People's Fund.

ARUNACHAL PRADESH FOREST CORPORATION

The Arunachal Pradesh Forest Corporation Ltd, incorporated under the Companies Act, 1956 (No. 1 of 1956), was constituted on March 31, 1977. It was formally inaugurated on December 15, 1977 at its headquarters at Deomali in the Tirap District.

The project area of the Corporation is at present confined to the Tirap District comprising the Khonsa and Changlang Forest Divisions.

The authorised share capital of the Corporation is Rs. 120 lakhs, which will be raised from the following sources:

- (1) Equity Shares,
- (2) Term Loan and
- (3) Short-term Working Capital.

The Project Report of the Forest Corporation has been appraised by the Agricultural Refinance Development Corporation for grant of loans to be given through the State Bank of India.

The Project Report lays down the following:

"Project Area is as follows:

- | | |
|---|---------------------|
| (1) Geographical Area | ... 6907 sq. km. |
| (2) Reserved Forest proposed to be covered by the project | ... 867.14 sq. km. |
| (3) Proposed Reserved Forest | ... 248.82 sq. km. |
| (4) Game Reserve and unclassed State Forest | ... 5791.04 sq. km. |
| (5) Area of Annual Cut | ... 1440 hect. |

"In accordance with the recommendations of National Commission on Agriculture, the Government of Arunachal Pradesh approved setting up of Forest Corporation (Government Company) to implement this project. The Arunachal Pradesh Forest Corporation Ltd. with an authorised share capital of Rs. 1,20,00,000 was incorporated under Companies Act 1956 (No. 1 of 1956) on 31.3.77 vide certificate of incorporation No. 1693 of 1976-77.

"The project will generate employment potential for 17 lakhs mandays of unskilled and semi-skilled workers. About 5,700 unskilled and semi-skilled workers will be employed annually in the project. In addition to this on an average 340 persons will be employed in executive and secretarial establishments of the project. Thereby employment opportunities in the project area will be doubled as compared to the existing employment opportunities. The project is labour intensive and aims at improving the economy of the tribals and under-privileged sections of the society.

"Social Objectives

The main social objectives of this project are:

- (a) to fully exploit the rich forest resources of Tirap District,
- (b) to enrich the forest by teak plantations and raising of hollong by intensive silvicultural operations,

- (c) to supply adequate quantities of ply log to various plywood factories in the area which are starved on account of scarcity of ply logs.
- (d) to improve the economic conditions of the tribal people of Arunachal Pradesh,
- (e) to boost up the economy of the tribal area,
- (f) to improve communications in the area."

Floods

The level tract of the district on the north through which flow the Noa-Dihing and the tributaries of Burhi-Dihing is inundated by flood waters during the heavy monsoon. On the 19th August, 1948 the Burhi-Dihing was in spate and caused extensive damages to the neighbouring villages of which the most affected were Nonglai, Kuharbari, Amrit, Lakhu and Long having a total population of 689 persons. Following the heavy flood occurred in the wake of the great earthquake of 1950, a flood in the Noa-Dihing and its tributaries in 1951 damaged the timber wealth of the district considerably. There occurred a minor flood in 1955 in the low-lying Singpho area due to heavy rains.

When the monsoon sets in and heavy shower continues, rivers rise in spate and cause damages to villages and plantations. As a result, communications are disrupted and villages cut off. Severe periodical storms, which occur generally between March and May, damage the crops. The earthquake of 1950 has upset the river beds and many rivers and rivulets changed their courses. Land slides are frequent during the monsoon. In 1956, the river Namchik overflowed due to constant downpour of rain. In the flood of 1955, over 10 acres of *sali* paddy cultivation in the Singpho area were damaged, and the flood of 1956 ravaged the paddy and millet plantations. As a result of the floods especially during the years 1954 and 1955, Horudumsa, Gilanja and Imbu villages were abandoned, and a wide area of not less than 70 acres (28 hectares) of land under wet-rice cultivation became unfit for agriculture. Although no serious flood occurred after the fifties, a wide area is submerged under water every year in the rainy season.

¹ viz. (a) The Narottam Co-operative Industries Ltd. and
(b) The Nocte Timber Company Ltd. etc.

Appendix

CROP CALENDAR

Sl. No.	Crops	Areas below 2000 ft.			Areas above 2000 ft.			Average yield per acre
		Period of sowing	Period of harvesting		Period of sowing	Period of harvesting		
1		3	4	5	6	7		
1.	Ahu paddy	Feb	March	March	April	Nov	8-15 maunds	
2.	Sali paddy	April	June	April	June	Nov	20-25 "	
3.	Maize	April	June	June	June	Nov	10-15 "	
4.	Millet	Jan	Feb	Feb	March	Oct	15-20 "	
5.	Job's tear	Jan	Feb	Jan	Feb	Oct	10-15 "	
6.	Potato	Sept	Oct	Sept	Oct	March	40-44 "	
7.	Sugarcane	Jan	Feb	Jan	Feb	Nov	500 "	
8.	Kochu	Jan	Feb	Jan	Feb	Nov	20-30 "	
9.	Mustard	Aug	Sept	Aug	Sept	March	20-25 "	
10.	Yam	Jan	Feb	Jan	Feb	Dec	25-30 "	
11.	Chilli	Dec	Jan	Jan	Feb	July	8-10 "	

Source : Directorate of Agriculture and Community Development, Government of Arunachal Pradesh.

CHAPTER V

INDUSTRIES

Tirap, like the rest of Arunachal Pradesh, is predominantly an agricultural district. It has no large scale industries. There are three wood-based medium scale industries producing veneers, tea-chests, ply-boards etc. In 1975, in the small scale sector, the industrial units were two oil mills, eleven rice haulers, two grinding of wheat and one auto-filling station. The cottage industries comprise weaving, dyeing work, cane and bamboo work, wood-carving, smithery, manufacture of salt, pottery etc. The tribal arts and crafts are unique in many ways and for their development there are craft centres with training and production wings. The following brief description is indicative of the development of handicrafts in the district.

Weaving

The tribes have their own dresses. Some of them are now being attracted towards modern textiles. However, their weaving designs are still excelling and they display workmanship of a high order. It is generally the women who do the weaving. A considerable number of women of the Singpho, Tangsa and Wancho communities are engaged in weaving, who make their own traditional dresses.

The most valuable specimens of weaving of the Singphos are the turbans (both for men and women), women's skirts and waist bands, men's *lungis* (a sort of sarong) and handbags. It was aptly said of the Singphos that "their art is expressed mainly in weaving".¹

The following are some of the familiar patterns of Singpho skirts:

Mikhen Pukang: This is a combination of red, black and green stripes of a coarse texture woven alternately to form a piece of cloth. In this work, the red and black stripes are more distinct than the green ones.

Muthat Pakang: This pattern is a combination of intermingled thin and white stripes against a black background. The texture is coarse.

Mukiy Pakang: This is a combination of thin stripes of green and violet colours against a black background. The pattern is made with the thread of muga silk.

¹ Verrier Elwin, *The Art of the North-East Frontier of India*, (Shillong, 1959), p. 85.

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Some of the prominent designs of men's *lungis* are as follows:

- | | |
|----------------------|--|
| (i) <i>Patep</i> | — Woven in red and black yarns. |
| (ii) <i>Bamboo</i> | — Green, violet, skyblue and black colours on muga silk. |
| (iii) <i>Pachang</i> | — This exhibits a texture of black, violet, white and green yarns. |

The artistic patterns of Tangsa weaving are represented by the hand-bags of diamond-cut designs, hand-bags of mixed colour and beautiful skirt pieces woven in red, black, white and blue colours. One of the popular handloom products of the Tangsa women is a multicoloured chequer pattern *lungi* (sarong for men).

The Tangsas are fond of designing their woven pieces with geometrical symbols and floral motifs. They also decorate the female upper garments with a band of needle-work sewn breadth-wise.

The Singpho and Tangsa women are experts in making ceremonial costumes, which show their artistry and skill in weaving. They weave a type of water-proof which is very durable.¹

In the Wancho society, weaving is done by women, but it is confined to those of the chiefs' families who have a keen sense of colours and their combinations. Their bags have a combination of deep red, yellow, black and green colours against a white background. "These zigzag designs," observes Dr. Elwin, "are popular on the sashes used by the Konyaks and Wanchos to carry their baskets and are common on the Wancho bags".² He further mentioned of a herring bone design and diamond pattern on the Wancho bags and states that triangles are found more frequently on Konyak sashes than on Wancho bags. "Human figures...", he writes, "are shown rather realistically on Wancho bags and sashes where the simple geometric designs are certainly associated with head-hunting".³

The Wancho articles of weaving include cotton blankets and sashes besides dress. Among the Noctes, the art of weaving seems to be on the decline as mill-made cloth are now preferred by them. The loin cloths, waist-bands, wrappers, jackets, head-gears, cloth strap for baskets are some of the other articles made by the people of this district.

In the Tangsa and Singpho areas, cotton is grown locally and spun for local use, but in other areas of the district, cotton is scarce. In the past,

¹ S. E. Peal, in 1879, observed that the Tangsas like Singphos made wicker baskets and plastered them with rubber juice "so that not only water but it becomes spirit proof"; they made pretty bamboo mugs, with two handles in the form of loops, (J.A.S.B. 1881, Vol. I).

² Verrier Elwin, *The Art of the North-East Frontier of India*, (Shillong, 1959), p. 40.

³ Ibid, p. 43.

yarn was imported from the plains in small quantities at a rather high price. Large quantities of cotton yarn and wool are now brought for sale at cheaper rates, and this has given a great stimulus to the weaving industry.

Dyeing

Dyes are generally prepared from the juice of jungle plants and trees, and some threads are made from tree fibres. The Tangsas and the Singphos are renowned dyers in the district.

Colonel Hannay in the last century observed that in the Singpho area the thread was dyed before weaving was done. "They use as dyes a kind of indigo called 'Rom', 'Seing Lung', or 'Asso Khat', and the bright yellow root of a creeper called 'Khai Khiew'".¹

Cane and Bamboo Work

All the tribes are adept in cane and bamboo work. The products of this craft are bamboo hats, jugs, trays, tea cups, containers, mats, baskets, utensils and articles of adornment like rain coats, leggings, armlets etc. Not only these articles are useful, but also they are artistic. Their basketry is of high standard, particularly those of hexagonal shape.

Bamboo sticks and spears fringed with dyed goats' hair and helmets or hats of fine cane strips are made by the Noctes of the Khela village, while the Noctes of the Hukan village make bamboo rain-shields and brooms. At Dadam, another Nocte village, baskets with lids known as *jhapa* are made, which are very useful. Such baskets are as valuable as the Tangsa baskets called *salai* and *lephun* of open hexagonal form.

The Wanchos are likewise good craftsmen. Their bamboo mats are in great demand in the plains markets. The necklace made out of grass by the Wancho women depicts their finer craftsmanship. Their baskets made of *lajai* and *radang* bamboos are valuable. In addition, all the tribes make the cane stools or *moras* which fit in very well with the type of houses they live in.

Wood-Carving

Some of the finest and best wood-carving in the entire area of Arunachal Pradesh are found among the Wanchos of the Tirap District. The central motif in wood-carving is a human head. The head-hunting is the inspira-

¹ E. T. Dalton, Tribal History of Eastern India (Descriptive Ethnology of Bengal), (Delhi, 1973), p. 12.

tion not only of the wooden or brass heads worn by the warriors, but also of carvings on drinking mugs and pipes, of head-hunting scene on the pillars of *morungs*, and human figures carved on baskets or other artefacts. Other specimens of wood-carvings are dolls, plates, tobacco pipes, statuettes and forms, such as the frog, tiger and other animals. The above specimens are mainly carved for household purposes or as items of furniture, and they have ceremonial values as well. Wood-carvings are displayed in the *morungs* and burial grounds. They are not generally meant for sale in the open markets, only on certain occasions they are exchanged for other articles. Wood-carving of an image is connected with religious performances. Verrier Elwin remarked that "Here the wood-carving in the past has been very largely associated with head-hunting and the human head dominates almost everything that is made. Thus there are tobacco pipes with the bowl carved in the shape of a head; drinking-mugs with warriors carrying off heads in triumph; small wooden heads and little human figures, often done with astonishing realism and power, which again celebrate a successful raid".¹

Ornamentation

The tribal people of Tirap, like those of other districts, are fond of ornaments and jewellery. The bulk of ornaments used is made up of beads brought from the plains. Of the important ornaments made by the local people are ivory armlets, glass bead necklaces, beads of white jungle seeds, bead anklets, ornaments of bell-metal etc.

Smithery

A very small number of people are engaged in smithery. Articles of agricultural implements as well as weapons with ceremonial symbols are made in their forges. The Tangsa blacksmiths are mainly engaged in making iron scrapers, spearheads and *daos*, while the Noctes in the Laju area are skilled in making *daos*, spades, knives, spearheads and scrapers. Similarly, in the forges of the Wanchos are produced spearheads, scrapers and even brass ornaments and bangles.

To quote Dalton, "The Singphos understand the smelting of iron, and their blacksmiths with no implements but a lump of stone as an anvil, and a rude hammer, forge weapons,—especially *daos*,—which are highly prized all over the frontier for their temper and durability".²

¹ Verrier Elwin, A Philosophy for NEFA (Shillong, 1964), p. 101.

² E. T. Dalton, Tribal History of Eastern India (Descriptive Ethnology of Bengal), (Delhi, 1973), p. 11.

It seems that in the past, almost all the tribes knew the method of making a muzzle-loading gun (about 3 ft long). S. E. Peal wrote of the manufacture of gun powder by the people of these areas as follows: "Old flint muskets of English make were not uncommon, the powder being made on the spot by the Nagas, nitre collected from the sites of old cow-houses; where the sulphur came from I could not ascertain. The charcoal was made of the wood of citron-trees, *jaura tenga* of the Assamese".¹

Manufacture of Salt

Although existence of salt-licks in the Kameng and Subansiri Districts is reported, it is only in the Tirap District brine-wells and salt springs are found. Such springs and wells exist around the Borduria-Namsang area.

The brine wells in Tirap were once the main source of salt in this tract. This salt was even supplied to the plains of Assam and at times the plains people of the adjoining areas depended entirely on the salt produced by the Noctes of Tirap. But with the development of communications, salt at a cheaper price is now being brought from other parts of India, and hence the brine wells of this district are falling into disuse. The extraction of salt in Tirap is done by a heating process which requires fuel.

The process of manufacture and supply of salt are described here briefly.

The salt is mostly prepared during the winter months. The persons who are specially engaged in manufacturing salt are called *lon puria* (salt-makers). The water from the brine springs and wells is collected in bamboo *chungas* or tubes. These tubes are kept over fire until the water evaporates leaving the solid substance as salt. From 100 to 150 *chungas*, 20 to 25 kg of salt are obtained. There are altogether 21 brine-wells in the Namsang-Borduria area. From Tobing-Jan well near Namsang, the maximum quantity of salt is extracted.

Formerly, when there was no importation of salt from other parts of the country to this area, the brine-wells were given on lease to a person who arranged the supply of salt. He had about 100 workers under his charge. Each worker was required to manufacture about one maund of salt of which two seers were taken by the supplier as his due, and the major portion was offered to the Nocte Chief. The workers had also their shares and the residue was sent to the plains for sale or barter against rice, coarse cloth and dried fish.²

¹ Verrier Elwin, *India's North-East Frontier in the Nineteenth Century*, (London, 1962), p. 114.

² M. N. Bardoloi, *Land of the Hornbill and Myna*, (Shillong, 1970), p. 37.

Pottery

It is mainly the women who are engaged in pottery. The winter months are most suitable for pottery works. The pottery manufactured in the district is handmade. Although some improvised tools are used, the potters are not acquainted with the use of wheels. The manufacturing process is laborious and the progress is slow, but the earthen wares they make are quite remarkable. In the Nocte area, earthen ware vessels are made on a small scale in the villages of Laju, Dadam and Kheti, but it has a good demand in the neighbouring areas. The Wanchos use the wares not only for household purposes, but also in the obsequies as skull containers, and hence they give a ceremonial value to them. The wares are also used as medium of exchange in the tribal society.

Minor Cottage Industries

Work in ivory, horn and bone constitutes another minor enterprise of the people. To quote Verrier Elwin, "The Wanchos traditionally are not fond of clothes, but make up for this by the use of splendid ornaments of ivory, bone, horns, shells and beads, while the more ephemeral grace of feathers and flowers distinguishes their ears and hair."¹ Production of tea in the indigenous way is also an important enterprise. Quarry of limestone is available in the Nocte area. Brewing is done from rice, millet and tapioca almost at every house. Some of the Tangsas are good carpenters. The Noctes make fishing nets with fibres obtained from the shrub known as *riha* in the same way as jute fibres are made.

Handicaps of Cottage Industry

One of the handicaps impeding the growth of cottage industry is that the local products are now facing hard competition with bazar goods brought from outside. Writing on this problem Dr. Elwin remarked, "There is first the competition of bazar goods. These come with the prestige of 'modernity', of novelty, and the fact that they are so largely used by the official staff. The tribesmen are earning a good deal of money, in road-making and building, in portage and by selling their animal and vegetable produce. It is only natural that they should spend this money on manufactured goods instead of going to the trouble of making them themselves. Plastic ornaments easily take the place of the older, far more beautiful, ornaments of bone, seeds, and wings of birds. A singlet takes the place of the

¹ Verrier Elwin, *A Philosophy for NEFA* (Shillong, 1964), pp. 25-26.

decorative coat; shorts supplant the finely woven and cowrie-decorated apron or the loin-cloth of leopard-skin."¹

Dr. Elwin further observed, "A great deal of tribal art is associated with religious beliefs and practices and as these weaken the art weakens with them." Head-hunting was the inspiration of wood-carving in the Tirap District, and, therefore, 'with the passing of actual head-hunting, the art is bound to be weakened'. "In Tirap there is a further difficulty. It may be dangerous to make a striking or beautiful thing. Publicity can shorten life. It is risky to carve well, for people will ask who the artist was and such queries are unlucky. When a pillar is carved in a morung (village-dormitory or guard-house), a dog must be sacrificed and a period of taboo observed; the artist must restrict his diet and observe a rule of chastity for a number of days. If he breaks these rules he may fall sick; he may even die. A Konyak who made me a small wood-carving had to sacrifice a pig to avert these dangers before he gave it to me".²

Dr. Elwin also noted that there are other taboos and restrictions too. "In some Wancho groups, only the wife and daughters of a chief can weave... This is one of the reasons why it is so difficult on the North-East Frontier to make any satisfactory collections of specimens for museum purposes. In a Wancho village I once saw a remarkable basket, decorated with wooden skulls and bear's fur. But when I tried to buy it—at a very high price—the owner, an old and poor man, refused to sell. 'In a few months', he said, 'I shall be dead, and unless this bag hangs on my tomb, I shall be without credit in the other world'.³

Singpho Myths Connected with the Origin of Arts and Crafts

The story of the origin of arts and crafts according to the indigenous belief is interesting. "In a Singpho story the first craftsman is a man named Intupwa. He tried, unsuccessfully to cut wood with sharp stones and went to search for iron. He first asked the trees where he could get it, but the trees replied, 'If we tell you, you will make a dao and cut us down'. Then he asked the grasses and they made the same reply. He asked the wild animals and they said, 'If we tell you, you will make iron-tipped arrows and kill us'. At last he asked the water, which sent him to a certain goddess who gave birth to a baby-girl, at first red as fire but later black as iron. Intupwa broke her to pieces and took the iron home. But he did not know how to work it until he learnt how to make a stone hammer

¹ Verrier Elwin, *The Art of the North-East Frontier of India*, (Shillong, 1959), p. 185.

² *Ibid.*, pp. 5, 12, 135 & 156.

³ *Ibid.*, pp. 5 & 8.

by watching an elephant's feet crushing everything beneath them. He learnt how to make a pair of tongs when a crab caught him with its claws, and after that he began to make daos, knives and arrow-heads".¹

The Cottage Industries Training-cum-Production Centre

The Cottage Industries Training-cum-Production Centre was opened in the district in 1956 :

- (1) to boost the production rate of the various cottage industries in the district ;
- (2) to introduce new techniques for improving the local arts and crafts ;
- (3) to introduce new crafts suitable to local conditions, and
- (4) to popularise woven materials and other manufactures in the interest of an all India trade.

The Cottage Industries Training-cum-Production Centre, which was first set up at Namsang, imparted training in carpentry, smithery, weaving, spinning and cane-work.

The number of girl trainees in weaving and tailoring in 1956 were five. Besides them, three boys received training in blacksmithy and carpentry and five in cane and bamboo-work. In this Centre, sewing was also introduced. Afterwards other units were opened at Doidam, Subang and Soha. Doidam had a smithy section while Soha had a craft unit, and the unit in the other village was mainly concerned with weaving.

In 1957-58, the Centre was shifted to Khela, but with the shifting of the divisional headquarters from that place, it was moved to Khonsa. It was finally shifted to Changlang in 1961-62. In 1959, 18 students were trained in weaving, 16 in smithery, 17 in cane-work and 9 in sawing. In the headquarters, special provisions were made in 1960-61 for instructions in the manufacture of tribal looms and weaving accessories, as well as articles of furniture. In 1962, articles, such as ploughshares, daos, bamboo trays and cane articles were produced. The sawing unit produced 162 planks and 39 beams while, as a special undertaking, 20 lbs of washing soap were manufactured. The total sale proceeds of the Centre for the year 1962-63 amounted to Rs. 1930.

The Arts and Crafts Centre at Changlang opened in 1962 was residential and instructions were given to the trainees of this Centre in carpentry, weaving, cane and bamboo work, sawing, smithery, wood-carving, silver-

¹ *Ibid.*, pp. 26-29.

smithy, bamboo shingling, carpet-making and sericulture. In 1964, the total sale proceeds of the products came to Rs. 21,772.30. Agricultural implements—*daos*, garden-rakes and sickles were made in the blacksmithy section, while furniture including office tables, chairs and other articles were produced by the carpentry section. The craft unit is concerned with manufacture of bamboo drinking cups (with cane-handle), panniers, bamboo stools, flower vase etc. From the weaving unit several articles, such as bags (with bird designs), door curtains, Tangsa coats, Khampti loin cloths and rain coats are turned, and at a fly-shuttle loom, ladies' coats, baby coats and endi wrappers and other furnishing fabrics with local designs are made. Carpets with dragon and other designs are also produced.

The emporium at Changlang has a rich collection of woven materials, such as Tibetan scarves, Tangsa bags, mixed Tangsa and Tibetan door screens, Tangsa baby coats, Tangsa *lungis*, table clothes, ladies' hand-bags etc.

Power

The district has many rivers cascading from the hills, and the hydel potential is great. Implementation of a micro-hydel project with an installed capacity of about 250 kw is under way.

Electrification of different places in the district is in continuous progress. Upto the month of March 1977, fifteen places—Khonsa, Changlang, Jairampur, Deomali, Namsang, Namsang Mukh, Borduria, Nampong, Laju, Miao, Pongchau, Longding, Wakka, Bordumsa and Vijohnagar were electrified with a total installed capacity of 735 kw.

Craft Centres

The Craft Centres, seven in number in 1976-77, are functioning at different places of the district. The annual out-turn in terms of the cost of articles produced in these centres/units is shown at the appendix to this chapter.

Nocte Timber Co. Ltd.

The Nocte Timber Co. Ltd. was established at Deomali with a share capital of Rs. 10 lakhs for production of veneers. The capital formation as standing on October 1, 1977 is as follows:

(1) Share Capital	..	Rs.	10,00,000
(2) Capital Reserve	..	Rs.	95,827
(3) Development Rebate Reserve	..	Rs.	62,358
(4) General Reserve	..	Rs.	10,74,670
Total		Rs.	22,32,855

Sixtyone per cent of the controlling share of the company is subscribed by the Government, and the rest 39 per cent belongs to the Assam Saw Mills and Timber Co. Ltd. according to a lease valid up to the month of March 1978. On the expiry of the lease, the company is likely to be brought under the directive control of the Arunachal Pradesh Forest Corporation Ltd. The management of the company has been taken over by the Government since July 1977.

The total number of workers, skilled and unskilled, employed in this plywood industry is 300, and in addition some 20 to 30 workers are engaged occasionally. The annual production capacity of the industry is nine lakhs of tea-chests. During the year 1976-77, the actual production figures were as follows :

(1) tea-chest panels	..	6,85,807 sq. mtr
(2) com. plywood (in 4 mm)	..	45,782 sq. mtr
(3) sawn timber	..	916 cub. mtr
(4) green and core veneer	..	3,84,049 sq. mtr
(5) block boards	..	1,633 sq. mtr
(6) doors	..	107 pieces

Narottam Co-operative Industries Ltd.

The Narottam Co-operative Industries Ltd. at Deomali was established in the year 1972 with a share capital of Rs. 10 lakhs raised from the local people—the Noctes. The individual share was initially raised as loan from the Namsang-Borduria People's Fund to be subsequently refunded by the share-holders through this industry. The authorised share capital of the industry stands at Rs. 10,18,000.

During the period of about five and a half years since March 1972, the industry has earned a net profit of Rs. 18,15,000, which has been utilised for expansion of the industry with a capital investment of Rs. 20 lakhs. An amount of Rs. 2 lakhs has already been refunded to the People's Fund by the share-holders in repayment of the loan, and it was expected that by the year 1979-80 the balance amount of the loan of Rs. 8 lakhs would be paid off.

The industry consists of three wings:

- (1) Plywood Manufacturing Unit.
- (2) Saw Mill Unit and
- (3) Mustard Oil Crushing Unit.

The industry provides for employment of the local people on worker-cum-apprentice basis in the first instance. The total number of workers in the industry as in the month of June 1977 was 110 of whom 90 were regular, skilled and semi-skilled workers and 20 casual or unskilled workers.

It was envisaged at its inception that the industry would have an annual turn over of about 1,00,000 cft of timber for making and processing of veneers. The average annual production of the industry has come to 2,50,000 tea-chest veneers, 50,000 cft of sawn timber and 200 qtl of mustard oil.

The Arunachal Saw and Veneer Mill Pvt. Ltd. at Jairampur, another medium scale wood-based industry, also produces ply-boards, tea-chests, veneers etc.

APPENDIX
ANNUAL OUT-TURN OF DIFFERENT CRAFTS

(In thousand rupees)

Sl. No.	Name of Crafts	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
1.	Weaving	1.30	2.89	2.97	4.94	12.85	16.23	16.83	22.75	17.03
2.	Carpentry	1.90	0.58	1.56	1.67	13.85	27.15	35.83	46.18	58.30
3.	Blacksmithy	0.09	—	0.18	0.29	0.48	0.87	0.95	1.39	—
4.	Cane and Bamboo	0.13	—	—	—	—	—	—	—	7.03
5.	Carpet-making	1.02	1.17	1.95	1.52	1.55	4.48	4.52	3.20	6.68
6.	Wood-carving	0.04	0.70	0.64	0.65	1.09	1.49	2.35	2.99	—
7.	Sawing	—	1.07	0.93	1.08	1.00	0.97	1.06	0.29	—
8.	Wancho articles	—	—	—	—	—	2.11	0.68	1.04	4.28
Total:		4.48	6.41	8.23	10.15	30.82	53.30	62.22	77.84	93.32

Source : Statistical Hand Books of Tirap District, 1972-73, 1975-76 and 1976-77.

CHAPTER VI

BANKING, TRADE AND COMMERCE

Banking

There is no indigenous banking system in the district. Owing to the appreciable size of the construction work and other developmental schemes being implemented in the district, a good number of the local people have earned substantial amount of money. There was a custom among some of the people to bury the money in the houses for security reasons. In order to stop this practice and in the interest of the local people, the Government have been encouraging the people to make savings. Moreover, the local people are persuaded for fruitful expenditure and investment of money for productive purposes. This is done in two ways, first by persuading the people to save in the local post offices, and second, by encouraging them to invest in the co-operative sector. A number of local post offices with saving accounts facilities have been opened. The State Bank of India has also opened three branches in the district. The working of the State Bank in the district as on March 31, 1977 was as follows:¹

	(in thousand of rupees)
Aggregate Deposits	8110
Aggregate Advances	357
Total Priority Sector Advances	202

Early Trade

The geographical remoteness of the area combined with its lack of communication and transport facilities and the low standard of living of its people in the pre-independence days are responsible for the economic and commercial under-development of the district even though it is rich in forest, mineral and other resources. In the absence of money as medium of exchange, the whole system of trade and commerce was based mainly on barter or exchange of commodities according to the needs of individuals, families or villages.

¹ Source : Statistical Hand Book of Arunachal Pradesh, 1976-77.

The early trade and commercial relations may be classified under three broad headings—trade with Burma, trade with the plains of Assam and inter-tribal trade among the local communities.

Trade with Burma

Trade relations between the people of this district and those of upper Burma had been in existence for centuries. Bhamo, a great trade centre on the Irrawaddy river, attracted a large number of traders from this district, who carried their merchandise for exchange or sale through the passes across the Patkai ranges which they used as trade routes. In exchange for handloom products, tea leaves, salt, beads etc., the people of this district imported from Burma *daos*, iron implements, fishing nets, spears, penknives and also Burmese garments. One of the principal items of trade was opium. This trade was current mainly between the Singphos of this district and the Kachins of upper Burma. Illicit trade in the contraband articles, such as opium, was going on for a long time across the international border running along this district. Sometimes the smugglers used elephant-tracks to cross the border at a great risk of life only to avoid arrest. With the extension of administration in Tirap, restrictions were gradually imposed on the transborder trade with the result that the clandestine movement across the border for trade has been stopped.

Trade with the Plains of Assam

From time immemorial, the people of Tirap had regular trade relations with the people of the plains of Assam. But no detailed account of the early trade is available. Some of the Ahom *Buranjis* refer to the people of the present Tirap District trading with the Assamese. Salt was regularly supplied by the Noctes to the people of Assam until the commercial activities of the East India Company extended to the Brahmaputra Valley. As a matter of fact, Tirap was one of the important sources of salt for the people of the Brahmaputra Valley before it was regularly supplied by the merchants of the Company through Bengal. Moreover, there are some references in the *Buranjis* to the supply of raw coal and crude kerosine oil to the people of the plains by the Wanchos which they dug out from the pits in the hills.

It may be interesting to note that in the last part of the nineteenth century and the early part of this century some of the Singpho villages, where conditions for trade and commerce were a little better, were renowned for rubber trade. The villages of Samun, Wakhel and Bisa sold rubber tapped from jungles and from the Longloi-Tarun basin, and traders from as

far as Bengal came to buy it. The rubber was sold at Rs. 50/- per maund at the Bisa market.

In the past, the articles for disposal and exchange were usually brought to the markets in the plains of Assam. Now the tribal people sell their articles instead of bartering them for other commodities and buy their necessities from the plains markets. The chart at appendix I to this chapter gives an account of the merchandise exchanged between the people of Assam and this district in the old days.

Inter-Tribal Trade among the Local Communities

A regular trade was current among the tribes themselves within the district and with those of the neighbouring district of Lohit. The articles of trade consisted of the daily necessities like salt, opium, cattle, hand-woven clothes and articles brought from the plains of Assam. Opium was cultivated by the Taraon and Kaman Mishmis and they bartered it to the Singphos for certain articles of their requirements. On the other hand, the Mishmis of Lohit purchased a large number of cattle from the people of Tirap.

Trade Centres

Before independence, the district was virtually isolated and there was no trade centre except in the Singpho area which had small marts mainly for the rubber trade. At present, trade and commerce are flourishing in the markets near the border of Assam. A chain of markets have sprung up along the adjacent plains of Assam, and these markets are important to the people of this district. The tribal people visit the markets regularly and a brisk business is carried on in a number of articles. Generally, the Singphos and Tangsas visit the nearby markets at Ledo, Lekhapani and Margherita, the Noctes attend at Margherita, Jaipur, Naharkatiya and Namrup, and the Wanchos go to Barhat, Namrup and Sonari. Some of these places are connected by railways and they have a direct road link with the other parts of the country.

Development of Trade : Co-operatives

During the last three decades new developments have taken place, which have brought about remarkable changes and mobility in the system of trade and commerce. The opening of new administrative centres and development of communications have contributed largely to the growth of trade and commerce in the district. New market places have been built up and blocks have been rented to the local traders. This and various other

steps taken by the Government have encouraged the tribal people to take up business enterprises. Small markets have sprung up at a number of places. A good trade centre is developing at Khonsa, the district headquarters. Besides these, in 1977 eighteen co-operative societies have been operating in the district in different economic spheres, and their business activities are on the increase. These societies cater to the needs of the local people as well as Government employees. The consumer co-operative stores are situated at Khonsa, Changlang, Bordumsa, Longding, Namsang, Nampong, Vijoynagar and Miao. Some of the co-operative societies have also undertaken marketing and processing, transport, agricultural development etc. In the industrial sector, there are two forest-based co-operative societies.

The position of the co-operative societies as standing in the month of June 1977 is shown in the appendix II to this chapter.

The Government endeavours and the people's initiative for development of trade and commerce are also indicated in the census categories of 'establishment'.¹ "An 'Establishment' was defined as a place where goods were produced or manufactured not solely for domestic consumption, or where servicing and/or repairing was done as a factory, workshop or household industry, or a place where retail or wholesale business was carried on or commercial services were rendered, or an office, public or private, or a place of entertainment or where educational, religious, social or entertainment services were rendered. It was necessary that in all these places one or more persons were actually working. Thus, an establishment would cover manufacturing, trade and other establishments where people worked. . . . A 'Household Industry' was defined as an industry conducted by the head of the household himself or herself and/or mainly by the members of the household, at home or within the village in rural areas and only within the premises of the house where the household lived in the urban areas. The household industry was not to be run on the scale of a registered factory".² According to the 1971 Census, the number of establishments in the Tirap District in different sectors and their percentage are as follows :

	Number	Percentage
Government or Quasi-Government	373	29.2
Private	888	69.64
Co-operative	18	1.4
Total :	1,279	

¹ Census of India, 1971, Arunachal Pradesh, Part III A & B, pp. 11, 12, 23, 26 & 52.
² Ibid., p. 8.

The broad types of the establishments and their numbers based on the 1971 Census figures are as follows :

	Manufacturing, Processing or Servicing Establishments	Trade or Business Establish- ments	Other Estab- lishments	Total
Government or Quasi-Government	8	28	337	373
Private	53	308	527	888
Co-operative	4	14	—	18
Total	65	350	864	1,279

It may be noted that out of 65 manufacturing, processing or servicing establishments 48 are household industries — 44 in the private sector and 4 in the co-operative sector.

Exports

The bulk of exports of the local people consists mainly of agricultural products and handicrafts, but the volume of export is small, and the trade with the plains of Assam and the other neighbouring areas is conducted on a limited scale. A very valuable item of export from the district is timber obtained from the local forests. The total forest area in the district is about 3,200 sq. km of which reserved forests cover an area of 2574.20 sq. km. The timber is supplied to the wood-based industries in the district, the Assam Saw Mills and Timber Company in the Lohit District, and also to the plains of Assam. Moreover, sleepers, sawn timber and finished products are supplied to the Indian Railways, Navy, Army and to the local engineering departments. The number of sleepers supplied from this district to the Railways is as follows :

Year	(In thousand pieces)			Total
	Broad Gauge	Metre Gauge	Narrow Gauge	
1968-69	12.51	25.30	Nil	37.81
1969-70	20.92	17.60	Nil	38.52
1970-71	30.94	17.44	Nil	48.38
1971-72	41.13	36.39	Nil	77.52
1972-73	54.45	49.37	Nil	103.82
1973-74	79.39	99.04	Nil	178.43
1974-75	78.09	79.54	Nil	157.63
1975-76	68.60	72.25	Nil	140.85

Weights and Measures

Old Time Practice : As already stated, early trade relations in the district were based on barter or exchange of commodities according to the needs of the people. The condition remained unchanged until the establishment of a regular administration in the district. With the passage of time and gradual development, the people trading in the plains of Assam adopted the systems of weights and measures as were in vogue in the neighbouring areas of Assam. Generally, the areas adjacent to Assam followed the weights and measures system of Assam. In the interior of the district, there was no standard system of weights and measures. In some parts, the barter system was in vogue until very recently, while in other parts some crude methods of weights and measures were followed.

Metric System : In order to implement the metric system of weights and measures introduced throughout the country under the Standard of Weights and Measures Act, 1956, a Government organisation of weights and measures has been functioning in Arunachal Pradesh since 1964. The introduction of one uniform metric system in the district in place of the old diverse and bewildering system of weights and measures has been successful to a great extent towards simplifying the business transactions.

An Inspector of Weights and Measures assisted by a small staff is functioning in the district.

Appendix I

Name of Tribe	Articles produced and sold in the plains markets by tribal people		Articles—the tribal people generally bought from the plains markets	
	Cottage Industries	Agriculture	Miscellaneous	
Singphos	lungis, bags, skirts, baskets and mats	vegetables, chillis, ginger, sweet-potatoes and food-grains	home-made ploughs, bamboo, leaves, nerbs and cane	yarn, mill-made cloth, fancy goods, salt, beads, tea-leaves, soaps, torch and lanterns, tobacco and cigarettes, implements and household utensils. Assam silk and images of Lord Buddha (wooden, brass and ivory)
Tangsas	lungis, bags and home-spun clothes, cane and bamboo products	paddy, millets job's tear, arum, sweet-potatoes and ginger	goats and poultry, forest products—timber, bamboo, cane etc.	The articles mentioned above except images of Lord Buddha
Noctes and Wanchos	bamboo mats, cane and bamboo products, wooden images, spears, daos, ornamented walking sticks	ginger, arum, chillis, pan (betel leaves), sweet-potatoes, oranges and lemons	forest products, such as timber, bamboo, cane, herbs	Mill-made clothes, beads, tea-leaves, tobacco, bidi and cigarettes, household utensils, implements, fancy goods, umbrellas etc.

Appendix II
THE CO-OPERATIVE SOCIETIES IN TIRAP DISTRICT
(As on 30-6-77)

Sl. No.	Name of the Societies	Date of Registration	No. of Members	Paid up Share Capital			Working Capital			Annual Turnover			Profit Current			Loss Current			Position as per Audit Report
				Rs.	P.	Rs.	P.	Rs.	P.	Rs.	P.	Rs.	P.	Rs.	P.	Rs.	P.	Rs.	
1.	Tangsa Co-operative General Stores Ltd., Changlang	16.10.57	137	3,280.00		14,000.00		1,45,083.60		2,68,814.61		—		18,484.09		1976-77			
2.	Nocte Co-operative General Stores Ltd., Khonsa	16.10.57	56	10,970.00		60,000.00		2,03,891.37		5,77,025.88		13,651.45		—		-do-			
3.	Wancho Co-operative General Stores Ltd., Longding	11.11.61	40	8,140.00		—		1,21,320.00		2,35,298.58		21,596.09		—		-do-			
4.	Namsang Co-operative General Stores Ltd., Namsang	27.1.60	179	3,580.00		—		52,023.00		98,841.97		6,364.08		—		1975-76			
5.	Nampong Co-operative General Stores Ltd., Nampong	11.11.61	29	1,040.00		—		51,165.00		59,552.98		2,387.28		—		1974-75			
6.	Buniadi Siksha Bhavan Co-operative, Changlang	9.12.63	75	190.00		—		14,612.30		70,427.61		4,187.02		—		-do-			
7.	Yobinjoji Co-operative General Stores, Vijaynagar	18.1.64	54	2,960.00		2,000.00		9,044.14		96,085.65		9,216.07		—		-do-			
8.	School Co-operative, Khonsa	18.1.64	93	104.50		1,000.00		1,684.50		—		—		—		1972-73			
9.	Singpho Co-operative General Stores, Bordumsa	26.5.59	111	1,900.00		—		17,863.68		1,46,359.38		582.90		—		1975-76			

Appendix II
THE CO-OPERATIVE SOCIETIES IN TIRAP DISTRICT
(As on 30-6-77)

Sl. No.	Name of the Societies	Date of Registration	No. of Members	Paid up Share Capital			Working Capital			Annual Turnover			Profit Current			Loss Current			Position as per Audit Report	
				Individual	Government		Rs.	P.	Rs.	P.	Rs.	P.	Rs.	P.	Rs.	P.	Rs.	P.	10	11
1		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
10.	Assam Rifles Multipurpose Co-operative, Vijaynagar Tirap Frontier	8.3.65	214	4,630.00	—	2,48,849.32	1,26,953.79	6,471.99	—	1974-75										
11.	Transport Co-operative, Khonsa	7.3.64	60	21,280.00	1,05,000.00	2,53,050.80	2,13,028.38	—	15,278.09	1975-76										
12.	Miao Co-operative General Stores Ltd., Miao	15.1.66	276	3,550.00	15,000.00	58,635.06	9,91,847.01	29,067.25	—	-do-										
13.	Tangsa Timber Multipurpose Co-operative, Yomchum, Changlang	7.5.68	147	3,210.00	—	51,013.15	52,105.39	12,863.29	—	-do-										
14.	Miao Co-operative Marketing, Miao	18.11.68	408	5,430.00	—	1,85,600.00	1,00,198.34	24,807.20	—	-do-										
15.	Narottam Co-operative Industries Ltd., Deomali	1.8.71	3527	1,18,750.00	—	24,43,223.07	35,52,624.77	8,33,023.46	—	1976-77										
16.	Arunachal Pradesh Co-operative Agricultural Development Corporation Ltd., Khonsa	5.12.72	189	9,308.00	—	9,308.00	44,947.00	6,206.72	—	1972-73										
17.	Singpho Co-operative Marketing Society, Bordumsa	1.1.74	71	10,464.00	—	1,17,314.68	82,051.98	—	24,765.96	1975-76										
18.	Nocte Co-operative Talkies Ltd., Khonsa	5.9.73	22	5,500.00	—	—	—	—	—	-do-										

Source :—Office of the Registrar of Co-operative Societies, Government of Arunachal Pradesh.

CHAPTER VII

COMMUNICATIONS

Old Time Trade Routes

A good number of old tracks and paths connected the district with the plains of Assam and the important marts of the adjoining areas on the otherside of the border. These tracks and paths also served the purpose of trade routes, and the articles for trade were carried to different marts by porters. Due to the contiguity of this area with Burma, the people had close trade relations across the border. They went to the marts in Burma through the passes traversing the Patkai ranges. There are a number of passes across the Patkai through which ran trade routes connecting the district with the markets in Burma. During the Japanese invasion of Burma, the refugees, who came to India through this district, followed these routes. But these tracks and paths were not regular means of a standard road communication; they could not be used in all weathers in the hazardous mountainous terrains.

Communications in the British Days

A survey was conducted by the British Government for construction of a railway or a road to Burma through this district. There are interesting references to the trade routes in the writings of early European explorers and administrators like S. E. Peal.¹ Captain Jenkins and R. B. Pemberton who explored the possibility of a road communication through the hills of the Patkai. Baron O. D. Granges² wrote in 1848 that a trade route passed through the Patkai ranges to Bhamo, a trade centre on the Irrawaddy, from there the route extended to Yunnan in China. In former times, Bhamo was a great trade centre and it attracted a large number of traders from China, Tibet, Assam and the area now known as Arunachal Pradesh.

¹ S. E. Peal, Note on the old Burma Route over Patkai via Nongyang — in J.A.S.B. XXXXVIII pt. II, pp. 69-82; Jenkins, Notes on Burmese route from Assam to Hoochoong Valley Pro. A.S.B. 1869, pp. 67-74. Pemberton, Eastern Frontier etc. pp. 68ff.
² Baron O. D. Granges, Short survey of the countries between Bengal and China showing the great commercial and political importance of Burmese towns of Bhamo on the Irrawaddy and practicability of direct trade over land between Calcutta and China. J.A.S.B. pp. 132 Feb. 1848.

The idea of either a railway or a road connecting Burma with the eastern part of India did not materialise till the Second World War when the security of India's eastern frontier was at stake, and construction of a motorable road up to that frontier to keep the supply line alive seemed imperative under the force of circumstances. The Stilwell road (named after the General who commanded the American ground troops in the Burma campaign in 1943) was constructed at this time. In the entire district, this was the only motorable road, about 56 kilometres in length, during the pre-independence days. During the war, this road assumed great importance for traffic.

Development of Road Communications

After the independence more roads have come up and the area is now easily accessible. Development of road communications in this area has been given great emphasis. "The North-East Frontier Agency (now Arunachal Pradesh), which curves like a giant horse-shoe astride the Brahmaputra Valley, can no longer be described as the forgotten frontier as was done by a writer only a couple of years ago. This is because of the recent successes achieved in the task of carrying the good things of civilisation to the hitherto neglected inhabitants of this region, quite apart from developments on the international border which have come in for a great deal of limelight lately. The carrying out of this task not only brought us into intimate contact with the people of the Agency; but having successfully gone through a period of trial and error, our experiments began to be rewarded with a measure of success in evolving special methods and procedures to increase the well-being of the tribesmen. An example of this is the success achieved in opening up a network of roads in the Tirap, the headquarters of which were shifted to the interior of Khela-Khonsa from the Assam Plain's town of Margherita only in August 1955, prior to which there were no other roads, food and other essential articles were supplied to Government servants and the Assam Rifles through drops from the air on the dropping zones along the hills near the Administrative Centres".¹

Apart from the system of air-dropping the administration has to depend on the Agency Labour Corps and animal transport for sending provisions and stores to the interior outposts. The porters were enlisted mostly from the local community and were given scheduled rates for carrying the loads. Transportation of goods by mules was also introduced. The system of relying on air drops and porters for transportation of goods was not com-

¹ K. L. Mehta, *The Adivasi*, p. 80.

mensurate with the growing exigencies of the administration and it was very expensive. This problem has been considerably solved through implementation of the schemes for road construction. At present, there are a number of motorable roads besides a good number of mule and bridle paths as well as porter tracks constructed either on self-help basis by the people or by the Central Public Works Department, which constitute the important means of communication within the district and connect the district with the rest of India.

The responsibility for road construction was in the early stage wholly official and there was hardly any participation of the people in this work. As a result, the progress was slow. The necessity of peoples' participation in the development of communication was increasingly felt, and in 1955, the initiative for connecting more territories by road communications with the help of the local people was taken up by the administration on self-help basis. The task was arduous, particularly at craggy places, but this did not deter the determination of the people and Government officials who were entrusted with the job. At times 2,000 to 3,500 people volunteered their services and worked tirelessly for months together. The efforts of the people and the Government officials were amply rewarded by 1959 by which quite a number of good motorable roads were constructed in the district. In this context, the name of Shri K. A. A. Raja, the Political Officer of Tirap Frontier Division for the period November 1956 to September 1959, merits particular mention for his very great leadership and contributions to the development of road communications in Tirap. The district today has a remarkable net-work of roads connecting all its fourteen circle headquarters.

The total length of roads (surfaced and unsurfaced) in the district, as in March 1976, is as follows :

(1) Road — C.P.W.D.	...	790 km
(2) Forest Roads	...	287 ..
		1077 km

The forest roads are connecting links between the major roads, and they are used for transportation of the forest products.

Besides the motorable roads, a large number of mule and bridle paths and porter tracks have been constructed mostly on self-help basis with the technical assistance obtained from the Engineering Department. Some of the existing inter-village porter tracks constructed and maintained by the local people have been improved by the Central Public Works Department for the benefit of the villagers and also the officials undertaking regular tours into interior areas for administrative and developmental works. Moreover, the

length of unsurfaced roads constructed in the Community Development Blocks till the month of March 1975 is 255 km of which 7 km is motorable. There is, however, no railway in the district.

Vehicles and Conveyances

Most of the vehicular traffic on the roads of the district is of the Government. The State Transport provides for passengers regular bus-services between (1) Khonsa and Naharkatiya and (2) Miao and Margherita. Altogether seven State Transport buses ply on these two routes.

Air Transport

Although a number of places in the district have now been connected by a network of roads, yet there are some places, which depend on air supplies for food and other essential requirements. There are two airdropping zones in the district.

Tourist Facilities

There are inspection bungalows and rest houses in almost all the headquarters of the administrative circles and sub-divisions of the district for the convenience of the touring officers. Many of these bungalows are provided with furniture and other items of necessity. There are also staging huts and rest camps in the areas where there is no road.

Khonsa, the district headquarters, has an additional facility of a well-furnished and well-maintained circuit house as well as an inspection bungalow. At present, there are inspection bungalows at Changlang, Nampong, Namsang, Niauxa, Miao, Vijoynagar, Longding, Jairampur, Bordumsa and in the forest colonies of Tirap, Namchik and Deomali. Besides these the inspection bungalows at Margherita and Naharkatiya in Assam are also used as transit camps by the visiting officers.

Post, Telegraph and Telephone Facilities

Till 1959-60 there were only three post offices in the district without telegraph facilities. Upto the month of March 1977, twentythree post offices including five post offices with telegraph facilities were opened in the district. Postal facilities have been provided to all the important administrative centres of the district, and some of them including the district headquarters at Khonsa have telephone exchanges as well.

A list of post offices is appended to this chapter.

Appendix

POST OFFICES IN TIRAP DISTRICT

(Position as on March 31, 1977)

Type of Post Office	Location
<i>Sub-Post Office</i>	(1) Khonsa (2) Changlang (3) Jairampur (4) Deomali (5) Miao
<i>Branch Post Office</i>	(1) Longding (2) Narottamnagar (3) Namsang (4) Soha (5) Borduria (6) Bogapani (7) Vijoynagar (8) Laju (9) Hukanjuri (10) Deban (11) Manmao (12) Namchik (13) Bordumsa (14) Pongchau (15) Wakka (16) Senua (17) Kanubari (18) Niauxa

CHAPTER VIII

MISCELLANEOUS OCCUPATIONS AND ECONOMIC TRENDS

Livelihood Pattern

With the extension of administration over the whole of Tirap District and the efforts being made for all-round developments and welfare, far-reaching rapid changes are taking place in this area and in the life of the local people, who, though rooted in the traditional past of tribal society, are voluntarily adapting themselves to the changing socio-economic conditions, and in the evolutionary process they themselves are moving towards advancement. One of the results of these changes is the emergence of a new educated section of young people. Although the percentage of highly educated persons is still very small, the literacy percentage being 11.22 in the total population of the district and 4.76 among the scheduled tribes according to the 1971 Census, the number of the local people in the Government service and technical professions is on the increase. It is the avowed policy of the Government to provide the trained and educated tribal youths with suitable jobs in all cadres of the administrative and technical services. Besides the higher posts in Government services held by them, they are now employed as office clerks, Village Level Workers, Agricultural Demonstrators, Veterinary Field Assistants, Language Officers and in various other capacities. In the private and co-operative sectors, they are now to be found as contractors, traders, businessmen etc.

The tribal societies in the district are not divided into clear-cut occupational groups, for almost the whole of the population is dependent on agriculture, which varies from shifting to permanent cultivation. A low level of technical development and economic specialization is the general characteristic of the local tribal societies organised on the basis of small social groupings, such as clan, tribe or village. The tribal life is corporate and it does not admit of any strict craft or trade exclusiveness as in many other societies. In the tribal society the people work collectively for satisfaction of their social and material needs. The occupations of the tribal people of this district, who are attached to land and village, are not diverse and they are in the main supplementary to agriculture.

Some of the supplementary occupations are spinning, weaving, wood-carving, domestication of animals, hunting and fishing, extraction of salt

from the brine springs and petty trades. It is of particular interest to note that there are no such professional groups as barber, washerman, tailor, cobbler etc among the local people. Men of these professions are mostly from the plains of Assam. Tribal businessmen of the district, whose number is gradually increasing, are, however, likely to form an important professional group.

The entire population of the district living in some 18,697 households is rural. Most of the people make their living by shifting cultivation called *jhum*, and they are still at a very low level of economic development. There is no major industry. The two plywood industries with saw mill and mustard oil crushing units at Deomali and another such at Jairampur are the only medium-scale industries in Tirap.

Employment in Different Occupations

According to the 1971 Census, the worker categories and their numbers in the district are as follows :

	Persons	Males	Females
Total Population ..	97,470	51,774	45,696
Workers ..	53,053	30,999	22,054
Non-workers ..	44,417	20,775	23,642

Category of Workers

1. Cultivators ..	44,475	22,837	21,638
2. Agricultural labourers ..	375	267	108
3. Livestock, Forestry, Fishing, Hunting, Plantation and Orchards and allied activities ..	2	2	—
4. Household Industry ..	68	41	27
5. Other than Household Industry ..	5	5	—
6. Constructions ..	2	2	—
7. Trade and Commerce ..	29	27	2
8. Transport, Storage and Communications ..	5	5	—
9. Other Services ..	8,092	7,813	279
Total : ..	53,053	30,999	22,054

AMONG SCHEDULED TRIBES

	<i>Persons</i>	<i>Males</i>	<i>Females</i>
Total Scheduled Tribe Population ..	68,845	34,493	34,352
Workers ..	38,781	19,404	19,377
Non-workers ..	30,064	15,089	14,975

Category of Workers

1. Cultivators ..	37,874	18,555	19,319
2. Agricultural labourers ..	63	44	19
3. Livestock, Forestry, Fishing, Hunting, Plantation and Orchards and allied activities ..	—	—	—
4. Household Industry ..	18	8	10
5. Other than Household Industry ..	2	2	—
6. Constructions ..	—	—	—
7. Trade and Commerce ..	21	19	2
8. Transport, Storage and Communications ..	—	—	—
9. Other Services ..	803	776	27
Total : ..	38,781	19,404	19,377

The economic classification of the population as enumerated above shows that about 84% of the 'workers' are cultivators in the total population and about 98% among the scheduled tribes. The category of workers under 'other services' constitutes the next higher percentage. The other categories of workers are numerically insignificant. In the 1971 Census, persons have been categorised as 'workers' and 'non-workers' according to their main activity or occupation. A person's main activity was ascertained with reference to certain types of work, such as cultivation, household industry etc. A person who is mainly engaged in any economically productive work by his physical or mental activity has been termed as 'worker', and a person who is not so engaged has been categorised as 'non-worker'. The 1971 Census defines that "A man or woman who was engaged in household duties, such as cooking for own household or performing one's own household duties or a boy or a girl who was primarily a student attending institution, even if such a person helped in the family economic activity but not as a fulltime worker, was not treated as a worker. On the other hand, if a person was primarily engaged in some economic activity but also attended to some household

chores or attended a night school etc, he or she was treated basically as a worker."¹

Occupations

Agriculture, as already stated, is the main occupation of the major section of the population. Of the 44,475 cultivators in the district, 37,874 (males 18,555 and females 19,319) persons belong to the Scheduled Tribes. The total number of agricultural labourers in the district is 375, and among them only 63 persons (males 44 and females 19) are from the indigenous people. Among other subsidiary occupations particular mention may be made of the following:

Hunting and Fishing : Hunting and fishing expeditions are parts of the tribal life in this district as in other areas of Arunachal Pradesh. The time and place of such expeditions are usually fixed by the village councils, since they are the concern of the tribal community as a whole and not merely of individuals. The tribal community hunting is a remnant of the past. It recalls the old days of a tribe when their ancestors came to their present abode through wild mountainous tracts and subdued the hostile circumstances in order to settle. Hunting is, therefore, supported by tradition and social sanction.

But hunting is not merely customary, it has great utilitarian value as well. It satisfies the needs of the people for meat, skin, horn, feather etc. The expedition is generally undertaken in the winter when bands of people are found roaming about in the jungles in search of beasts and birds.

Fishing in the streams and rivers is not only a pastime with the people, but it also makes up the deficiency in their food supply. The Government is encouraging pisciculture throughout Arunachal Pradesh, and there are 40 village fish ponds in this district.

Wood-Carving : The ingenuity of the Wanchos and Noctes express itself in their wood-carving, which are of remarkable cultural and artistic value. In fact, some of the finest wood-carving in Arunachal Pradesh is to be found among the Wanchos. The wood-carving reflects the practice of head-hunting of the old days, and is done for decoration of the *morungs* or bachelors' dormitories and funerary images erected for warriors and other important persons. The Wanchos also make beautiful wooden tobacco pipes, animal figures, toys, ornaments, masks, implements etc. Although the wood-carvings are not normally used as articles for sale, they do meet the socio-cultural needs of the people.

¹ Census of India, 1971, Arunachal Pradesh, Part II-A, p. 66.

Employment in Tea Gardens: A seasonal occupation of a section of the people of this district is the labour service in the neighbouring tea gardens in Assam. During the winter months when there is no work in their fields and the weather becomes chilly, they come down to the plains to do tea-plucking. They work in the gardens for about two months. The wages they earn help them to purchase their bare necessities like salt, utensils etc. This seasonal migration for employment in the tea gardens is an annual feature for long. A change is, however, now taking place as a result of the manifold socio-economic developmental activities being carried on in the district. Measures are being taken to check this migration to the plains of Assam, and to utilise the labour for other productive purposes for the development of the district.

It is important to note in this context that tea plantation has been initiated on an experimental basis in the Kanubari area of the district adjacent to the border of Assam. The local tribal people are to be employed in the plantation. In fact, tea plantation in Arunachal Pradesh is a new development and it is being introduced for the first time.

Besides these occupations, a good number of the local people work for portage as members of the Agency Labour Corps or as casual porters, and they earn for themselves a considerable amount of money thereby.

An important fact about the local people is that women work side by side with men in agricultural fields and household industries. Indeed, it is the women who in certain areas do the most of cultivation. According to the 1971 Census, among the total number of 44,475 cultivators and 375 agricultural labourers in the district 21,638 and 108 respectively are women.

Other Crafts: It merits particular mention that the Singphos smelt iron for making *daos*, which are highly valued for their durability. They also make spears with short shafts as well as cross-bows with arrows. The Singpho and Tangsa women are good weavers. The Tangsas are proficient in cane and bamboo basketry as well. They also know the art of blacksmithy. Iron scrapers, spearheads and *daos* are manufactured by them as stated before.

ECONOMIC TRENDS

A significant feature of the economic trends in the district is that money economy, which was not current in Arunachal Pradesh in the pre-independence days, has been gradually woven into the fabric of the local tribal economy. As exchange of goods was formerly done through barter, there was little monetary transactions in the district. Until recently, barter was an important factor in influencing the course of trade and commerce in the outlying regions. The price of an article under barter system is determined

by its immediate necessity instead of value. Commodities of higher value are at times exchanged for that of lower value. This impeded the growth of both internal and external trade, and was, therefore, detrimental to the commercial and economic interests of the tribal people as a whole. The barter system is now giving place to money economy as a result of manifold developmental activities. The opening up of the interior parts through a network of roads and establishment of administrative centres have brought the entire district under administrative control and one economic system. Consequently, the internal economy of the district is now linked up with the mainstream of economic activities in India.

Various welfare schemes for socio-economic development of the people implemented since 1947 have brought about remarkable changes in the life of the people. The establishment of 177 schools of which five are Higher Secondary Schools. 18 co-operative societies, three wood-based medium industries and seven craft centres, introduction of improved methods of agriculture and irrigation, development of animal husbandry, construction of a network of 1,332 kilometres of roads connecting interior places and of bridges and buildings, opening of post and telegraph offices, electrification of places and utilisation of the vast forest resources have all contributed towards growth of economy and raising of living standard of the people. Moreover, endeavours are being made in every possible manner to develop the cultural ingenuity of the people and to give impetus to their trade and commercial aptitude. The Inner Line Regulation enforced in 1873 is still operative, and the restrictions it has imposed on movement from outside to Arunachal Pradesh for business, trade or other purposes are intended to protect the tribal people from exploitation by bringing the trade and commercial intercourse under control. Through the execution of various welfare and developmental schemes new employment opportunities are being created for the people. The trained and educated local youths are now going in for various occupations including Government Service. Boys are taking up modern professions of mechanics, drivers, contractors etc; transport services are being run by public bodies and individuals in the co-operative and commercial sectors. As a result, the tribal economic structure is at present passing through a process of gradual transitional change.

The policy of the Government is to ensure regulated development, to bring to the tribal people a richer and fuller life, the benefits of civilisation in keeping with the trend of national development and the principle that 'people should develop along the lines of their own genius without any imposition from outside'. All endeavours are, therefore, being made to do the developmental works through and not in rivalry to the social and cultural institutions of the tribal people so that they may be able to adjust themselves with the changing circumstances.

The achievements made in various sectors of development in the district since independence have evidently brought about remarkable changes in the social and economic life of the tribal people. In this tribal mountainous region, development projects cannot be implemented as speedily as in the plains due to geographical and other factors. The sparseness of population and the difficult terrain which limit and hinder mobility are the two major constraints. And since the developmental activities have to be carried out 'in carefully measured phases', the tribal way of life cannot be jeopardised in an over-enthusiasm for development.

Despite the limitations, things are changing and the change is for the better, which is visible in the villages, in the social life and the economic conditions of the people. The change is gradual but sure, leading to a transformation of the society from backward economy towards a better living standard and modernity. The economic change has brought about not only material development but also a change in the psychological make up of the people, in their outlook and attitude. The old values are yielding place to new judgements.

An inevitable outcome of these changes is an awareness of the utility of money. Money is now the accepted medium of exchange throughout the district. A good number of tribal people is today earning money by means of portage, sale of animal and vegetable produce, as contractors for road and building constructions, and also through Government Service, co-operative societies, craft centres and commercial organisations. The tribesmen's share of revenue from the 'private' village forests of Namsang-Borduria is yet another source of monetary income. The accumulation of money in the hands of the people is a necessary precondition for boosting up trade and commerce in this part of the country, for money has to be converted into material possessions. In the pre-independence days the money was of little use to these people except when they went to the plains for trade, and needed some money for purchase of salt and other bare necessities although the bulk of trade was carried on mainly through barter.

Capital investment in Arunachal Pradesh by businessmen from outside is prohibited except on a very limited scale. The development of the area depends almost entirely on public investments. The Government is, however, encouraging progressive and enterprising local people to undertake co-operative and business ventures. A number of co-operative societies for consumer goods, transport, marketing and processing, industries and agriculture have been established in the district. The accumulated money in the possession of the tribesmen has thus been channelised for commercial purposes. The co-operative movement in the district is playing an important part in infusing in the minds of the local people a spirit of business enterprise and an willingness for small savings and investment.

Planning

Before 1947, the economic activities of the people were limited to production through elementary methods. The agriculture was based mainly on jhuming or shifting cultivation with simple tools like *dao* and pointed wooden or bamboo stick. The living standards of the people were extremely low. There was hardly any 'market', and trade and commerce was confined to local areas. Interplay of the factors of demand and supply exerted very little influence on the tribal economy. In order to improve the economic conditions, the policy of the Government, as already stated, was directed towards development and welfare by stages. The measures taken in the first stage aimed at improving the existing methods of production for attainment of a higher standard of living, and also bringing about changes in the backward economy through monetisation and mobility of supply and demand so as to organise production and consumption on a broader basis by breaking their localisation.

The development programmes in the second stage commencing from before 1960 envisaged the following:

- (1) A shift from indigenous methods where they had reached their maximum efficiency to new and more productive system through a transition from primitive agricultural practices to wet-rice and terrace-rice cultivations, from loin loom to Assam loom etc.;
- (2) The extension of external market facilities to local producers and consumers for creation of new demands and openings for local products;
- (3) Building up of new industries larger than indigenous cottage crafts;
- (4) Training of the people in the operation of the modern commercial system through direct involvement, and
- (5) Introduction of a monetary system and establishment of commercial enterprise.

The pace of development gathered a tremendous momentum in the following years. Improvement of economy through development of agriculture and communications received increasingly greater emphasis in the Five Year Plans. Highest priority was given to construction of roads and bridges. Next to this, priorities were laid on agriculture, social services including education and medical, power and industrial development. In an appreciation of the fact that economy of this tribal area could be promoted to a better productive system only through the development of agriculture, being the mainstay of the people, efforts were made to introduce improved and scientific methods to cultivation in place of the old indi-

genous methods, which were not found conducive to more productivity. Agricultural stagnation was the main constraint on economy, resulting in the low standard of living of the people.

Keeping in view the national objectives and the special features of Arunachal Pradesh's economy, the following broad objectives were laid down for this Union Territory's Fifth Plan:

- (a) To maximise food production through intensive cultivation;
- (b) To develop the means of communications as an infra-structure. The road coverage of 5.6 kms per 100 sq.km achieved at the end of the Fourth Plan is the lowest in the country;
- (c) To harness and develop power resources as a necessary infra-structure;
- (d) To initiate industrialisation of the area by introduction of large, medium and small scale industries;
- (e) To provide minimum educational and health facilities, and
- (f) To ensure that the cultivators, small entrepreneurs and job seekers get a fair share in the fruits of planned development.

Agriculture

The shifting cultivation commonly practised by the cultivators of the district is of subsistence nature. Today a good number of the villagers in Tirap are drawn towards sedentary agriculture. A great step has been taken to develop cultivable lands for permanent cultivation. Methods of double cropping and sowing of high-yielding varieties of seeds are also being taken up by the cultivators. During a period of five years 1972-73 to 1976-77, a total area of about 2311 hectares of land in the district was developed under permanent cultivation. Sixteen minor irrigation projects with a total command area of 473 hectares were implemented from 1974-75 to 1976-77. In fact, a remarkable progress has been made towards self-sufficiency in food, and the extension of urban market facilities has led to an expansion of the commercial sector of crop production. The implementation of rural water supply schemes in the district has benefited about 59 villages with a population of about 9,170. Implementation of the Ground Water Scheme at Mopakhat in Kanubari would facilitate wet-rice cultivation in that area.

The programmes taken up by the Government for agricultural development envisage, among other things, the following:

- (1) Development of land under permanent cultivation;
- (2) Distribution of improved agricultural implements and machines amongst progressive farmers;

- (3) Irrigation by channels and construction of Minor Irrigation Projects;
- (4) Implementation of 'Rural Water Supply' schemes; and
- (5) Supply of fertilisers and improved seeds.

Co-operation

The different types of co-operative societies functioning in the district in 1977 are as follows:¹

<i>Type of Society</i>	<i>Number</i>
(1) Consumer Co-operative	...
(2) Transport Co-operative	...
(3) School Co-operative	...
(4) Marketing and Processing Co-operative	...
(5) Industrial Co-operative	...
(6) Agricultural Development Co-operative	...
(7) Multipurpose Co-operative	...
(8) Cinema Co-operative	...
Total :	18

In 1971-72, the total annual turnover of the seventeen societies functioning at that time amounted to Rs. 26,26,471.37 and the net profit earned by them till 1971-72 is about Rs. 4,87,562.00. The co-operative movement has gained popularity in Tirap and the local people are participating in the co-operative activities in increasing numbers. The total number of members, 2,975 in 1972, and the business of the societies are also growing.²

Forest-Based Co-operative Industry

The People's Fund raised from the net revenue derived from the Namsang and Borduria 'Village Forests' is expended for the growth of industries and implementation of various schemes in other sectors of development. "An experiment in the setting up of a forest-based co-operative industry, which is the first of its kind in the country, has been started by the Forest Department in the Tirap District. This Industry known as the Narottam Co-operative Industries Ltd. aims at evolving a pattern of wood-based industries

¹ Source : (a) Statistical Hand Book of Arunachal Pradesh, 1975-76.

(b) Office of the Registrar of Cooperative Societies, Government of Arunachal Pradesh.

² See Chapter VI for details.

in which each and every tribal household in the Tirap District will have a direct participation in the setting up and running of a series of wood-based industries. This is truly a co-operative venture, which is the first of its kind in the country wherein about four thousand sons of the soil will be having a single share each of Rs. 250.00 thereby raising a share capital of ten lakhs. The individual share was raised in the first instance as a loan from the 'People's Fund' which the share-holder will pay back through the Narottam Co-operative Industries within a few years, along with interest thereon... It is expected that the Narottam Co-operative Industries will have a turnover of about 1,00,000 cft of timber per annum to begin with converted in the form of veneers and subsequently processed at site, yielding a net profit of over two lakhs in the first year of its working. Apart from giving a reasonably high dividend to the share-holders and repaying the loan, the rest of the income would be ploughed back in the shape of similar units in the other regions of Arunachal subsequently. This venture will not only give employment to individuals and improve their economic status, but will also endear them to the preservation and propagation of forests as vitally needed in this part of the country".¹

Forest Corporation

It may be mentioned in this context that the Arunachal Pradesh Forest Corporation Ltd.² would open wide avenues for employment of the tribal people and promote their economic conditions substantially by bringing under its control the wood-based industrial units like the Narottam Co-operative Industries Ltd. and the Nocte Timber Company Ltd., and by extensive exploitation of the rich forest resources of the Tirap District as well as new plantations.

The Corporation aims at achieving the above objectives³ in order to:

- (1) maintain and improve the existing forests into more productive forests so that progressively increasing yield and revenue is obtained by ;
 - (a) adoption of suitable natural regeneration technique with enrichment planting of hollong where necessary and
 - (b) conversion of the forests unsuitable for hollong natural regeneration into teak plantations by artificial regeneration method ;
- (2) provide more employment opportunities to the local people ;

¹ Twentyfive Years of Forestry in Arunachal by the Forest Department, Government of Arunachal Pradesh.

² See Chapter IV for details.

³ Arunachal Pradesh Forest Corporation Ltd., Project Report, 1977, p. 8.

- (3) eliminate exploitation of local people by middlemen by encouraging local people to take up timber extraction and minor forest produce collection ;
- (4) train the local people in forestry operations and in wood-based industries ;
- (5) develop the wood-based industries, and
- (6) utilise the low productivity forests for raising valuable cash crop plantations which could serve as models for adoption by local people.

Community Development

The Community Development Programme has been introduced in the district since 1953-54. The Programme aims at development of villages through self-help. The Community Development Blocks in Tirap as existing in March 1973 are shown in chart 1 and the achievements made under the programme are shown in chart 2 appended to this chapter.

Three blocks were at Post Stage II phase and one at Stage I—post intensive phase in the month of March 1976.

Chart No. 1

Name of Block	Head-quarters	Year of Opening	Area covered (in sq. km. approx.)	No. of Villages covered	Population	Stage
1	2	3	4	5	6	7
1. Namsang CD Block	Namsang	1953-54 Revitalised in 1972	679	19	3,393	Post Stage-II
2. Niauxa CD Block	Longding	1955-56 Revitalised in 1972	357	46	29,644	-do-
3. Changlang CD Block	Changlang	1958-59 Revitalised in 1972	1300	111	17,018	-do-
4. Khagam (Miao) CD Block	Miao	1968-69	505	65	18,579	Stage-I

Chart No. 2

Sl. No.	Item	Unit	1970-71	1971-72	1972-73
1.	Seeds distributed	Rs.	360	—	1850
2.	Fruit Seeds distributed	Nos	555	—	95918
3.	Work animal	Pairs	5	15	—
4.	Poultry/Birds distributed	Nos	—	50	—
5.	Minor Irrigation Channels	Nos	—	—	221

N.B. The chart no. 2 excludes Khagam CD Block.

Source : (1) Statistical Hand Book of Tirap District, Arunachal Pradesh, 1972-73.

(2) Statistical Hand Book of Arunachal Pradesh, 1973-74.

The economic and other developmental activities being carried on in the district through the Government and people's initiative are also indicated in the 1971 Census' categories of establishments as shown below :

Sectors	Manufacturing, Processing or Servicing Establishments			Trade or Business Establishments		Other Establishments		Total
	Registered Factories	Un-registered Work-shops	House-hold Industries	Wholesale	Retail Others	Educational Institutions	Public Health Institutions	
Government or Quasi-Government	—	8	—	—	14	14	42	373
Private	—	9	44	—	288	20	—	888
Co-operative	—	—	4	—	14	—	—	18
Total	—	17	48	—	316	34	42	1279

1 Census of India, 1971, Arunachal Pradesh, Part III A & B—Establishment Report and Tables, p. 52.

CHAPTER IX

GENERAL AND REVENUE ADMINISTRATION

Administrative Set-up

The erstwhile North-East Frontier Agency (NEFA), administered by the Governor of Assam acting as the agent to the President of India under the provisions of paragraph 18 of the Sixth Schedule to the Constitution and part of the table appended to that schedule, has been reconstituted under the provisions of the North-Eastern Areas (Reorganisation) Act, 1971 as an Union Territory since January 21, 1972, the date from which it has come to be known as Arunachal Pradesh. With the coming into force of the Government of Union Territories Act, 1963 (20 of 1963) in Arunachal Pradesh from August 15, 1975, the Administrator of the territory, formerly designated as Chief Commissioner for the period from January 21, 1972 to August 14, 1975, has been redesignated as Lieutenant Governor appointed by the President under Clause (1) of Article 239 of the Constitution of India. Shri K. A. A. Raja is the first Chief Commissioner as well as the first Lieutenant Governor of Arunachal Pradesh. The Constitution—37th Amendment Act, 1975 providing for a Legislative Assembly with a Council of Ministers for the Union Territory of Arunachal Pradesh has also come into effect from the Independence Day on August 15, 1975.

The first Council of Ministers consisted of five Ministers including the Chief Minister and four other Ministers of his Cabinet. The first Chief Minister of Arunachal Pradesh was Shri P. K. Thungon. The Ministers are in charge of various Government departments as assigned to them, and they are required under Section 44 of the Government of Union Territories Act, 1963 (20 of 1963) to aid and advise the Administrator in the exercise of his functions.

The Arunachal Pradesh Secretariat is headed by the Chief Secretary who, in the discharge of his duties and responsibilities, is assisted by a number of Secretaries, Deputy Secretaries and Under Secretaries, who are in charge of various secretariat departments and branches respectively.

The administration of Arunachal Pradesh is organised on the principle of what is called the 'Single Line Pattern' which is also known as 'Single Chain Administration'. According to this pattern, power descends vertically from the head of the administration to the lowest executive officers. The

technical officers at each level and place are directly responsible to the respective local executive heads at that location. This pattern of administration aims at successful coordination of the activities of the various departments for all round development and welfare of the area.

At the Secretariat level various departments, directorates and other offices are under the direct supervision and control of the Secretaries or Deputy Secretaries as the case may be. All cases for the administrative approval and sanction are, therefore, submitted by the heads of these departments to the respective controlling officers in the Secretariat. No double set of files corresponding to the directorates and other departments is, however, maintained in the Secretariat.

The Deputy Commissioner, as the head of the district, is in overall charge of the district establishments of various departments. The development departments in the district are in fact the integral parts of the Office of the Deputy Commissioner. The departmental heads, who are under the administrative control of the Deputy Commissioner at the district level in Tirap, are the District Agriculture Officer, the District Veterinary Officer, the District Medical Officer, the District Industries Officer, the Deputy Conservator of Forests, the District Education Officer, the District Research Officer, the District Statistical Officer, the Assistant Registrar of Co-operative Societies and the Executive Engineers belonging to the Central Public Works Department. They work under the technical guidance of their respective heads of departments. The Deputy Commissioner is responsible for planning and execution of various developmental schemes in the district, and in order to discharge this responsibility he functions in unison with the district heads of the development departments.

The geographical position of Arunachal Pradesh as a frontier region inhabited by diverse tribes who are at a low level of economic development, and the mountainous terrain rendering communications difficult, call for well-coordinated administrative set-up flexible enough to take quick decision in all important and emergent matters. The 'Single Line Administration' aiming at concerted activities of various government organs is a device to suit the peculiar conditions obtaining in this territory. This pattern of administration has been drawn up with a view to creating a feeling of *esprit de corps* among various government organs working for a common purpose of development and welfare.

The Tirap District is administratively divided into four sub-divisions, namely Khonsa, Changlang, Miao and Longding which are again divided into fourteen administrative circles. The Khonsa Sub-division is administered by the Deputy Commissioner. At the headquarters he is assisted by an Additional Deputy Commissioner and three Extra Assistant Commissioners. The other sub-divisions are each in charge of an Extra Assistant Commis-

sioner. Each of the circles are directly under a Circle Officer. The Extra Assistant Commissioners and the Circle Officers are drawn from the Arunachal Pradesh Civil Service. The position of administrative officers in the district (as in 1977) was as follows:¹

Sub-division	Circle	Position of Administrative Officers			
		Dy. Commissioner	Addl. Deputy Commissioner	Extra Assistant Commissioner	Circle Officer
1. Khonsa	a) Khonsa	1	1	3	4
	b) Namsang	—	—	—	1
	c) Laju	—	—	—	1
2. Changlang	a) Changlang	—	—	1	1
	b) Nampong	—	—	—	1
	c) Manmao	—	—	—	1
3. Miao	a) Miao	—	—	1	1
	b) Bordumsa	—	—	—	1
	c) Deban	—	—	—	1
	d) Vijoynagar	—	—	—	1
4. Longding	a) Niausa	—	—	1	1
	b) Wakka	—	—	—	1
	c) Panchao	—	—	—	1
	d) Banfera	—	—	—	1
Total		1	1	6	17

Local Self-Government

At the village level there exists in the district a regular system of self-government constituted by the tribal village councils. These councils are composed of village elders, and they traditionally enjoy a good deal of autonomy in judicial, administrative and developmental matters. All of these councils work under the provisions of the Assam Frontier (Administration of Justice) Regulation of 1945 (Regulation 1 of 1945) which confers on them such powers as are necessary to function as autonomous bodies.

¹ Source : Office of the Deputy Commissioner, Tirap District, Khonsa.

The *Gaon Burah* or the village elder, who is also normally by virtue of his position the head of the village council, acts as a representative of the administration at the village level. Besides the *Gaon Burah*, a team of political interpreters are employed by the administration for maintaining intimate relations with the village people. The *Gaon Burah* and the interpreters assist the Government officials to perform their duties and to implement Government decisions. They render valuable services in settling of disputes, forwarding of villagers' appeal to the law courts and petitions to the Government, in arresting of offenders and transaction of Government business at the village level. The Regulation 1 of 1945 also confers powers on the statutory 'village authorities' in civil and criminal matters.

Panchayat Raj

In harmony with the democratic self-governing traditions of the tribal people as manifested in the village and the inter-village councils, a 'panchayat' system of local self-government has been introduced in the district under the provisions of the North-East Frontier Agency Panchayat Raj Regulation, 1967 (Regulation 3 of 1967) as amended by the North-East Frontier Agency (Administration) Supplementary Regulation, 1971. The Regulation 3 of 1967 envisages for the districts a three tier structure of self-governing bodies, namely Gram Panchayat at the village level, Anchal Samiti at the block level and Zilla Parishad at the district level, and they have been duly empowered to formulate and execute minor development plans, and to implement various welfare schemes. The 1967 Regulation also provided for constitution of an Agency Council in the North-East Frontier Agency.¹

REVENUE ADMINISTRATION

The land in the district is held by the people under different categories of ownership, such as individual, clan and village. There is also a mixed type of ownership—partly individual partly communal. Village lands are generally conterminous with the settlements of individual clans. It is important to note in this context that the plots of land held in communal ownership may extend to one or several villages, and the individual families have the right to cultivate plots of communal land allotted to them by the village community. Although individual right of cultivation and possession is recognised within the limits of village land, the land is, as a matter of rule, owned collectively by a clan or a village. The system of land ownership in the district is not based on any tenancy supported by cadastral

¹ The Panchayat system has been described in detail in Chapter XII.

survey. In this area *jhum* or shifting cultivation is the most common method of farming. A new family which may come to a village for permanent settlement is allowed, with the permission of the village council, to cultivate plots of land allotted to them and to explore the forest and other resources. The ownership of land, however, varies from tribe to tribe, but no land revenue is virtually collected from any one of them whatever the kind of ownership may be.

Land Settlement

"To the tribal mind, Governments' attitude about land and forests is as important as any scheme of development or education".¹

Government's attitude to the settlement of land is formulated in the Sadiya Frontier Tract Jhum Land Regulation, 1947. The Regulation gives the tribal people customary rights over their *jhum* land, provided a village or a community has enjoyed the right to cultivate or utilise such *jhum* land for not less than five years prior to the making of this Regulation. The *jhum* land is defined as "all land which any member or members of a village or a community have a customary right to cultivate by means of shifting cultivation or utilize by clearing jungle or grazing livestock, provided that such village or community is in a permanent location". A village or a community is considered to be in a permanent location if it always remains within a specific area, although a part of the whole of such village or community may migrate from time to time to different localities within that area. In most parts of Arunachal Pradesh, however, shifting cultivation does not usually mean shifting homesteads, for many of the village locations are very old.

In fact, according to the Jhum Land Regulation of 1947, the customary rights of a village or a community to *jhum* land are respected. The ownership of individual or clan or village over land is recognised only in respect of permanent, semi-permanent cultivation and land attached to a dwelling house. The ownership of all other land including *jhum* land rests with the Government.

The Regulation provides customary right to *jhum* land in favour of an individual cultivator if he has inherited the land, or purchased it prior to the making of this Regulation in accordance with local custom; and if he, as a resident of a permanent village, has brought under cultivation land which had not been used at any time within the preceding thirty years, provided that such land is within cultivable reach of his own village. The Regulation also applies to an individual cultivator 'if he has purchased the

¹ Verrier Elwin, A Philosophy for NEFA (Shillong, 1964), p. 62.

land at any date subsequent to the making of this Regulation, provided such purchase was not contrary to any local custom or any of the provisions of this Regulation'. In actual practice, however, the local customs and traditions are respected and take precedence over the regulation.

Land for Government purposes is acquired by negotiation with the village community which owns such land. After executing necessary deed and agreement and on payment of suitable compensation whenever necessary land is formally transferred to the Government. Procedures laid down in the Land Acquisition Act are also followed in such cases. The transfer or sale of land is strictly controlled. The whole area is beyond the 'Inner Line' where outsiders are not normally permitted to settle and no tribesman can sell his land to a non-tribesman. The tribal land in the district is, therefore, well-protected from outside exploitation.

The Inner Line Regulation of 1873 was promulgated not with a view to (as is so often thought) isolating the hill people from the plains, but to bringing 'under more stringent control the commercial relations of British subjects with the frontier tribes'. The activities of speculators in the Lakhimpur District of Assam for caoutchouc had led to serious complications, and the spread of tea gardens beyond the fiscal limits of the settled territories of the day had involved the Government in many conflicts with the hillmen. The intention of the Inner Line Regulation was that no British subject or foreign resident could pass beyond a certain point without a licence. The Regulation also put restrictions on trade and the possession of land beyond the line.

"The tribal people", says Verrier Elwin, "are bound to their land by many and intimate ties. Their feeling for it is something more than mere possessiveness. It is connected with their sense of history, for their legends tell of the great journeys they made over the wild and lonely hills and of the heroic pioneers who made the first clearings in the forest. It is part of their reverence for the dead, whose spirits still haunt the countryside. The land is the mother who provides for them in response to the labours of their hands and who, when supplies run short, feeds them with a hundred natural gifts. It is the setting of adventure, in love, in hunting and in war, which can never be forgotten. The land is the foundation of a sense of security and freedom from fear; its assured possession is a lasting road to peace".¹

Forest

In pursuance of the principles formulated by the late Prime Minister

¹ Verrier Elwin, A Philosophy for NEFA (Shillong, 1964), p. 66.

Nehru that 'tribal rights in land and forests should be respected', it was envisaged that the forest policy in Arunachal Pradesh in regard to the questions of forest rules and the payment of forest royalties should not be less liberal than that operating in the Autonomous Hill Districts of Assam, and it 'must be conditioned by the direct interests of the people and not by a desire to increase revenue by launching upon a policy of exploitation of forests'.¹ The Government policy towards the forests under the control of the Tribal Councils was defined in the Jhum Land Regulations of 1947. Besides this, the basic principles of the National Forest Policy of 1952, with some minor modifications to suit the local conditions, are followed in regard to the utilisation and management of the forest resources.

The various forest codes, regulations and rules operating in Assam are also applicable to the Forest Department of Arunachal Pradesh.² Relevant Central Rules are also followed.

Revenue

The revenue is earned mainly from the forests. The total forest area in the Tirap District is 3,200 sq. km.

The annual revenue realised from the forests in the district for a period of five years is as follows:³

Years	Revenue (in thousand of rupees)
1971-72	8121.73
1972-73	8364.62
1973-74	8751.64
1974-75	10077.33
1975-76	11642.69
Total	46958.01

During the year 1976-77, the forest revenue earned was Rs. 1,67,62,620.

The other sources of revenue are stamps and registration fees, State excise, taxes and duties on electricity, taxes on vehicles, housing, agriculture, animal husbandry, industry, public works, various license fees etc.

¹ (a) Verrier Elwin, B. Shastri and I. Simon, Important Directives on Administration of NEFA, (Shillong, 1967), p. 14.
 (b) Verrier Elwin, A Philosophy for NEFA. (Shillong, 1964), pp. 67-68.
² Vide the Assam Gazette Notification No. FOR. 4/48/7 dated the 1st May, 1948.
³ Source : Statistical Hand Books of Tirap District, 1975-76 and 1976-77.

Under the North-East Frontier Agency (Abolition of Poll Tax and Levy of House Tax) Regulation, 1959 which came into force in some specified areas of Arunachal Pradesh with effect from 1st January, 1965, house tax at the rate of Rs. 2/- per house per annum was levied in the Bordumsa area of the Tirap District where some twentyeight villages were subjected to poll tax prior to the implementation of the said Regulation. The levying of house tax in the district was done in pursuance of a decision that house tax should not be introduced in any area where neither house tax nor poll tax was in force at the time of the promulgation of the aforesaid Regulation.

The revenue receipts in the Tirap District for a period of five years are as follows:¹

(in thousand of rupees)					
Item of Revenue Receipt	1971-72	1972-73	1973-74	1974-75	1975-76
1	2	3	4	5	6
1. House rent	13.80	17.44	16.35	8.47	9.15
2. Miscellaneous receipt	181.69	85.35	297.59	111.09	88.16
3. Poll tax/ House tax	—	2.09	1.07	2.04	7.12
4. Forest	8121.73	8364.62	8751.64	10077.33	11642.69
5. Agriculture and Transport	36.30	92.85	88.69	105.60	117.66
6. Electrical revenue	—	137.51	182.67	254.26	NA
7. Animal Husbandry	—	—	22.43	27.89	—
Total	8353.52	8699.86	9360.44	10586.68	11864.78

NA — Not Available

¹ Source : Statistical Hand Book of Tirap District, Arunachal Pradesh, 1975-76

CHAPTER X

LAW AND ORDER AND JUSTICE

Administration of Justice

According to the provisions of the Assam Frontier (Administration of Justice) Regulation, 1945 (Regulation 1 of 1945) and the Code of Criminal Procedure Act, 1973 (Act 2 of 1974), the criminal and civil justice are administered by the Deputy Commissioner, Additional Deputy Commissioner, Extra Assistant Commissioner and the village authorities. The Deputy Commissioner and Additional Deputy Commissioner are respectively the District Magistrate and Additional District Magistrate as well. They also exercise equal powers of a Session Judge. The Extra Assistant Commissioner is vested with powers not exceeding those of a First Class Magistrate as defined in the Code of Criminal Procedure. The Circle Officers, appointed as ex-officio Extra Assistant Commissioners, are vested with the magisterial powers of any class.

Chapters VIII, X and XI of the Criminal Procedure Code, 1973 have been brought into force in the Union Territory of Arunachal Pradesh together with provisions of Sections 2, 3, 4, 5, 20 to 23, Chapter V (with certain modifications) and Section 373 with effect from the 1st April, 1974. In other procedural matters, the principles of the criminal procedure are the guiding principles. While administering justice, the principles of the Indian Evidence Act are applicable. Judiciary and Executive have not been separated. In accordance with sub-section (1) of Section 20 of the new Criminal Procedure Code Act, 1973 (Act 2 of 1974) various officers were appointed as Executive Magistrates and also under sub-section (2) of Section 20 of the same Code, the Deputy Commissioners and Additional Deputy Commissioners are appointed as District Magistrates and Additional District Magistrates respectively. Some of the Executive Magistrates are appointed as ex-officio Assistant Commissioners and are invested with the powers of a Judicial Magistrate of either First Class or Second Class as the case may be in accordance with Section 18 of the Assam Frontier (Administration of Justice) Regulation, 1945 (Regulation 1 of 1945) and Section 3 (3) of the Code of Criminal Procedure, 1973 (Act 2 of 1974). The District Magistrates, Additional District Magistrates and Executive Magistrates are

also empowered to hold inquest in accordance with Section 174(4) of the new Code of Criminal Procedure.

The maintenance of law and order, and judicial administration in the villages are largely the responsibilities of the statutory village authorities as defined in the Regulation 1 of 1945, which confers on them powers to try any case involving any of the undermentioned criminal offences in which the person or persons accused is or are resident within their jurisdictions:

Theft, including theft in a building.

Mischief, not being mischief by fire or any explosive substance.

Simple hurt.

Criminal trespass or house trespass.

Assault or using criminal force.

The village authorities have also powers to impose a fine for any offence which they are competent to try and also award payment in restitution or compensation to the extent of the injury sustained. Vested also with powers in civil matters, the village authorities can try all suits without limit of value, in which both the parties are indigenous to the tract and live within their jurisdiction. The cases which are beyond the legal powers of the village authorities are tried by the civil officials empowered for the purpose.

The statutory village authorities are different from the customary or traditional tribal or village councils in their composition and legal jurisdiction. The village authorities have limited powers to administer criminal justice and to take preventive measures, whereas the traditional tribal councils exercise unlimited powers in both criminal and civil matters. These councils may even try a case of murder and settle it up by compelling the offending party to pay compensation to the aggrieved party in accordance with the tribal customary law.

The tribal councils can still exercise powers to settle disputes arising in the village. In fact, they try most of the civil cases and very minor criminal offences.

Incidence of Crimes and Lock-ups

Incidence of crimes amongst the people of this district is on the whole low. During the period of five years from 1971 to 1975, only 72 criminal cases were registered in the district. There was no civil suit in this period. The nature of crimes was mainly theft, causing hurt and trespass. During the year 1976-77, altogether 32 cases of crimes were reported, of which there was only one case of murder.

There is no jail in the district. Before the organisation of a police force

in Arunachal Pradesh, there were lock-ups at Khonsa and Nampong. There are now four lock-ups in the district at Khonsa, Changlang, Miao and Vijoynagar. The convicts, whose terms of imprisonment exceed three months, are usually sent to the District Jail at Dibrugarh in Assam. The undertrial prisoners are kept in the police lock-ups.

Organisation of Police Force

The Regulation 1 of 1945 extended to the whole of erstwhile North-East Frontier Tracts provides the following for police duties:

"The ordinary duties of police in respect of crime shall be discharged by the village authorities. They shall maintain peace and order within their jurisdiction.

"The village authorities shall not be deemed to be police officers for purposes of section 25 and section 26 of the Indian Evidence Act, 1872 or the section 162 of the Code of Criminal Procedure, 1898.

"The village authorities shall watch and report on any vagrant, or any bad or suspicious character found within their jurisdiction, and may apprehend any such person if they have reasonable grounds for suspecting that he has committed or is about to commit an offence, and shall hand over any person so apprehended to the Political Officer or an Assistant Political Officer.

"Every Civil Police Station shall be under the control of the Political Officer, but its administration with regard to the pay, allowances, clothing, transfer and discipline of the staff shall be vested in the Superintendent of Police of the district which furnished the staff or such other Police Officer as the Government may appoint in this behalf, provided that transfer shall be made in consultation with the Political Officer."

Before 1971-72 there was no regular civil police force of the administration in the districts of Arunachal Pradesh. The duties of police were performed by the Central Reserve Police and other reserved police forces, and also by the Assam Rifles. With the enforcement of the Police Act, 1861, which has been extended to Arunachal Pradesh since 1972, the Police Department of the Government of Arunachal Pradesh has been set up for organisation of the police force. At present, an Inspector General of Police holds the charge of the Police Department. He is assisted by an Assistant Inspector General of Police. In the district, the Deputy Commissioner acts as the ex-officio Superintendent of Police.

The Civil Police Force raised in Arunachal Pradesh in 1971-72 is now

¹ See P. N. Luthra, Constitutional and Administrative Growth of the North-East Frontier Agency (Shillong, 1971), p. 85.

functioning in the district. In 1975-76, the Police Station at Khonsa consisted of 1 District Inspector, 3 Sub-Inspectors, 1 Assistant Sub-Inspector and 12 Constables. There is also an Armed Branch and a Special Branch of the Police Force at Khonsa. A police outpost with 1 Sub-Inspector and 4 Constables was also opened at Changlang.

Organisation of Civil and Criminal Courts

There is no regularly constituted civil or criminal courts in Arunachal Pradesh. Under the provisions of the Assam Frontier (Administration of Justice) Regulation, 1945 (Regulation 1 of 1945), various officers empowered for the purpose are recognised as administrators of justice, and they are competent to try civil and criminal cases including major and heinous criminal offences. The Regulation 1 of 1945 confers wide criminal and civil powers on the Deputy Commissioner. As regards the trial of cases including civil cases, the Regulation 1 of 1945 is still the law of procedure in Arunachal Pradesh.

Legal Profession and Bar Associations

At present, there is no legal profession in Arunachal Pradesh. Lawyers from the adjacent districts of Assam assist in conducting the cases. A panel of lawyers approved by the Government is prepared for this purpose. There is no Bar Association in the district.

CUSTOMARY LAW AND JUSTICE IN THE TRIBAL SOCIETIES

With the extension of the administration to the remote interior parts of the district and setting up of a police force, the serious crimes are now dealt with by the competent civil authorities themselves according to the law of the Government instead of tribal customary laws.

The various tribal societies of Tirap have their own customary laws for administration of justice through their tribal or village councils. An account of the judicial functions of these councils is as follows:

Nocte

In regard to the Nocte customary law and justice Verrier Elwin observed as follows:

"Generally for all kinds of offences a fine is nowadays the only punishment given to an offender.

"Corporal punishment was never very common, but in some villages it is said that, if a man was found guilty of committing adultery with the wife of a chief, he was immediately cut to pieces, even without the calling of a ngothun (council).

"Again if someone was found guilty of causing an accidental fire he used to be brutally killed by the outraged neighbours. Sometimes such offenders were tied to a post and speared.

"In such cases the villagers usually did not wait for the ngothun to be held and took the law into their own hands without delay"

Some serious offences in the Nocte society are adultery, theft, violation of land and water rights, assault and murder. Other offences are non-payment of bride-price, default in community work etc. All these offences are normally adjudicated on payment of fines.

A theft of paddy from a granary is compensated by a fine of one buffalo, one pig and one bangle to be paid to the owner, whereas the members of the ngothun may receive two bangles and five tolas of opium. Theft of paddy from a field is to be compensated by payment of fines consisting of one pig and a sum of Rs. 10/- in cash to the owner while the ngothun receives one tola of opium.

Theft of agricultural crop from a field is also compensated by payment of fines consisting of one tola of opium and a chicken.

A person found guilty of committing adultery is required to pay a fine in the form of one pig, one bangle, a tola of opium (opium may be substituted by other articles during the payment of fines) and an amount in cash.

A case of divorce is settled by payment of a fine either by the husband or the wife, whoever is found to be the guilty party.

Payment of a heavy fine in case of a death due to assault consists of three buffaloes, three gongs, three bangles, six armlets, a hornbill feather, a dao, a bag, a spear, a hat, two boar's tusks, a conch shell, a shield, a piece of red cloth, a pig, a dog, a silk cloth and also four baskets of paddy. These articles are to be used in the performance of funeral rites and feast.

When the village council fails to decide, a case is sent up to the Chief of either Namsang or Borduria for final decision.

Wancho

"Disputes within the village generally arise out of theft, seduction of girls, and adultery, encroachment on other people's land and property, and

¹ Verrier Elwin, *Democracy in NEFA* (Shillong, 1965), p. 173.

so on. But inter-village disputes arise mainly on account of encroachment on other village land and water for hunting and fishing, though sometimes there are disputes about women also.

"In course of time, the customary laws and justice amongst the Wanchos have gradually slackened and nowadays fines, in cash or kind, are the main punishments given to persons proved guilty of offences. But in the old days, Wancho laws were severe, and corporal punishment was common".¹

In the past, death sentences were imposed by the Wanchos by hanging the offender or by drowning him. A punishment of this kind was awarded by the village council some years ago when a person called Bocha was hanged at Pumao. He had a habit of killing his neighbour's pigs and stealing from their granaries. The village council repeatedly fined and warned him. But the penalties did not stop him. He defied the council's orders and finally he was sentenced to death.

Seduction of a chief's wife is also a serious offence and it may lead to death sentence against the offender.

Banishment from the village is another severe punishment. A person committing unintentional murder may be exiled. Chantang village, for example, was a place renowned for offenders who were exiled there from Niaunu, Niasa, Mintong, Longphong and other adjacent villages. Deopani near Bimolapur Tea Estate in the Sibsagar District of Assam is another such place where persons found guilty of unintentional murder were transported for life from the villages of Rusa, Chopnu, Nokfan and Chopsa.

Minor offences are always settled by fines. A theft of agricultural crop is compensated by payment of a fine of one pig to the village councillors. But in cases of theft of a larger quantity of articles, a fine of one pig and also one silk cloth is imposed.

In the old days, it is said, if a thief stole such articles from the house of a chief, he was arrested and sold to another village for one elephant tusk and a gong.

Divorce is allowed on payment of a fine. Adultery with a betrothed girl is also compensated by payment of fines. There are cases in which the guilty person had to pay a fine of one mithun, one silk cloth and a part of his cultivable land to the girl betrothed. A heavier fine is imposed on a person having illicit connection with any married woman. In case she is a chief's wife, adulterer in former times was killed immediately.

Tangsa

Theft, non-payment of bride-price and land encroachment are consi-

¹ Verrier Elwin, *Democracy in NEFA* (Shillong, 1965), pp. 179-180.

dered by the Tangsas as major offences. The offences are compensated by payment of fines which vary according to the damage caused and the nature of offence. A guilty person who is unable to pay the fine is treated as a captive. But he could be bailed on assurance of payment of the fine, within a definite period, by his friends or relatives. If no bail is offered on his behalf, he may be engaged as a servant (*binasa*) by the head of the council or the person whom he has offended.

Corporal punishment is not given. Normally, a fine to be paid by an offender in cash or kind is the only form of punishment.

Singpho

In the Singpho society, theft, property disputes, adultery and sexual offences are looked upon as major crimes.

In case of a theft of valuable articles, the thief is bound to return the stolen articles or the value thereof in cash and to pay a fine in addition. If the fine is not paid, the thief is kept as a prisoner. If his relatives want to release him, they have to pay the fine or stand as surety for him, else he is beaten until he swears not to steal again in future and to pay up when he could. A nominal fine is imposed in less serious cases of theft, such as stealing of vegetables from a kitchen garden or poultry or fish etc.

In case of a dispute about property amongst brothers, the tra (village council) decides their respective shares and divides the property according to the rules of succession or inheritance.

Cases relating to seduction of girls are usually settled by payment of fines depending on the merit of the case, status and economic condition of the culprit, according to which a rich man is to pay a heavier fine than a poor man. If the girl becomes pregnant, the person responsible is to offer sacrifices to a deity called Sisan Nat for the welfare of the girl.

Adultery is considered by the Singphos to be the most serious crime. A case in which a person charged with adultery with a chief's wife is treated very severely. He is tied under the wooden ladder of the house and kept there for one night and then he is beaten severely before he is expatriated from the village. In the case of a chief committing adultery with a commoner's wife, he has to pay a fine of one buffalo, one costly cloth and a sum of money in cash.

If a person elopes with the wife of a chief, the chief has the power to confiscate his property. If they are caught, the man is tied to a thorny tree and the woman is paraded round the village after her hair has been cropped so as to defame her publicly.

The severity of punishment of the old days is now disappearing. Although the tribes have their own ways of arbitration, the major offences are at present dealt with by the Government.

CHAPTER XI

OTHER DEPARTMENTS

The Deputy Commissioner is the administrative head of the district. He has the controlling and superintending responsibilities for all works done in the district — administrative as well as developmental. The district administration and the developmental works are carried out in close co-ordination with each other, with the Deputy Commissioner or the Additional Deputy Commissioner functioning as the co-ordinating authority. The technical officers of the development departments are under the administrative control of the Deputy Commissioner at the district level. In accordance with the 'Single Line Pattern of Administration', the technical officers at different levels are responsible to the executive officers concerned for the developmental works carried out by them in the district, and to their departmental heads for technical matters, such as formulation of plans, schemes and their implementation. The Deputy Commissioner is assisted by the subordinate executive officers on the administrative side, and by the technical officers on the developmental side.

The organisational set-up of the Government departments in the district has been shown in some detail in Chapter IX. Besides the establishments of the Deputy Commissioner, Extra Assistant Commissioners and Circle Officers, the following development departments are functioning in the district.

Agriculture and Rural Development Department

The district organisation of the Agriculture and Rural Development Department headed by a Director at the Union Territory level is in the charge of a District Agriculture Officer with his headquarters at Khonsa. The District Agriculture Officer is assisted by the Agriculture Inspectors stationed at various places of the district. There are also Village Level Workers working under the direction of the District Agriculture Officer.

The department in the district is responsible for implementation of agricultural programmes concerning improvement and promotion of agriculture, integrated rural development and various other allied sectors of development, such as multiple cropping, fertilizers, cash and commercial crops, fishery, agricultural census etc. The District Agriculture Officer

also acts as a technical adviser to the Deputy Commissioner in agricultural matters.

Animal Husbandry and Veterinary Department

The Department of Animal Husbandry and Veterinary at the district level is in the charge of a District Veterinary Officer, who is assisted by Veterinary Assistant Surgeons, Veterinary Field Assistants and Assistant Farm Managers. The department is concerned with improvement of breed and upgrading of cattle, protection of cattle against contagious diseases, treatment of sick animals, castration of scrub animals and dairy farming.

Rural Works Department

The departmental head of the Rural Works Department at the Union Territory level is the Superintending Engineer. The department in the district is in the charge of an Executive Engineer, who is assisted by a number of Assistant Engineers and Junior Engineers deployed at various places. Besides them, the district organisation of the department is staffed among others by Subject-Matter Specialists, Technical Assistants, Surveyors, Draughtsmen etc.

The department works for implementation of various schemes relating to minor irrigation, rural water supply, ground water survey, integrated soil and water conservation, introduction, popularisation and custom hiring of agricultural implements and machines etc.

Engineering Department

The existing Engineering Department in Arunachal Pradesh is a wing of the Central Public Works Department. The Chief Engineer with his headquarters at Itanagar is the head of the department in Arunachal Pradesh. There are altogether three engineering civil circles with one Superintending Engineer in charge of each circle. Besides them, the department has one more Superintending Engineer, who is concerned with electrical works, and also a Senior Architect.

At the district level, the circles are divided into a number of divisions under the charge of Executive Engineers, who are assisted at different levels by Assistant Executive Engineers, Assistant Engineers and various other technical staff.

The engineering divisions in the Tirap District, namely Khonsa, Jairampur and Miao, are in Circle III. There is also one Planning Division stationed at Jairampur.

Working under the technical guidance of the Chief Engineer and Superintending Engineer of the circle, the Executive Engineers are responsible for execution of the development programmes of the department in their respective divisions. Besides the construction and maintenance of roads, bridges and buildings, the department also works for micro hydel projects, electric installations, rural electrification, water supply and maintenance of helipads and landing grounds.

Medical Department

The officer at the district level in charge of the Medical Department is the District Medical Officer stationed at Khonsa. He exercises control over all subordinate Medical Officers and is responsible for execution of health schemes in the district. He also supervises the work in the hospitals and health units and looks after their proper maintenance and function. Under the guidance of his departmental head, the Director of Health Services, he also acts as a technical adviser to the Deputy Commissioner of the district in medical matters.

Education Department

The Education Department at the district level is in the charge of a District Education Officer. Acting under the supervision and guidance of the Director of Public Instructions being the head of department, he is responsible for all educational activities carried on in the district. He also acts as a technical adviser to the Deputy Commissioner of the district and helps the local administration to implement schemes and plans for promotion of education. The educational institutions upto the standard of Middle Schools are supervised by him. He is assisted by two Assistant District Education Officers posted at Changlang and Longding respectively. The management of the Higher Secondary Schools in the district is the responsibility of Principals working under the local control of the Deputy Commissioner. These schools are, however, supervised by the Director of Public Instructions himself.

Forest Department

The Forest Department is headed by the Chief Conservator of Forests. He is assisted by Conservator of Forests, Deputy Conservator of Forests, and Assistant Conservator of Forests who are in charge of various forest circles, divisions and ranges.

The forests in the Tirap District excluding the forest areas taken up by

the Forest Corporation fall under the jurisdiction of the Conservator of Forests, Eastern Circle. There are (in 1976-77) two territorial forest divisions in the district, namely Khonsa and Changlang Forest Divisions, each under the charge of a Deputy Conservator of Forests. The western half of the district constitutes the Khonsa Forest Division with its headquarters at Deomali, whereas the eastern half comes under the Changlang Forest Division with Jairampur as its headquarters. The divisions are further sub-divided into a number of ranges.

The responsibility for exploration of forest resources, management of the forest business and execution of schemes rests with the Deputy Conservator of Forests, who in each division is assisted by Assistant Conservator of Forests. The Forest Rangers are responsible for efficient management and execution of work within their respective ranges and they are assisted by Foresters and Forest Guards.

The Namdapha Reserve Forest in the district is under the Wild Life Board and placed under the overall charge of the Chief Wild Life Warden stationed at Itanagar. The Wild Life Forest Division in this district has its headquarters at Miao. The headquarters of the other two functional forest divisions, namely Silviculture Forest Division and Working Plan Forest Division, are at Deomali and Tirap respectively.

Co-operation Department

The Co-operation Department is headed by the Registrar of Co-operative Societies. He is assisted by one Deputy Registrar and one Assistant Registrar at the headquarters.

The district organisation of the department is in the charge of an Assistant Registrar of Co-operative Societies headquartered at Khonsa. He is under the immediate administrative control of the Deputy Commissioner. Besides a Junior Inspector of Co-operative Societies who is attached to him at the headquarters, a Senior Inspector of Co-operative Societies is posted in the Miao Sub-division to assist him in that sub-division.

The object of this department is to promote co-operative activities for the benefit of the tribal people. Eighteen co-operative societies have been functioning in the district in various sectors, such as consumer co-operative, marketing and processing co-operative, industrial co-operative, transport co-operative, school co-operative and agricultural development co-operative.

Information and Public Relations Department

The District Information and Public Relations Officer at Khonsa guides and directs all works pertaining to information, publicity and mass-com-

munication in the district. Under him there are four projection units with operators stationed at Changlang, Longding, Nampong and Laju respectively, as also two Radio Mechanic, one each at Khonsa and Changlang. The Field Publicity Organisation of the Government of India is also at work in the district. The District Information and Public Relations Officer performs his duties under the technical guidance of the Director of Information and Public Relations, who is the departmental head. All the district publicity units work in close co-ordination with the local administration.

Economics and Statistics Department

The Directorate of Economics and Statistics is concerned with the collection and compilation of statistical data. The statistical organisation in the district is under a District Statistical Officer with headquarters at Khonsa. He is responsible for collection and processing of the basic statistics at the district level and preparation of District Statistical Hand Book. He is assisted by two Inspector of Statistics and five Field Investigators. The statistical reports which are sent by the district officers to the directorate are compiled and published in the consolidated annual Statistical Hand Books of Arunachal Pradesh. The District Statistical Officer also undertakes various statistical studies, surveys and census operations.

Industries Department

Under the Director of Industries the department in the district is headed by a District Industries Officer with headquarters at Khonsa. He is assisted by a team of officials, namely Superintendent of Crafts, Extension Officer, Craft Supervisors, Instructors and Demonstrators, who are attached to various craft centres and weaving units in this district. The District Industries Officer is concerned with the development and progress of indigenous tribal crafts and other industries in the district. The craft emporium at Khonsa is the store-house of articles produced by the local artisans and in the craft centres. It also organises sale of the craft products.

Research Department

The district organisation of the Research Department, headed by the Director of Research, is in the charge of a District Research Officer with headquarters at Khonsa. He is assisted by a Research Assistant for tribal researches and preparation of monographs on the social life, culture, history etc. of various tribes on the basis of field materials. The District Research Officer further acts as an adviser to the Deputy Commissioner of the district

on the questions of tribal culture and welfare. Assisted by a Keeper, he is also in overall charge of the district museum. The district library in charge of the Keeper is supervised by him. There is also a Language Officer for philological research.

CHAPTER XII

LOCAL SELF-GOVERNMENT

Historical Background

The history of self-governing institutions in the district dates from ancient times. These institutions are the village councils of the tribal people, which go by different names. They are called *ngothum*, *ngongthun* or *ngongthit* by the Noctes, *wangchu-wangcha* by the Wanchos, *khaphua*, *khapong* or *khapo* by the Tangsas, and *tra* (dispute) *tungdai* or *siphang* (problem) *tungdai* by the Singphos. These tribal councils may vary in composition, powers and privileges, but they have certain features in common. "They all derive their authority from ancient times and the fact that they are the expression of the will and power of the whole people".¹

The tribal council is constituted by elderly, influential and respected persons who are the accepted leaders of the village. The local priest and the official headman are also normally included. The villagers, in general, may take part and speak in the councils in session. The tribal council is a democratic institution in the most modern sense, where all the vital problems concerning the village are freely and publicly discussed and solved, criminal cases adjudicated, decisions taken on social and agricultural matters. No formal vote is necessary for a decision. The discussion continues until a consensus is reached. The council allows both the defendant and the complainant to plead for themselves, and it gives its judgement in accordance with the customary law after careful consideration of the divergent viewpoints.

These councils are informal in character and they do not have regular membership, committees and permanent officials.

The procedure of the council is not impeded by complex formalities. The function of the village council are threefold — judicial, administrative and developmental.

On the judicial side, which is in practice the most important function, the council settles all disputes arising in the village, and gives verdicts on even serious crimes committed against the tribal society. Other criminal acts

and deeds committed in violation of the established law and order are dealt with by the Government.

The administrative jurisdiction of the council extends to the maintenance of paths and bridges, supervision of water-supply and sanitation of a village, fixation of the dates of communal hunting and fishing, taking of decisions as to when the main agricultural operations should take place and when the festivals should be held, and on problems of land, admission of new settlers etc.

On the development side the village council is an important institution through which the local officials can work for many-sided development of the country at the village level.

All the councils work within the general framework of the Assam Frontier (Administration of Justice) Regulation of 1945 which recognises their importance and authority and confers on them considerable powers. This is in recognition of the fact that 'modern democratic government can have a solid foundation only in village democracy'. The tribal councils in the district of Tirap as in the other districts of Arunachal Pradesh are basically democratic in character and composition. They work as village governments. It is, therefore, the persistent policy of the Government to work through the village councils without over-administering them, and to fit them in the democratic system.

The following description of the tribal councils and their functions is from the compilation by Verrier Elwin.¹

"The Nocte Councils"

"Once the Noctes were a tribe of warriors and head-hunters who involved themselves frequently in inter-village disputes and raids. The political life of the people was maintained by the chief and elders, a body which is called variously *Ngonthun*, *Ngongthun* or *Ngongthit*. This council maintains law and order, decides disputes within the village and with other villages and also organizes development activities. In the old days they also planned their wars and head-hunting forays. Nowadays, the Nocte village councils are functioning almost like regular panchayats and undertake all sorts of activities for the development and welfare of the people, besides deciding their disputes.

"The chief of the village, who is called *lowang*, is the head of the council and functions as its chairman. It is he who gives the final decision on any affair, after consulting the other members.

"Besides the chief, the council consists of a few other members. They

¹ Verrier Elwin, *Democracy in NEFA* (Shillong, 1965), p. 18.

¹ Verrier Elwin, *Democracy in NEFA* (Shillong, 1965), p. 170 ff.

are the ngongba, ramba, tanba and a few elderly persons who know the local customs and manners. (The ngongba is the chief's assistant and a priest; the ramba is also a priest, who informs the villagers about holding of a Ngothun and the tanba is the chief's messenger).

"The Wangchu-Wangcha

"In each Wancho village there exist a well-organized body for the administration of justice. It is the council of elders, the wangchu-wangcha, of which the wangham, the chief, is the head, assisted by a number of members with different functions. These members and their designations vary from village to village.

"At Pumao, for example, the council consists of the wangham or chief who is the president, the wancha, who acts as the khonsai, the wangcho, the ngopa (priest), the wangcham and the senior members of the village representing each clan.

"The wangcho and the wangcha are both also called khonsais and act as 'ministers'. The chief, before giving a decision on any matter, consults the two khonsais.

"The wangcham acts as messenger to the chief and the council. He informs the village about any meeting and calls the members to attend it.

"The village councils of the Niaujan group, consisting of Niaunu, Niausa, Mintong, Longphong and Zedua villages are similar to that of the Pumao council, but here the executive body consists of only the wangcham (chairman), the wangchapa, the wangchampa and the wangchupa.

"At Wakka, the council has a large number of members: the tang-ngam (chief), the da-pa, the gangsa-pa (junior chief), the gangsa-pas from different divisions of the village, the chingkhaw-gang-ngam (the chief of the Chingkhaw section), the ngopa (priest), the gampa (diviner), and a few old men from different clans who know the social customs and rules.

"The council takes up all kinds of cases and disputes that occur in the village. Inter-village disputes are also considered by the respective councils and the decision is sent through a messenger to both places.

"In case of disputes within the village, the decision given by the council is accepted and regarded by all, but in inter-village disputes, when the decision is not accepted, a dispute led to serious feuds and even head-hunting in the old days.

"The council generally meets at the chief's morung, where all the members are invited.

"Functions of the Council: In the old days, the main function of the council was to decide and plan about warfare, and to settle cases and disputes within the village. But nowadays, besides dealing with minor cases

and disputes, the council takes up all kinds of development work, such as the construction of roads, cleaning the village paths and so on.

"A good example of such a council can be found in Chanu village, where it is more a development committee than an ordinary council. It undertakes all kinds of development work and each member is responsible for its different activities. At the same time, the council settles disputes and tries cases.

"The Tangsa Councils

"The Tangsas used to have a well constituted council of elders called khaphua, khapong, khapo and so on, which consisted of a leader (lung wang, ngowa or lowang) and a few members (sangta, kamba or dedwa) chosen by the villagers. The leader was selected from a particular clan, after taking into consideration his wealth and intelligence while the members represented the various clans.

"The council adjudicated all disputes and maintained law and order in the village. Its leader was very powerful and his verdict was considered to be final.

"Each sub-tribe had its own council of elders. The Lungris had their well-organised village council called khaphua, consisting of a leader, the phulung wang, selected from the Kimthak clan, and a few members, the sangta, representing each clan. The Yogli term for the council of elders is khapong, and lung wang for its head. The members were called kamba or phunwa. The Mosang village council was called khampong. The ngowa was the head of it, and the members were called dedwa or fonwa. The khapo was the term for the village council of the Khemsings; the leader was the lowang, and the members, powas. The village council assembled at the house of the lowang. The Ron-Rangs also had a village council similar to that of the Khemsings.

"The council of elders had no set code of laws to safeguard the rights of the people. But its decision on any dispute was considered decisive, and was respected by all the members of the community.

"The Singpho Council

"The Singphos of Tirap call their village council tra (dispute) tungdai or siphang (problem) tungdai, and the members are known as singpho silang. This does not seem to be a regular or established body but the elders are specially called when some important matter is to be decided.

"There are generally three active members of the tra tungdai—one of whom is the gaonbura, the official representative, while the other two are selected

from amongst the older and experienced men. At the time of the meeting, however, the whole village attends and takes part. The meeting in the case of a dispute is generally held in the house of the complainant.

"Previously the chief of all the Singphos was the president of the tra, but nowadays the chief of Bisa or Ningro is invited to preside over it when any important discussion or some complicated or serious case is pending. Otherwise, normally one of the senior members or the gaonbura acts as president who is called aki. The other villagers who attend are called mung.

"The council decides all kinds of cases such as theft, seduction of unmarried girls, adultery, quarrels, disputes over buffaloes or cows, and disputes about property. Its decision is taken as final and is accepted by all. In case the people are not satisfied with it or if the tra cannot decide any case, then they approach the Administration for a decision.

"The tra or siphang also decides any work for the village such as the construction of roads, house building or the performance of festivals or ceremonies."

PANCHAYAT SYSTEM

The tribal councils are self-governing institutions in character and functions, and recognised by the Government as such. The North-East Frontier Agency Panchayat Raj Regulation, 1967 (Regulation 3 of 1967) as amended by the North-East Frontier Agency (Administration) Supplementary Regulation, 1971 defines that "Gram Panchayat means a body of persons elected according to the tribal customary methods by the residents of any village or a group of villages". The Regulation 3 of 1967 aims at establishing the panchayat system of local self-government and investing the various bodies constituted under the provisions of the Regulation with such powers and authorities as may be necessary to enable them to function as units of self-government. It offers opportunities to the people to take effective part in administration and development. The 1967 Regulation provides for a three tier structure of self-governing bodies, namely Gram Panchayat, Anchal Samiti and Zilla Parishad. As already stated¹ the Gram Panchayat is the unit of the panchayat system of self-government at the village level, the Anchal Samiti at the block level and the Zilla Parishad at the district level. Under the provisions of the North-East Frontier Agency (Administration) Supplementary Regulation, 1971, a Pradesh Council was constituted in place of the Agency Council which was functioning immediately before the commencement of this Regulation. With the coming into force from

¹ See Chapter IX.

August 15, 1975 of the Constitution — 37th Amendment Act 1975 providing for a Legislative Assembly in the Union Territory of Arunachal Pradesh, the Pradesh Council ceased to function.

Anchal Samiti

Constitution and Composition: The Anchal Samiti is constituted for such contiguous areas in a district as are termed a Block. It is an unit of self-government at the Block level. An Anchal Samiti consists of the following members :

- (1) One representative elected by the members of each Gram Panchayat falling within its jurisdiction in a Block. An Anchal Samiti comprises a specified number of Gram Panchayats ;
- (2) One representative from the co-operative societies situated within the Block as ex-officio member ;
- (3) Five persons nominated by the Deputy Commissioner from the members of the unrepresented tribal communities ;
- (4) The Sub-divisional Officer of the sub-division in which the Block is situated as ex-officio member.

Besides the above members, the Deputy Commissioner may appoint such officers as ex-officio members of an Anchal Samiti without the right of vote as may be deemed necessary.

The Sub-divisional Officer who is a member of an Anchal Samiti acts as its President. The Vice-President is elected from amongst the members of an Anchal Samiti.

Powers and Functions: The Anchal Samiti, the jurisdiction of which is conterminous with the area of a Block, is an important unit of planning and development. In fact, it is the organ through which various developmental and welfare activities are channelised at the inter-village level. It has an effective part to play for promotion of education, improvement of agricultural methods and increased production, and also in the sphere of administration. The North-East Frontier Agency Panchayat Raj Regulation of 1967 has vested the Anchal Samitis with specific powers and functions for the following matters :

- (1) Improvement of sanitation and public health including:
 - (a) Supply of water for drinking and domestic use,
 - (b) Provision of medical relief as well as establishment and maintenance of hospitals and dispensaries,
 - (c) Maternity and child welfare,

- (d) Encouragement of vaccination in human beings and animals, and
 - (e) Taking of anti-malarial and anti-kala-azar measures.
- (2) Public works including:
- (a) Construction, maintenance and repair of buildings, waterways, public roads, drains, embankments, bunds and bridges, and
 - (b) Construction and maintenance of minor irrigation works.
- (3) Education and culture relating, *inter alia*, to
- (a) Establishment and maintenance of library, reading room, club or other places of recreation and games, and
 - (b) Spread of education to Middle English and Middle Vernacular standards, and also above those standards.
- (4) Self-defence and village defence,
- (5) Administration which includes:
- (a) Maintenance of records relating to agricultural produce, census of village industries, population census, cattle census, spinning wheels and weaving machine census, census of unemployed persons or persons having no economic holding or such other statistics as may be necessary.
 - (b) Registration of births, deaths, marriages and maintenance of registers for the purpose.
 - (c) Drawing up of programmes for increasing the output of agricultural and non-agricultural produce in the village.
 - (d) Preparation of a statement showing the requirements of the supplies and finance needed for carrying out rural development schemes.
 - (e) Preparation of plans for the development of the village, and
 - (f) Acting as agent of the Government for developmental works within the area where funds for specific purposes are provided.
- (6) Welfare of the people which includes:
- (a) Organisation of welfare activities among women and children and among illiterate sections of the community.
 - (b) Organising voluntary labour for community works and works for the uplift of the village, and

- (c) Relief to people affected by floods, drought and other natural calamities.
- (7) Agriculture and preservation of forests comprising:
- (a) Improvement and development of agriculture and horticulture,
 - (b) Production and use of improved seeds, and
 - (c) Promotion of co-operative farming.
- (8) Breeding and protecting of cattle.
- (9) Promotion, improvement and encouragement of cottage and village industries.

An Anchal Samiti may assign to any Gram Panchayat falling within its jurisdiction some of its specified functions.

Financial Resources: The Panchayat Raj Regulation of 1967 provides for a fund for each Anchal Samiti for discharging its functions. The Regulation lays down that the following shall be credited to and form part of the Anchal Samiti Fund, namely:

- (i) the proceeds of any tax, fees, licence fees, case and surcharge levied under this Regulation;
- (ii) the collection charges of tax or revenue due to Government;
- (iii) any grant and contribution made by the Governor or any local authority or other persons;
- (iv) all sums received by way of loan or gift;
- (v) the income from, or the sale proceeds of, any property of the Anchal Samiti;
- (vi) the sale proceeds of all dust, dirt, dung or refuse collected by the employees of the Anchal Samiti;
- (vii) all sums received in aid of, or for expenditure on any institution or service, maintained, managed or financed by the Anchal Samiti, and
- (viii) any other sum paid to the Anchal Samiti.

Zilla Parishad

Constitution and Composition: The North-East Frontier Agency Panchayat Raj Regulation of 1967 provides for a Zilla Parishad for each of the districts of Arunachal Pradesh. The Zilla Parishad is the highest

unit of local self-government at the district level and it consists of the following members:

- (1) The Vice-Presidents of all the Anchal Samitis in the district as ex-officio members;
- (2) One representative of every Anchal Samiti in the district who is elected by the members from amongst themselves;
- (3) Not more than six persons to be nominated by the Governor from out of the tribes which have not secured representation on the Zilla Parishad, and
- (4) The Deputy Commissioner in charge of the district, ex-officio.

The Deputy Commissioner of the district is the President of the Zilla Parishad. The Vice-President is elected by the members of the Zilla Parishad from amongst themselves for a period of three years.

Powers and Functions: The Zilla Parishad is an advisory as well as co-ordinating body. It advises the Governor on all matters concerning the activities of the Gram Panchayats and Anchal Samitis situated within the district. It makes recommendations to the Governor in respect of:

- (1) the budget estimates of the Anchal Samitis;
- (2) the distribution and allocation of funds and grants to the Anchal Samitis;
- (3) the co-ordination and consolidation of the plan proposed by the Anchal Samitis and drawing up of the District Plan;
- (4) the co-ordination of the work of the Gram Panchayats and Anchal Samitis, and
- (5) land settlement and raising of revenues for the Anchal Samitis.

The Zilla Parishad also makes a review of the working of the Anchal Samitis from time to time, and gives advice on such other matters as may be referred to it by the Governor.

There are seven Anchal Samitis and one Zilla Parishad functioning in the district of Tirap. The implementation of the Panchayat Raj in the district is a step towards realising the principles of self-government and democracy.

CHAPTER XIII

EDUCATION AND CULTURE

Background

Spread of modern education on a wide scale is a post-independence development in the district. Although a Government Middle English School at Sadiya (subsequently upgraded to High School) was established before 1947 for the boys and girls of the Sadiya Frontier Tract and also of the Tirap Frontier Tract, yet there is no record available to know whether the school had on its roll any student from the Tirap Frontier Tract. There was, however, one school at Rangkatu in the Changlang Sub-division. Some members of the chief's family of Laptang also received education in the schools in Assam. In fact, the independence of India marked the actual beginning of an era of educational progress in this district. In 1947, a school was opened at Yumchum with an untrained teacher, and by 1949 eight new schools were established in the district. In 1950, additional schools were opened in the villages of Bordumsa, Laptang, Doidam, Manmao and Soha. In March 1977, there were 177 schools in the district. During the early years of independence educational progress was slow, for there was a general aversion to modern education and female literacy. Ignorance and difficult means of communication also played their parts to impede the progress. But the initial impediments did not last long. The people learnt by their experiences and gradually they became conscious of the need of education. To derive the benefits of education they soon came forward with a demand for more schools.

Educational Institutions and Literacy

The educational campaigns carried on since 1947 received an ever-increasing response from the local people. Many new schools were opened. The following table furnishes the number of schools and pupils in the district between the year 1947 and 1977:¹

¹ Source : (a) Directorate of Public Instruction, Government of Arunachal Pradesh,
(b) Statistical Hand Book of Tirap District, Arunachal Pradesh, 1972-73,
(c) Statistical Hand Books of Arunachal Pradesh, 1973-74 to 1976-77.

Year	Kindergartens/ Nursery Schools	Primary/Junior Basic Schools	Middle Schools	High Schools	Higher Second- ary Schools	Total No. of Schools	Boys	Girls	Total No. of Students
1947-50	—	11	—	—	—	11	438	9	447
1952-53	—	15	—	—	—	15	529	22	551
1953-54	—	23	—	—	—	23	669	112	681
1954-55	—	23	—	—	—	23	725	145	870
1955-56	—	23	—	—	—	23	789	89	878
1956-57	—	24	—	—	—	24	716	96	812
1957-58	—	25	1	—	—	26	782	120	902
1958-59	—	26	1	—	—	27	963	93	1,056
1959-60	—	28	2	—	—	30	1,021	107	1,128
1960-61	—	30	2	—	—	32	1,141	150	1,291
1961-62	1	32	2	—	—	35	1,252	158	1,410
1962-63	1	35	2	1	—	39	1,424	168	1,592
1963-64	1	48	3	2	—	54	1,986	312	2,298
1964-65	1	52	4	2	—	59	2,743	236	2,976
1965-66	1	74	4	3	—	82	3,128	378	3,506
1966-67	1	104	5	2	1	113	4,145	681	4,826
1967-68	information not available								
1968-69	1	106	4	2	1	114	—	—	4,073
1969-70	1	114	4	2	1	122	—	—	4,349
1970-71	—	125	4	2	1	132	—	—	4,432
1971-72	—	123	5	1	2	131	—	—	4,241
1972-73	—	126	5	—	3	134	4,388	993	5,381
1973-74	—	135	4	—	3	142	5,211	2,040	7,251
1974-75	1	138	8	—	4	151	5,330	1,900	7,230
1975-76	2	148	10	—	4	164	5,582	2,008	7,590
1976-77	2	161	9	—	5	177	6,159	2,332	8,491

According to the 1971 Census, the percentage of literacy in respect of the total population in the district is 11.22 and of the scheduled tribes is 4.76 as against 5.16 and 1.79 respectively in the 1961 Census Reports. The decadal growth of literacy and the number of literate and educated persons are shown in the following tables :

(1) In the total population of Tirap

Census Year	Males	Females	Total Persons
1961	2,696	379	3,075
1971	9,351	1,588	10,939

(2) Among the Scheduled Tribe population of Tirap

Census Year	Males	Females	Total Persons
1961	911	78	989
1971	2,829	445	3,274

The male and female literacy percentage in the district according to the Census of 1971 is as follows :

Total Population		Scheduled Tribe Population	
Males	Females	Males	Females
18.06	3.48	8.20	1.30

Organisation

The Department of Education with an Education Officer was constituted on September 1, 1947 with its headquarters at Sadiya (the then headquarters of the Sadiya Frontier Tract). Mrs. Indira Miri was appointed as the first Education Officer and it was she who started the pioneering work in the field of education. The supervision as well as the administration of educational activities was carried on from Sadiya, where a Teachers' Training Institute was also established in the month of December, 1947 for training of teachers for expansion of education in the interior areas. The trained teachers from this institute were sent for opening of new schools. But the earthquake of 1950 dealt a severe blow to the expansion programme of the Education Department. The subsequent floods washed away almost the whole of Sadiya in 1952 with the result that the Education Department and the Teachers' Training Institute were shifted to Margherita in Assam, and the latter was again shifted to Changlang in this district in 1957 and renamed as Buniadi Siksha Bhavan.

As a result of the gradual extension of educational activities, the need for a education directorate was felt, and consequently a Director of Education was appointed in 1956. In order to maintain a close supervision of the then Adviser to the Governor of Assam on the implementation of educational policy and programme, the directorate was stationed at Shillong. In 1977, a Director of Public Instructions was appointed as the head of department, who now guides and directs all educational activities in Arunachal Pradesh. The education department in the district is under the administrative control of the Deputy Commissioner. The District Education Officer, Principals and Assistant District Education Officers assist the Deputy Commissioner for implementation of the educational schemes and programmes.

The schools in the district are organised in the pattern of Central School Organisation and the Central Board of Secondary Education, New Delhi. The school education starts from Class I and continues upto Class XII. In some schools, there are also pre-school centres for children of 3 to 5 years age group. The stages of school education are as follows:

Pre-Primary	—	One year for children of 3 to 5 years age group
Primary	—	Classes I to V
Middle	—	Classes VI to VIII
Secondary	—	Classes IX and X
Higher Secondary	—	Classes XI and XII

The Primary and Middle Schools are controlled by the District Education Officer. For inspection and supervision of the educational institutions, the district is divided into three zones — Khonsa, Changlang and Longding. The Khonsa zone is placed under the charge of the District Education Officer and the other two zones are each in charge of an Assistant District Education Officer. The Higher Secondary Schools are looked after by the Principals working under the administrative control of the Deputy Commissioner, and supervision of the Director of Public Instructions.

General Education

At the instance of the local people a school was opened at Yumchum in 1947 as already mentioned. Since then the primary education has a history of steady progress through the Five Year Plans. There was a marked increase in the number of Lower Primary Schools as well as students during the First Five Year Plan. The number of schools rose from 15 in 1952-53 to 32 in 1960-61. During this period, two Lower Primary Schools were upgraded to the middle standard. The people were no longer indifferent to education

and they sent their children to the schools in greater numbers. Towards the close of the Second Five Year Plan in 1960-61, there was altogether 1291 students on the roll. During the Third Five Year Plan, there was yet further growth in the number of students as well as schools. In 1962-63, altogether 39 schools were functioning in the district and one among them was a demonstration High School. In the same year the total number of students in different schools was 1592. In 1966-67, after the Third Five Year Plan, the number of schools rose to 113 of which one was Higher Secondary School and two High Schools. The number of students rose to a total of 4826. By the end of the Fourth Five Year Plan there were three Higher Secondary, four Middle and 135 Lower Primary Schools with 7251 students on the roll.

The spread of education in the district continues unabated since the inception of the Education Department. The persistent efforts of the administration for promotion of education have succeeded in receiving satisfactory response from the local people. All the schools in the district are directly managed and financed by the Government except the Ramkrishna Sarada Mission Girls' School at Khonsa and the Ramkrishna Mission Boys' School near Deomali. Special care is taken to see that the schools are run in the best interest of the tribal people and not a section of them remains without the facilities of education.

Primary and Basic Education

The stage of primary education is from Class I to Class V. All the Primary Schools are under the supervision of the District Education Officer. There is a system of co-education in all these schools. Lower Primary examination is conducted by the Arunachal Pradesh Examination Board.

Before the close of the First Five Year Plan in 1955-56, the need for organising the Primary Schools on the line of basic education was emphasised, and for that purpose batches of education officers and teachers were deputed to the Hindustani Tamili Sangh, Sevagram and Jamia Millia Islamia, Delhi to receive training in basic education. As a result, a number of schools were converted into Junior Basic Schools. The trained teachers were the pioneers for carrying out the Basic Education Programme. By 1962, all the Primary Schools and lower primary section of all the Middle and High Schools in the district were converted into Junior Basic Schools.

The curriculum of the Junior Basic Schools includes crafts and agriculture as important subjects for teaching. Generally, a school has an agricultural garden attached to it, where seasonal vegetables are grown by the students. The training in the improved methods of agriculture and other arts and crafts is imparted in order to keep up the interest of the educated Arunachal boys

and girls in their agricultural economy and in the development of their indigenous crafts. Besides these, physical exercise, social work, indigenous and modern games are also important items of teaching in the schools. Particular care is taken to develop among the students qualities of self-reliance, mutual help, respect and reverence for elders and superiors and willing co-operation with others. The object of basic education in Arunachal Pradesh is to provide such opportunities to the children as are conducive to their intellectual and moral growth so that they can contribute in future their best to the development of their society and to the nation as a whole.

A scheme for establishment of residential schools was taken up in 1957-58. In the peculiar conditions obtaining in Arunachal Pradesh it was envisaged that instead of having a good many scattered schools, a few centrally situated residential schools would better serve the cause of education. Accordingly, inter-village schools were set up at Khonsa, Niauxa, Soha, Changlang and Vijoynagar with a total number of 355 boarders. These schools were modelled on the traditional Indian *ashrams* where the pupils lived and studied in close association with their teachers. All the students of these schools resided in boarding houses and were given free educational facilities, such as free food, free clothing and free books.

Secondary Education

The secondary education is imparted through classes in two sections — the middle school section consisting of classes from VI to VIII and the secondary section IX to XII. In 1966-67, there were five Middle Schools, two High Schools and one Higher Secondary School in the district. All the High Schools have been upgraded to Higher Secondary Schools. A system of co-education is followed in all these schools. Separate classes are, however, held on household crafts, such as cooking, weaving etc. for the girl students. There are hostels for the girls attached to different educational institutions. Boarding facilities with free food and clothing are extended to the students of distant villages reading in the Middle and Higher Secondary Schools. Text-books are also supplied free of cost to all the tribal students of these schools. The Middle School examination is conducted by the Arunachal Pradesh Examination Board. Higher Secondary Schools are affiliated to the Central Board of Secondary Education, New Delhi.

Higher Education

The Jawaharlal Nehru College at Pasighat in the Siang District, which was established in 1965, is the only college in Arunachal Pradesh for higher education upto degree standard. The students from this district are sent to

this college or to some other colleges in the country for prosecution of higher studies, and the deserving students among them are awarded necessary stipends.

Technical Education

There is no institution for technical education in the district. The students, who are willing to go for technical education, are, however, given every encouragement and help by the administration. Meritorious students are given scholarships for medical, agriculture and other technical courses, and arrangements are made with different institutions outside Arunachal Pradesh for their admission into various vocational disciplines.

Medium of Instruction

The medium of instruction at different stages of school education in Arunachal Pradesh was a complex question. The district is inhabited by diverse tribal groups speaking in different dialects. None of them has a script of their own, but they are familiar with some form of Assamese language, Assamese was, therefore, initially adopted as the medium in the primary, middle and high school standards. Hindi was also introduced as a compulsory subject in all the school standards. Science and mathematics were taught in English from Class VII to Class X. Later English was taken up as the medium in the Higher Secondary Schools for Classes from VIII to XI.

Eventually, since 1972 English has been accepted as the medium of instruction in all stages of school education. Besides English, Hindi is taught as the second language from Class I to Class X and Assamese or Sanskrit as the third language from Class VI to Class VIII.

Teachers' Training

One of the important features of the educational system in Arunachal Pradesh is the provision of training facilities for teachers. During the First Five Year Plan, an expenditure of Rs. 40,899 was earmarked for training of the teachers and for one demonstration school at Margherita. The total number of teachers trained at the Teachers' Training Institute, Margherita from 1951 to 1956 was 160. A lecturer in Hindi was also posted at the institute. In the Second Five Year Plan period the Teachers' Training Institute was converted into a Basic Training Institute called 'Buniadi Siksha Bhavan'. It was shifted to Changlang in 1957. The total number of teachers trained between 1956-57 and 1960-61 was about 200 (100 in basic

training and 100 in Hindi). Inspecting officers and heads of educational institutions are also deputed for training in this Bhavan, which has also a demonstration school attached to it.

'The Teachers' Training Programme of the Buniadi Siksha Bhavan is so designed that the teachers are trained up as multipurpose workers in the interior villages. Thus, on completion of training, when they are posted in the interior, they function not only as teachers, but also as agricultural demonstrators and emergency doctors. Training in social education is a part of the training course in the Buniadi Siksha Bhavan and the teachers are fully equipped to organize social education activities in the interior villages'.

In the Buniadi Siksha Bhavan the training is imparted with special emphasis on agriculture, cane and bamboo work, social services and development of culture including songs and dances. The Bhavan has produced a number of batches of trained under-Matric tribal teachers and there are many trained teachers working in various educational institutions in Arunachal Pradesh. The Junior Basic and Senior Basic are the two main training courses in the Buniadi Siksha Bhavan and it also provides for an orientation course of about three months for teachers who have qualified in basic education from places outside.

Female Literacy

Female literacy in the country is on the whole lagging behind that of male, and this is more so in the Tirap District of Arunachal Pradesh. The position of women in the old tribal society plunged in illiteracy, ignorance and conservativeness was responsible for a general aversion of the people towards female literacy. In this district the parents were formerly rather reluctant to send girls to schools. One important reason for this was that the girls were required to work at home and in the fields. The socio-economic conditions demanded that the girls would do only such works as their mothers did for livelihood and maintenance of family. In the changing circumstances today, the people are giving up their earlier antipathy for school education and sending girls in increasing numbers to schools. The gradual increase in the enrolment of girl students in the schools in this district is as follows:¹

¹ Source : (a) Directorate of Public Instruction, Government of Arunachal Pradesh
(b) Statistical Hand Book of Tirap District, Arunachal Pradesh, 1972-75.
(c) Statistical Hand Books of Arunachal Pradesh, 1973-74 to 1976-77.

Year	Number of Girl Students
1947-52	9
1952-53	22
1953-54	112
1954-55	145
1955-56	89
1956-57	96
1957-58	120
1958-59	93
1959-60	107
1960-61	150
1961-62	158
1962-63	168
1963-64	312
1964-65	236
1965-66	378
1966-67	681
1967-68	
1968-69	
1969-70	figures not available
1970-71	
1971-72	
1972-73	993
1973-74	2040
1974-75	1900
1975-76	2008
1976-77	2332

According to the 1971 Census, in Tirap the female literacy percentage of the total population is 3.48 and of the scheduled tribes is 1.30 as against 1.31 and 0.28 respectively in the 1961 Census. As already mentioned, there is a system of co-education in the schools. Some schools have separate hostels for girls. The Ramkrishna Sarada Mission School at Khonsa is a residential model school for tribal girls. It had classes upto standard VII in 1977, and with the gradual opening of higher classes it was going to be a High School.

Extra-Curricular Activities

Development of tribal arts and culture is a special component of the system of education in Arunachal Pradesh. Music and dance, which are important

aspects of tribal life, are also held in the schools. Cultural functions organised by the students are given encouragements and adequate help. Amenities for games and sports are provided to all Primary, Middle and Higher Secondary Schools. Great stress is laid on the indigenous games of the tribal people, and a book entitled 'Games of NEFA' in English Hindi and Assamese has been published by the Government. Every year an inter-district school tournament takes place in a district headquarters. Competition in a number of sports and games are held, and teams of players and athletes from different districts are sent up to participate in the tournament. These tournaments provide a meeting-ground to the boys and girls from different parts of Arunachal Pradesh. Prizes are awarded to distinguished teams and successful participants. Besides this, educational excursions of a batch of students selected from each district are sponsored by the Government. These students are taken on a conducted 'Bharat Darshan' tour to various places of interest in India. All expenses on this account are borne by the Government. It has been seen that such excursions are not only of immense educative value, but they also help the students to develop a sense of belonging to the vast country, that is India as a whole.

The National Cadet Corps training has also been introduced in the schools. Girls' guides and scout companies were also formed. A junior division of N.C.C. and a scout company were first raised in the Changlang Demonstration High School.

Social Education and Adult Literacy

There were four Community Development Blocks in the district in March 1976. In the villages covered by these Blocks, classes for adult education and measures for spread of literacy through evening classes for the villagers, who remain engaged in their work during daytime, are taken by the Gramsevak. Magic lantern shows, community listening sets and gramophone records are among the various means adopted for instructions given in these classes.

Libraries and Museums

The district has two public libraries, one at Khonsa and the other at Changlang. The stock of books in these libraries is shown language-wise as follows:

District Library at Khonsa

Language	No. of Books	
	(as in March 1973)	(as in January 1978)
English	2,110	2,357
Hindi	1,584	1,606
Assamese	2,519	2,777
Bengali	1,637	1,774
Malayalam	309	372
Nepali	20	20
Tamil	5	5
Total:	8,184	8,911

Sub-divisional Library at Changlang

Language		No. of Books (as in March 1973)
English	---	1,024
Hindi	---	893
Assamese	---	1,395
Bengali	---	1,125
Malayalam	---	154
Total:		4,591

Besides these public libraries, there are small libraries and museums attached to some schools. The District Museum is at Khonsa, and it contains 1012 (as in January 1978) valuable specimens of tribal weaving, wood-carving, cane and bamboo works, ornaments, implements, utensils etc. The following exhibits are some of them :

- (1) traditional Wancho tobacco pipe,
- (2) Wancho wood-carving of human figures,
- (3) traditional ornaments made of beads of different colours worn by both men and women,
- (4) indigenous agricultural implements,
- (5) Wancho head-gear (coloured) made of cane,

- (6) indigenous waist-band made of cane and brass,
- (7) traditional hunting weapons — bow and arrow, decorated spear and shield,
- (8) baskets of various types,
- (9) cotton bags embroidered with different traditional designs, and
- (10) indigenous articles of domestic use.

CHAPTER XIV

MEDICAL AND PUBLIC HEALTH SERVICES

Survey of Public Health and Medical Facilities in Early Times

No authentic record is available to know if any survey of public health was undertaken in the Tirap District during pre-independence days. Although, some medical facilities in the administered areas of the district (except the Wancho area) were available as far back as 1916, but they were not so regular and adequate as to give substantial relief and help to the ailing people. In fact, before 1947, the administrative jurisdiction though extensive and firmly based in these areas the British policy was directed towards exercising political control rather than welfare of the people. As a result, no hospital or dispensary was opened, and little attention was paid to public health. Medical relief was available only in a few administrative centres where officials were stationed for maintenance of law and order. Once a year the Political Officer accompanied by a doctor used to visit the interior areas, and this was the only occasion when the people received some medical aid.

In the old days, the inadequacy of medical facilities in the district was due not only to the erstwhile administration, but also to other reasons. Dearth of medical practitioners, lack of communications in the interior villages and also the antipathy of the people towards modern medicines and their dependence on indigenous drugs were some of the problems to be dealt with. The people suffered and died, yet tenaciously held on to their conviction that diseases were the work of evil spirits. Occasionally, they even hid patients from the doctors.

It, therefore, needed long persuasions and campaigns to convince the people of the efficacy of modern medical science and the utility of public health surveys. The task of the medical staff was not only to extend modern medical facilities to the tribal people, but also to educate them in the elementary principles of hygiene and sanitation.

After independence, the Government took up a series of schemes for opening of dispensaries and hospitals in the interior areas of the district so as to provide medical aid to as many people as possible. In 1950, an Assistant Civil Surgeon (I) was appointed with headquarters at Margherita to take charge of health services in the district. This, it may be said,

marked the beginning of systematic efforts for promoting public health in this area.

Vital Statistics

Until recently there was no system of registration of births and deaths in the district and no actual birth and death rates was on record. Preliminary steps were taken to collect information of births and deaths through medical staff, local teachers, Village Level Workers and *Gaon Burahs* (village elders).

The Registration of Births and Deaths Act, 1969 came into force in Arunachal Pradesh in October 1973 and it is now in the process of implementation. Under the provisions of this Act the *Gaon Burahs* of each village and the members of Gram Panchayat have been appointed as Informants and Notifiers of births and deaths respectively. The *Gaon Burahs* have been entrusted with the task of giving information of births and deaths in their villages, while the members of Gram Panchayat are to notify births and deaths and also to certify cause of deaths. For the purpose of registration of births and deaths, Village Level Workers and Primary School teachers are functioning as Sub-Registrars; Circle Officers and Extra Assistant Commissioners as Registrars, and Sub-Divisional Medical Officers and District Medical Officer as Additional District Registrars. The Deputy Commissioner is the District Registrar.

Lack of sanitation and medical care were responsible for many health-hazards in which the people had to live in the villages. The living standard of the people in general is still low due to economic conditions. With the extension of public health and medical facilities to wider areas, spread of diseases has been effectively checked, but a detailed assessment of the general standard of health and important causes of mortality is yet to be made.

Although the actual rate of child mortality has not yet been recorded, it is presumably not higher than what it was before. Incidentally, it may be noted in this context that in this district the percentage of decadal growth of the total population from 1961 to 1971 is 63.56, and of the Scheduled Tribe population is 24.94.

Diseases

The diseases that are common to the district are malaria, scabies, skin disease, dysentery, diarrhoea, respiratory and intestinal diseases. Cases of trachoma and venereal diseases have also been recorded. Goitre was menacing particularly in the Bordumsa, Nampong and Changlang areas.

The statistics would show that the people suffered mostly from malaria, skin diseases, respiratory and gastro-intestinal diseases, diarrhoea and dysentery. Except for malaria, the other diseases have been effectively controlled. Spread of endemic goitre is also held in check. The following charts¹ are indicative of various diseases and number of patients treated in the district during the period from 1971-72 to 1975-76:

Chart I

	1971-72	1972-73	1973-74
(a) Indoor Patients	1,850	6,920	4,810
(b) Outdoor Patients	59,190	73,128	67,800
Total	61,040	80,048	72,610

Chart II

Diseases	Number of Patients Treated				
	1971-72	1972-73	1973-74	1974-75	1975-76
(a) Syphilis	160	208	130	84	99
(b) Gonorrhoea	50	167	140	65	—
(c) Scabies	520	2,731	1,200	859	—
(d) Malaria	5,670	4,692	NA	8,439	9,048
(e) Other Skin Diseases	2,820	10,245	4,380	937	*1,011
(f) Diarrhoea/Dysentery	6,930	8,854	4,830	7,245	842
(g) Stomach and Intestinal Diseases	6,330	5,806	9,860	6,342	3,211
(h) Respiratory Diseases	7,920	7,982	11,250	2,188	378
(i) Goitre	130	2,661	480	56	204
(j) Leprosy	50	3	110	68	28
(k) Tuberculosis	—	—	70	46	214
(l) Other Diseases	30,460	36,699	40,160	38,434	48,191
Total	61,040	80,048	72,610	64,763	63,226
NA — not available		* including scabies			

¹ Source : (a) Directorate of Health Services, Government of Arunachal Pradesh.
(b) Statistical Hand Books of Arunachal Pradesh, 1971-72 to 1975-76.

Epidemics

When the World War-II was on, malaria, diarrhoea, dysentery and other diseases broke out frequently in epidemic form due to constant movement of troops, evacuees and panic-stricken people through this area. The villagers of Pinnyang, Kumlao, Changlang and Rangkatu died in large numbers as a result of the epidemics. A large number of the evacuees from Burma as also soldiers and labourers suffered from the epidemics, and many of them died on roads and in camps.

In 1948, an epidemic of cholera and dysentery broke out in the Noglai village. Preventive measures were promptly taken to check further spread of the diseases. In 1954, there was an outbreak of small-pox in epidemic form, which affected quite a good number of the local people. In September 1956, an epidemic of dysentery broke out in the Longkhau village of the Wancho area. Cases of occasional outbreaks of epidemics of dysentery, small-pox and virus-pneumonia were also reported. No incident of any widespread epidemic has, however, taken place in the recent years.

Hospitals and Dispensaries

In 1916, some Medical Units were formed, and they continued to do seasonal works in certain parts of the northern and southern Tirap, when the Assam Rifles personnel were stationed in these areas. These Medical Units did great services to the people. The medical officers attached to the Units visited regularly the interior areas of the district, and rendered treatment to the people who were sick and infirm. They also did their best to prevent spread of diseases. But the medical facilities extended by these units benefited only periodically a small section of the people for a time.

During the Second World War, Medical Units were stationed temporarily at Tipangpani, North Tirap, Namchik, Kumlao and Hell Gate along the newly constructed Stilwell Road. Although these medical units were closed when the war was over, an American aid centre functioned at Hell Gate for some time till it was shifted to the Pangsau Pass.

After the independence, the first two Medical Units in the district were opened at Khonsa and Changlang. There was also an itinerant unit attached to the medical dispensary at Khonsa, whereas at Changlang a mobile health unit was attached to the local dispensary to give medical coverage to the neighbouring areas. At about this time dispensaries were opened at Namphai, Rima and Tirap Forest. In 1950, there were altogether seven Medical Units functioning in different places in the district. The number of these units was raised in 1953 to eleven and medical officers

in charge of the units were appointed. The mobile health unit at Changlang and the itinerant unit at Khonsa were closed. In 1954, an *Ayurvedic* dispensary was opened at Namphai. Medical activities extended rapidly, and by 1958-59, there were seventeen dispensaries and Medical Health Units functioning in the district at the following places :

- | | |
|-----------------|---------------------|
| 1. Rima | 10. Dilli Base Camp |
| 2. Namphai | 11. Khela |
| 3. Nampong | 12. Laju |
| 4. North Tirap | 13. Niauxa |
| 5. Tirap Forest | 14. Lu |
| 6. Margherita | 15. Wakka |
| 7. Bordumsa | 16. Deomali |
| 8. Changlang | 17. Kanubari |
| 9. Soha | |

These dispensaries and units provided both curative and preventive medical facilities.

Eight of these dispensaries/units were enlarged in 1958-59 with provision of beds as shown below :

1. Rima Health Unit	...	...	6 beds
2. Tirap Forest Health Unit	...	...	6 "
3. Dilli Health Unit	...	...	4 "
4. Bordumsa Health Unit	...	...	6 "
5. Soha Health Unit	...	...	6 "
6. Laju Health Unit	...	...	6 "
7. Changlang Health Unit	...	...	8 "
8. Khela Health Unit	...	...	10 "

Total : 52 beds

In 1961-62, two more health units, one at Vijoynagar and the other at Ranglum came into existence. A sanatorium for hansen disease was established at Senua with 32 beds in the same years.

Extension of medical services for the well-being of the people continued unabated. A General Hospital with X-ray plant, operation theatre and other modern medical facilities for specialized treatment has been established at Khonsa, the district headquarters. The hospital has 30 general beds and a special ward of ten beds for treatment of T.B. patients. Ambulance for emergency service is also attached to the hospital.

A T.B. hospital at Margherita was also established in 1962. The hospital has 50 beds. A rehabilitation centre for the convalescent patients is also attached to this hospital.

In 1964-65, there were six hospitals and thirteen dispensaries including an Ayurvedic dispensary in the district with altogether 168 beds for indoor patients. There were in March 1973 twenty-six doctors, four staff nurses, eighteen auxiliary nurses, one matron and twenty-four pharmacists in the district.

The number of hospitals and health units, dispensaries, medical teams, medical officers, beds in hospital etc. in the Tirap District during the period from 1972-73 to 1976-77 is as follows :¹

Sl. No.	Particulars	1972-73	1973-74	1974-75	1975-76	1976-77
1	2	3	4	5	6	7
1.	Hospital/Health Unit	11	11	10	12 }	17
2.	Dispensary	5	5	7	6 }	
3.	Ayurvedic Dispensary	1	—	—	—	—
4.	H. D. Sanatorium	1	1	—	1	1
5.	T. B. Hospital	1	1	1	1	1
6.	Medical Team	2	2	2	2	2
7.	V. D. Clinic	1	1	1	1	1
8.	D.T.C.P. Team	1	2	—	1	1
9.	Medical Officer	26	26	22	27	24
10.	Ayurvedic Doctor	1	—	—	—	—
11.	Matron	1	1	—	—	—
12.	Nurse	4	5	1	2	2
13.	Auxiliary Nurse	18	20	18	18	19
14.	Compounder	24	25	20	21	24
15.	Bed in Hospital	220	220	220	220	220

The number of authorised beds in hospitals and health units in the district as on March 31, 1977 is as follows :²

¹ Source : Statistical Hand Books of Tirap District, 1972-73, 1975-76 and 1976-77.
² Source : Statistical Hand Book of Tirap District, 1976-77.

Sl. No.	Name of Hospitals/ Health Units with beds	General beds	T.B. beds	Bed for hansen disease	Total
1	2	3	4	5	6
1.	Khonsa	30	10	—	40
2.	Changlang	12	—	—	12
3.	Miao	10	—	—	10
4.	Longding	8	—	—	8
5.	Nampong	8	—	—	8
6.	Manmao	8	—	—	8
7.	Bordumsa	8	—	—	8
8.	Soha	8	—	—	8
9.	Laju	8	—	—	8
10.	Vijoynagar	8	—	—	8
11.	Pongchau	2	—	—	2
12.	Kanubari	2	—	—	2
13.	Deomali	2	—	—	2
14.	Banfera	2	—	—	2
15.	Wakka	—	—	32	32
16.	Senua	2	—	—	2
17.	Deban	2	—	—	2
18.	Diyun	—	50	—	50
19.	Margherita	—	—	—	—
Total :		128	60	32	220

Anti-Malaria Measures

The setting up of an anti-malaria unit at Sadiya in 1952 was the first step taken towards control of malaria in the district. In 1953, four more units were established in the district under the charge of a Senior Malaria Inspector. In the following year, three more units were opened. In 1958, the anti-malaria organisation was brought under the National Malaria Eradication Programme (NMEP), and the anti-malaria units were spread over the entire district in such a way as to combat malaria in a more effective manner. In 1961-62, there were ten anti-malaria teams operating in the district, and 19,491 houses covering a population of 52,137 were sprayed with Dichloro-Diphenyl-Trichloroethane (DDT) powder. In 1966-67, eleven spraying teams and a number of active surveillance workers worked under the National Malaria Eradication Programme. The sphere of NMEP acti-

vities is now much more wider than ever before. An entomological cell is also working in the district. The age group-wise distribution of malaria positive in the district during the year 1975 is as follows:¹

(In number)

Age Group	Blood slides positive	P.v.	SPECIES		Mixed
			P.f.	P.m.	
0 to 1 year	17	15	2	—	—
1 to 4 years	327	269	58	—	—
4 to 8 years	1351	926	425	—	—
8 to 14 years	2522	1714	806	—	2
14 to above	4831	2259	2565	—	7
Total:	9048	5183	3856	—	9

P.v.—*Plasmodium vivax*; P.f.—*Plasmodium falciparum*; P.m.—*Plasmodium malariae*

During the years 1976 and 1977, the total figures of malaria positive inclusive of all age-groups are as follows:²

Year	Blood slides positive	P.v.	SPECIES			Mixed
			P.f.	P.m.		
1976	9029	5652	3356	—	21	
1977	4117	2490	1620	—	7	

¹ Source : Statistical Hand Book of Tirap District, 1975-76.
² Source : Statistical Hand Book of Tirap District, 1976-77.

The surveillance activities and malaria cases radically treated in the district from the year 1967 to 1976 are indicated as follows:¹

Year	No. of Surveillance staff working		No. of blood slides collected	No. of blood slides examined	No. of blood slides found positive	SPECIES				No. of cases radically treated
	Sub-Inspector of Statistics	Domiliary Health Visitor				P.v.	P.f.	P.m.	Mixed	
1967	15	50	23311	23311	2721	1647	1052	3	19	2382
1968	16	52	29666	29666	3675	2451	1211	—	13	3297
1969	16	54	30362	30362	6299	5305	980	—	14	3545
1970	16	53	25454	25432	3624	3005	604	—	15	3466
1971	15	57	27630	27373	5674	3565	2070	—	39	3990
1972	15	*57	**28322	28134	4692	3696	670	—	53	3044
1973	15	57	32250	31850	10372	7701	2616	—	55	5670
1974	15	56	28582	28445	8439	5669	2742	1	27	4526
1975	15	57	29653	29330	9048	5183	3856	—	9	6890
1976	16	58	35369	35269	9029	5652	3356	—	21	6410

The details of DDT spraying operation in the district during 1975 are shown as follows:²

Rounds	No. of NMEP team operation	No. of villages/camps covered		No. of dwelling houses and others sprayed				No. of population covered
				Houses	Cow Shed	Kheti kutir	Granaries Other huts	
		Village	Camp					
1st Round	13	339	87	16801	2184	782	7080	87398
2nd Round	13	287	84	12780	1814	440	5412	69756

DDT spray is carried out every year. Villages and camps which are situated below 762 metres are covered annually by two rounds of DDT spray, and those situated between 762 metres and 1524 metres are sprayed once a year.

Control of Other Serious Diseases Tuberculosis

The B.C.G. vaccination campaign was started in the district in 1957.

* Including one Superior Field Worker.
 ** 188 blood slides found broken.
¹ Source : (a) Statistical Hand Books of Tirap District, 1972-73, 1975-76 and 1976-77.
 (b) Statistical Hand Books of Arunachal Pradesh, 1973-74 to 1976-77.
² Source : Statistical Hand Book of Tirap District, 1975-76.

The details of B.C.G. vaccination carried out from 1968 to 1975 are as follows:¹

(In number)			
Year	Total Registered	Eligible	Vaccinated
1968	100	100	90
1969	7548	2058	1695
1970	—	—	—
1971	44324	22761	17370
1972	27671	15882	14926
1973	6151	3703	3344
1974	22945	11395	6970
1975	698	698	694

Small-Pox

The National Small-pox Eradication Programme (NSEP) was taken up in 1962. There are eight NSEP teams functioning in the district. Preventive measures against small-pox are taken regularly every year by the NSEP Inspectors and Health Assistants. The following table is indicative of the NSEP activities in the district during 1972-73:²

Sl. No.	Name of Location of Units	Primary Vaccination (PV) given (in number)	Re-Vaccination (RV) given (in number)	Total
1.	Khonsa	972	5747	6719
2.	Laju	284	877	1161
3.	Deomali	51	1469	1520
4.	Changlang	1112	2452	3564
5.	Miao	1926	9288	11214
6.	Manmao	566	2847	3413
7.	Nampong	89	492	581
8.	Longding	440	2091	2531
9.	Lu-Banfera	251	720	971
10.	Kanubari	270	1432	1702
11.	Panchao	209	614	823
TOTAL		6170	28029	34199

¹ Source : Statistical Hand Books of Tirap District, 1972-73 and 1975-76.

² Source : Directorate of Health Services, Government of Arunachal Pradesh.

The achievements made by the eight NSEP teams working in the district are as follows:¹

Year	Number of Primary Vaccination (PV) given	Number of Re-vaccination (RV) given	Total number
1973-74	5,330	22,280	27,610
1974-75	5,360	31,980	37,340
1975-76	4,000	19,990	23,990
1976-77	2,412	5,561	7,973

Nutrition

The staple food of the local people consists of millet, vegetables and meat. Rice-beer is also a regular item of their diet. A dietary survey carried out in the Siang District of Arunachal Pradesh showed that the food taken by the Adis was richer in many respects than that of the average Indian peasant. The food was richer by 16 per cent in calorie, 17 per cent in protein, 70 per cent in calcium and 33 per cent in vitamin A. The richness of food is largely due to the rice-beer containing protein and minerals, which supplements the ordinary diet. This example of food value is generally applicable also to the Tirap District, as the food-habit of the people in both Siang and Tirap Districts is basically same. The absence of deficiency diseases like beriberi, rickets, scurvy, pellagra or xerophthalmia in this district shows that the local diet is not lacking in necessary ingredients of a balanced food and nutrition.

Goitre is endemic in certain areas of the district due to scarcity of salt. Steps to eradicate goitre have been taken by distributing iodised salt among the local people.

Sanitation

The sanitary conditions in many villages of the district are deplorable. Places with some sanitary arrangements are very few in number. In fact, the insanitary way of living is often responsible for spread of various diseases that afflict the local people. Villages are generally situated on the top of hills or on a slant, and they are widely separated from each other. The water-sources are remotely located. To make things worse, some of them are not easily accessible. It is difficult for most of the people to get

¹ Source : Statistical Hand Books of Arunachal Pradesh, 1973-74 to 1976-77.

regular supply of water for drinking and domestic purposes. Springs are available in some of the villages, but there are also stagnant pools of polluted seepage or fast flowing streams at the foot of the hills from where the villagers fetch water. The high occurrence of diarrhoea, dysentery and gastro-intestinal diseases in the district is due mainly to the scarcity of drinking water.

The people live in pile-dwellings. Inside the house they keep a constantly burning fire-place in the centre of each room. The smoky rooms without proper ventilation cause eye-diseases, and a good number of them suffer from chronic conjunctivitis resulting in the loss of eye-sight.

It has been one of the constant endeavours of the Government to improve the sanitation of villages. The people are persuaded to clear both the dry and wet refuses, and campaigns through posters and other means emphasising the dangers of insanitary way of living are organised to educate the people. The need for protection of the drinking-water reservoirs from pollution is also explained to them.

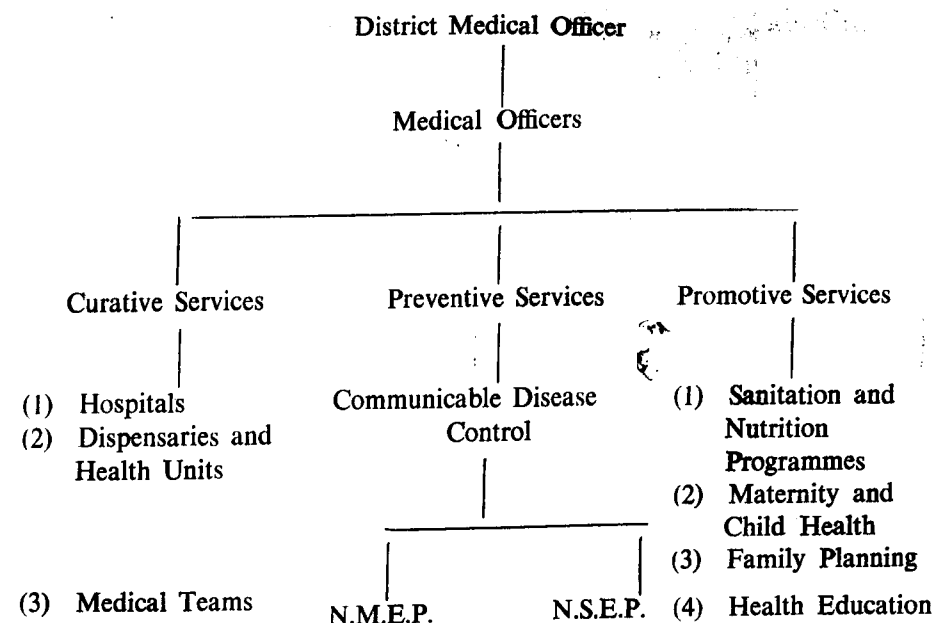
With the spread of education and medical activities in the district, the people are becoming gradually conscious of the health problems and the value of sanitation. Their economic betterment for which various development schemes are being executed would no doubt infuse in them a hygienic sense. About 57 schemes for rural water supply have been implemented in the district till 1975. Steps have also been taken for drainage to prevent logging of liquid wastes and for laying down pipelines in the villages in order to fetch water from perennial streams. Water supply schemes are also included in the Community Development Projects.

Filtered water is supplied to the townships and some villages. Tube wells have been installed in a number of villages and administrative headquarters. Water supply to places at higher altitude is made by gravitation system from nearby streams. Reservoirs have been constructed at different places. Khela, Khonsa, Changlang, Nampong, Namsang, Jairampur and some places have the provision of regular water supply.

Health education is imparted to the villagers by audio-visual and other means, such as magic lantern and film shows, display of posters in schools, health centres and other places. Principles of elementary hygiene and sanitation are explained to the students in schools as also to the village leaders.

Medical Organisation

The District Medical Officer is the head of the medical organisation in the district. He is assisted by medical officers and other subordinate staff. He is also the inspecting officer of all government hospitals and dispensaries in the district. The set up of the medical organisation is as follows :



Old Beliefs and Methods of Treatment

A common belief of the old days which works in the minds of the local people is that diseases are caused by evil spirits. The concept is what is spiritually caused can be cured spiritually. Sacrifices of animals and exorcisms are, therefore, necessary to appease the hostile spirits causing diseases. The people have their own indigenous methods of diagnosis and cure. Herbs and leaves of some wild plants are used by them as medicines. An account of the ways and means by which diseases are dealt with according to the old beliefs is appended below :

Among the Singphos

The Singphos believe that the diseases are caused by some malignant spirits called *nats*. There are eighteen such *nats* and they are responsible for all kinds of diseases. Pigs, fowls and dogs are sacrificed to them in order to get rid of their evil influences.

Singlap is considered as the most powerful *nat*. Barrenness of a woman is imputed to it. *Monu Nat* is responsible for accidents, body injury and scabies. Propitiation of both these *nats* is done by sacrificing buffaloes. *Tisan Nat* is believed to have the power of causing miscarriage or death of a baby in the womb. So it is propitiated in the fifth month of pregnancy.

Nimon Nat, a female spirit, causes fever at night. She is propitiated with a pig and a chicken. When *Murong Nat* attacks a man, he suffers from drowsiness and pain in the joints. Sacrifice of a red chicken is required for propitiating the *Singran Nat*. Bleeding from a wound, drunkenness and stomach pain, cold, cough or night blindness are ascribed to the malign influence of *Ningse Nat*. A buffalo is sacrificed to repel the evil influence of the spirit. Pain in body and joints is ascribed to a human-like spirit called *Finin Finim*. *Khumbang Sawa Nat* is believed to be the main spirit responsible for blood vomiting, skin disease, cough and cold. Animals are sacrificed to appease him.

For prolonged and chronic diseases, which the Singphos call *anas*, medicinal herbs are generally used as antidotes.

Some of the diseases and indigenous methods of treatment done by the Singpho medicine-men are as follows:

Disease	Symptom	Treatment
1) <i>Muksa Ana</i>	Swelling of the testicles and pain in the testicular nerve along with high fever	Rhizome of <i>inggong koru</i> (a kind of plant) roots of a creeper (called <i>keepa pot</i>), rhizomes of <i>inggu khongpat</i> and <i>gunkai kan</i> , two kinds of creepers, leaves from <i>nemimo lap</i> tree and seven pieces of ginger are pounded together into a paste and applied locally while the juice is taken orally.
2) <i>Bengi Ana</i>	Difficulty in passing urine	a) Seven pieces of root of a plant called <i>kinjiri sing</i> and seven black peppers are boiled in a little quantity of water, and the juice is taken in one dose. b) The urine of a flying squirrel is collected and seven grains of bora rice are soaked in it. Then the rice grains are dipped in a little water and given to the patient.

Disease	Symptom	Treatment
3) <i>Tan Ana</i>	Swelling of the cheek and coming of pus from the ear	Seven small pieces of the root of <i>bantroru</i> creeper, seven shoots with leaves of <i>chumon mulung</i> plant, roots of <i>ura</i> (bamboo), roots of <i>umkan lufo</i> plant, cloves, seven grains of salt are boiled together in a bamboo <i>chunga</i> and the juice is taken in few doses.
4) <i>Yokho Muchi Tai</i>	Severe pain in the throat	a) The cotyledonous part of seeds of <i>khinrimsi</i> tree is burnt and given to the patient to take. b) A paste made of roots of <i>nokhurru</i> plant, two black peppers and salt are given to the patient. A paste is made of <i>Mishmi teeta</i> (kasturi) and a little quantity of the spleen of of a bear. It is then applied locally.
5) <i>Waluting</i>	Tooth-ache	Til oil, musk, frog's blood, toad's feet and roots of <i>bukung map</i> in varying proportions are mixed together. The finer part of the paste is then applied locally with the feather of a black hen.
6) <i>Na Michitai</i>	Wounds inside the ear	A stem of betel leaf vine, a little quantity of <i>singchum</i> , spleen of 'Gui', spleen of a black cobra, a tooth of a jungle rat are grounded properly into a paste and applied locally. The wounded part is washed with the juice of <i>nimum lap</i> leaves before the medicine is applied.
7) <i>Kalong Ki</i>	Wounds in the genital part or venereal disease	

Disease	Symptom	Treatment
8) <i>Misit</i>	Leprosy	A kind of insect called <i>kosang</i> , spleens of a wild bear and of a tiger are mixed with some quantity of 'jokhar' and 'gondhok'. The affected portion is washed thoroughly with the juice of <i>impipatlap</i> leaves and then the paste is applied locally.
9) <i>Muksha tu Ana</i>	Dysentery	Outer cortex of <i>vangroi phun</i> and <i>puhen fi</i> trees, green shoots of <i>juhon chan phun</i> tree, tuber of <i>pokha sikao</i> (a kind of wild onion), three black peppers and salt are pounded together and then boiled in a bamboo pipe (<i>chunga</i>). The juice is taken by the patient.
10) <i>Pingkhan Ana</i>	Cholera	Bark of <i>uriyam</i> and <i>khnu phun</i> trees, roots of a kind of fern called <i>bih longoni</i> and rice-grains are pounded together and its juice is given to drink.
11) <i>Nipu Chuwadai</i>	Snake-bite	Roots of a small herb called <i>kongkanru</i> are pounded and the juice is taken out. A silver coin is rubbed on a stone and dipped in water. This process goes on till the water becomes silvery. The juice is then mixed in the water and the mixture is applied round the bitten spot.

Among the Noctes

The belief that diseases are due to the actions of evil spirits is also prevalent among the Noctes. Hence, they make appropriate sacrifices to satisfy the spirits. The spirit *Kangsak* makes a man speechless and a big pig is to be offered to appease it. The powerful spirit *Bolinang Thang* can turn a man mad, but it could be pacified by offering a white chicken. *Bekom* is another such powerful spirit which can cause bleeding from the nose and pain in the joints. To appease the spirit a squirrel is killed in the jungle with bow and arrow, or a hen is let loose in the jungle or a pig is sacrificed in the name of the spirit.

Witchcraft is also known to the Noctes. It is usually practised by some women adept in the art of black magic. At times the villagers seek their help for treatment of patients.

There are also medicine-men among the Noctes. Herbs are used by them as medicines. Some of the diseases and their treatment by these medicine-men are as follows:

1. Snake-bite — A kind of creeper called *somha ru* is cut to pieces and boiled, and then its juice is applied as medicine.
2. Bone fracture — A paste made out of leaves of a creeper called *ranges* is applied locally.
3. Acute pain — *Kachup* leaves are slightly warmed over the fire and massaged in the affected portion.

Among the Wanchos

The Wanchos believe that diseases are caused by a malignant spirit called *Bau-rang*, the earth god. According to the prescription of the diviner and priests, pigs and chickens are sacrificed to appease him and to ward off his malign influence.

Medicine-men are found among the Wanchos as well and their treatments of certain diseases are believed to be very effective. Some of the common diseases in local names, the symptoms and methods of treatment are as follows:

Disease	Symptom	Treatment
1. <i>Khangkak</i>	Headache	An egg shell is ground into powder and then rubbed locally for relief of the pain.

<i>Disease</i>	<i>Symptom</i>	<i>Treatment</i>
2. <i>Woklok</i>	Stomach pain	A little quantity of opium is mixed with water and given to drink.
3. <i>Maipong</i>	Pain in the joints	A piece of dry fish, few pieces of mithun and pig meat are put in a bamboo tube, half filled with water. Then three stones after being sufficiently heated are placed in the tube. The patient is required to inhale the vapour coming out of the tube.
4. <i>Haikak</i>	Cough	Few pieces of ginger and some <i>maked</i> , a local black pepper, are taken together.

Among the Tangsas

The Tangsas believe that evil intentions and activities of malevolent spirits are responsible for various diseases which afflict the human beings. These spirits are named by them.

The Mosangs attribute the cause of diseases like fever, headache, pain etc. to some evil spirits. The Lungris believe that all accidental deaths are due to the evil actions of a particular malevolent spirit. The Ron-Rangs name a number of spirits who are responsible for fever, stomach trouble, blood dysentery and so on. Each spirit, according to them, causes a particular disease. The Khemsings and the Yoglīs have also a similar belief in the spirits that bring sorrow and misery to their lives.

The idea of the evil spirits led the Tangsas to believe that diseases can be cured by propitiation of the spirits, and for this purpose they perform ceremonies involving divinations, incantations and sacrifices of pigs, fowls, rice-beer etc. The use of medicines was very rare among them. Although the ideas and beliefs about diseases are now undergoing a gradual change with the extension of medical help and facilities, they still have a deep-rooted faith in their own cures.

Important Local Herbs and Their Effectiveness

Some of the local herbs used by the tribal medicine-men for treatment of patients are known to be very effective. Investigation into the efficacy of these local medicinal herbs and aromatic plants is likely to enrich our knowledge of medicines. A medicinal herb known locally as *omerinko* or *arong* and botanically as *coptis teeta*, the dried rhizome of which is familiarly known as Mishmi teeta, has been found in this area. Since 1956, at least twenty different herbs and plants have been analysed besides *coptis teeta*. One of these herbs is said to possess properties comparable to cocaine.

CHAPTER XV

PUBLIC LIFE AND VOLUNTARY SOCIAL SERVICE
ORGANISATIONS*Representation of the District in the State and the Union Legislatures*

Under the Government of Union Territories Act, 1963 (20 of 1963) as amended by the Government of Union Territories (Amendment) Act, 1975 (29 of 1975), both coming into force from August 15, 1975, the Union Territory of Arunachal Pradesh has two seats in the Lok Sabha, i.e., the House of the People. The territory has been divided into two parliamentary constituencies—(1) Arunachal West and (2) Arunachal East. The Tirap District is included in the Arunachal East constituency.

According to the provisions of the said Acts and the Order of the Election Commission made in respect of the delimitation of assembly constituencies, the district of Tirap is represented in the Legislative Assembly of Arunachal Pradesh by six members elected from the following single member territorial constituencies:¹

<i>Name of Constituency</i>	<i>Extent of Constituency</i>
1. Noadihing-Nampong	Miao, Deban and Vijoynagar, Circles in the Miao Sub-division and Nampong Circle in the Changlang Sub-division.
2. Changlang	Changlang and Manmao Circles in the Changlang Sub-division.
3. Khonsa South	Laju Circle and the villages in Khonsa Circle lying to the South and South-West of the Metal road connecting Changlang, Khonsa and Longding.
4. Khonsa North	Namsang Circle, Khonsa town and Khonsa Circle excluding the villages in the Khonsa Circle falling in the Khonsa south constituency.

¹ The Arunachal Pradesh Gazette, Extraordinary Issue No. 42, Itanagar, dated November 5, 1975.

5. Niauxa-Kanubari Niauxa (Longding) and Kanubari (Banfera) Circles in the Longding Sub-division.

6. Pongchau-Wakka Pongchau and Wakka Circles in the Longding Sub-division.

Political Parties

The Janata Party and the People's Party of Arunachal were the two main political parties working in the district. The Indian National Congress also exercised considerable influence in the area at the time of the Lok Sabha election in 1977.

In the General Election to the Lok Sabha held for the first time in the Union Territory of Arunachal Pradesh in the month of March 1977, Shri Bakin Pertin, an independent candidate, was elected from the Arunachal East Parliamentary Constituency comprising the Tirap District. His nearest rival was a Congress candidate.

In the first General Election to the Legislative Assembly of Arunachal Pradesh, held in the month of February, 1978, there were two political parties, the Janata Party and the People's Party of Arunachal, in the field contesting for six assembly seats of the district. The Janata Party put up candidates for all the seats, while the People's Party contested for four seats. A Janata Party candidate was declared elected unopposed from the Niauxa-Kanubari constituency. As for the remaining five seats, sixteen candidates contested. There was a straight contest only in the Pongchau-Wakka constituency between a Janata Party candidate and an Independent candidate.

The results of the election are as follows:¹

<i>Parties</i>	<i>Number of Seats Won</i>	<i>Name of Candidates Elected</i>	<i>Name of Constituency</i>
The Janata Party	4	Shri Tengam	Changlang
		Shri Nokmey Namati	Khonsa North
		Shri Noksong Boham	Niauxa-Kanubari
		Shri Wangnam Wangshu	Pongchau-Wakka
The People's Party of Arunachal	2	Shri Jungpum Jugli	Noadihing-Nampong
		Shri Sijen Kongkang	Khonsa South

¹ Source : (a) The Arunachal Pradesh Gazette, Extraordinary Issue No. 61, Itanagar, dated March 9, 1978.
(b) Arunachal News (Shillong, February-March, 1978), Vol. No. 7, No. 1, pp 1-2.

Except for the Niausa-Kanubari constituency returning a candidate uncontested, the total number of electorate in the other five constituencies was 32,634, while the aggregate percentage of valid votes polled was 65.60.

Voluntary Social Service Organisations

Some of the voluntary social service organisations functioning in the district are as follows:

- (1) The Ramkrishna Mission,
- (2) The Sarada Mission,
- (3) The Bharatiya Adimjati Sevak Sangh, Nampong and
- (4) The Bharat Seva Mission, Borduria.

These organisations have been working in different areas of the district for social welfare, educational and cultural development. The Ramkrishna Mission Boys' School near Deomali and the Ramkrishna Sarada Mission Girls' School at Khonsa are among the best educational institutions in Arunachal Pradesh. The Bharatiya Adimjati Sevak Sangh, an old Indian institution, has three centres in the district for tribal welfare especially of children. The Bharat Seva Mission has organised four medical centres in the district. They also render services to promote social education. Besides them, there is the International Brotherhood Mission at Miao, which is working for the well-being of children. The institution has 50 students on its roll.

Some social and cultural societies have also been formed in the district for preservation and development of the age-old tradition and rich heritage of the people. They are as follows:

- (1) The District Social and Cultural Society, Khonsa,
- (2) The Tangsa Cultural Society, Tirap and
- (3) The Nocte Cultural Society, Khonsa.

The social service organisations are given necessary assistance and grant-in-aid by the Government.

Social Welfare Advisory Board

The Arunachal Pradesh Social Welfare Advisory Board, constituted in 1963, has been executing various welfare programmes for women and children through the Welfare Extension Project Centres under the Project Implementing Committees. There are two Project Implementing Committees in the district, one at Changlang and the other at Khonsa. Under these Committees there are five Welfare Extension Project Centres located at Changlang, Rangkatu, Lapnan, Kaimai and Nianu. Each of the Welfare Extension Project Centres is staffed by one Gramsevika, who looks after

the Balwadi (pre-basic school), adult education classes, craft classes etc, and one *Dai* attending to maternity cases. These centres serve as small health units providing first aid services to the local people.

The Board receives grant-in-aid from the Union Territory Government and financial help and assistance from the Central Social Welfare Board for implementation of its various welfare programmes.

The welfare programmes undertaken in the district by the board for implementation through the Welfare Extension Project Centres pertain, among other things, to the following:

(1) *Balwadi (Pre-Basic School for Children)*—The Balwadis of the five Welfare Extension Project Centres provide the children elementary education through recitation of nursery rhymes and English alphabet, demonstration of toys, numerical blocks etc. Apart from giving nutritious food to the children, the Balwadis also look after their bathing and clothing. In 1977-78, there were 234 children in the Balwadis in the district.

(2) *Nutrition Programme*—The Supplementary Nutrition Programme sponsored by the Central Social Welfare Board and the Union Territory Government has been extended to the Balwadis attached to the Welfare Extension Project Centres.

(3) *Free Medical Aid to the Villagers*—Medical care is rendered freely by the trained *Dais* to patients in villages and the Welfare Extension Project Centres. Maternity, pre-natal and post-natal, services are also rendered by the *Dais*.

(4) *Social Education*—Lectures are given to the villagers regularly by the Gramsevikas at the time of visiting their houses on personal hygiene, child care, importance of sanitation etc.

(5) *Condensed Course of Education for Adult Women*—This programme aims at holding classes by the Gramsevikas for education of adult women.

(6) *Vocational Training*—Under the Vocational Training Programme, various arts and crafts, such as weaving, sewing, tailoring, knitting etc are taught to the village women. Besides these, the women are also given instructions in culinary and household matters concerning preparation of nutritious food, preservation of food, kitchen gardening, flower gardening etc. At the initial stage, attempts are being made to impart training in weaving.

(7) *Mohila Mandal*—A Mohila Mandal has been organised at Goju village, Bordumsa in the district.

(8) *Cultural and Recreational Activities*—The Gramsevikas organise folk song, folk dance etc, and sports and games in each of the Welfare Extension Project Centres.

CHAPTER XVI

PLACES OF INTEREST

The Tirap District is a south-western projection of Arunachal Pradesh in its eastern extremity. It has an international border with Burma, which runs along the crest of the Patkai Hills on the south-east. Indeed, it is the gateway to India in the east. From times immemorial, waves of tribal migration flowed to India across the Patkai and its ridges descending into the stretch of land watered by the Burhi-Dihing, Noa-Dihing and their tributaries.

The district is a mountainous area with a crestline ranging from an average of 1,829 metres to 4,571 metres. The tangle of hill ranges decked with sub-tropical forests and the luxuriant growth of vegetation at the foot-hills, winding rivers and innumerable rivulets cascading from the hills and flowing through the green expanse of the dales and valleys and the serenity of the countryside are features of the beautiful landscapes of Tirap.

Verrier Elwin writing about the Tirap District says, "In the old days, mothers in the plains of Assam used to subdue naughty children by telling them if they didn't behave, the Rang-pangs would come and carry them off. No one quite knew who the Rang-pangs really were, and in actual fact no such tribe exists, but they were supposed to live in fortified villages along the Patkoi Range which separates India from Burma. Thence they would descend on the plains, and carry off men, women and children to slavery and even for sacrifice. I once made a lengthy tour along the formidable slopes of the Patkoi and one day came to a valley which was said to be their traditional home. It was a valley to tempt the myth-maker to excess; I cannot think what Herodotus would have made of it. The hills descended precipitously to a raving stream cascading down from the great ridge above; winds thwarting winds 'bewildered and forlorn'; bent the trees before them; and on a crag above there was a lonely village, aloof, witch-haunted—the clouds lay low about it. Yet when I went there I found the people very agreeable; they were hospitable, friendly, kind, a little suspicious at first, but far from being the monsters of popular legend".¹ Indeed, here in the district of Tirap live groups of tribal people who are as welcoming as their country.

¹ Verrier Elwin, *A Philosophy for NEFA* (Shillong, 1964), pp. 24-25.

The establishment of a regular administration and the developmental and welfare activities that are being carried on have brought about far-reaching changes in this district and in the life of the people living here. Places which were remote or unapproachable previously are now connected by a net-work of roads and some of them may even be reached by air or motor vehicles. It is, therefore, also a matter of interest to know how the places in this formerly little known district are springing up as new townships and developing villages.

Some of these places of interest, briefly described as follows, merit particular mention:¹

BANFERA (LU)

Banfera also called Lu is a Wancho village with a total population of 758 persons. It is also the headquarters of an administrative circle in the Longding Sub-division. It has a health unit and a school.

Banfera is also called Runu after the name of the Rujan clan who were its earlier settlers. S. E. Peal, a famous explorer, came to this place in 1872, and met the Chief of Banfera.

In the present site of Banfera village, there were two other villages of two groups of people called Kan and Man. It is said that the inhabitants of Wannu, a Wancho village, drove them out to the plains and established the present Banfera village. The Kans went to the plains of Assam and established a village there, which is now known as Kanubari. An elder brother from the chief's family of Wannu came to rule over the Banfera village, and hence it is now recognised as an elderly village of the Wanchos.

BISA

Bisa is situated on the bank of the Kharem stream, two miles north of its junction with the Burhi-Dihing. A century ago, S.E. Peal observed that the people of this village traded in rubber. Bisa was also a stronghold of the Singphos. The Chief of Bisa played an important role in the history of the district. Bisa was besieged a number of times by the British.

BORDUMSA

Bordumsa, about 130.20 km from Khonsa, is the headquarters of an important administrative circle in the Miao Sub-division. The village was

¹ The population figures shown in this chapter are based on the 1971 Census.

established by the Dumsa clan. The circle headquarters and the village have a total population of about 442 persons. A health unit has been established in this village. The place has been electrified since 1969.

BORDURIA

Borduria is a very important Nocte village in the Khonsa Sub-division, inhabited by about 855 persons. There is a craft centre in this village. Electricity has been extended to this village since 1976.

The Nocte name of the village is cha-la, *cha* means tiger and *la* kite. The name Borduria was given by the Ahom kings. The original name was Borduwaria, meaning the people of the main gate, *bor* for big and *duwar* for door or gate. It is said that the Ahom kings made friendship with the Chief of Borduria and appointed him the keeper of the main gate for which he was called Borduwaria.

CHANGLANG

A small township has developed at Changlang at an altitude of 549 metres. Changlang is a sub-divisional headquarters in charge of an Extra Assistant Commissioner. The teachers' training institute called Buniadi Siksha Bhavan, the only one of its kind in Arunachal Pradesh, is situated here. The institute provides different training courses to the teachers attached to various schools in Arunachal Pradesh.

A large number of Tibetan refugees have been rehabilitated in two newly established villages, a few miles away from Changlang township.

Changlang is only 72 km from Khonsa. It has a 12 bedded health unit and a craft centre. The township has been electrified since 1967. The total population of Changlang is 1,779 persons.

DEOMALI

Deomali, a charming resort by a small river winding through a luxuriant forest, is close to the boundary of Assam, and connected with Khonsa and Naharkatiya in Assam by road. Besides being the headquarters of the Divisional Forest Officer, Khonsa Forest Division and the Arunachal Pradesh Forest Corporation Ltd, its importance lies in the fact that two forest-based medium-scale industries, namely the Nocte Timber Company Ltd and the Narottam Co-operative Industries Ltd producing veneers, tea-chests, ply-board etc, are at this place. These apart, another local industrial enterprise, a saw mill, namely the Narottam Udyog acting as a commercial agent to the Narottam Co-operative Industries, also produces veneers.

The Ramkrishna Mission Boys' School near Deomali is one of the model educational institutions of Arunachal Pradesh. Deomali has still other attractions. It has a beautiful cultural centre, a park and an experimental farm growing coffee, cocoa and various aromatic plants.

The climate of the place is moderate and pleasant. It has a health unit. Deomali has been provided with electric lights since 1968.

DIYUN VALLEY

Diyun Valley is famous for many rare species of fauna. One-horned rhinos were also seen previously in this valley, but now they are almost extinct. This is an ideal place for a wild life sanctuary.

GANDHIGRAM

Gandhigram is a very well organised village inhabited by the Lisus. The population is about 885 persons. It is about 12 km away from Vijoynagar, which it links by a bridle path.

JAIRAMPUR

Jairampur, a place after the name of Shri Jairamdas Daulatram, the then Governor of Assam, is in the Nampong circle of the district, about 45 km from Margherita with which it is connected by a motorable road. It has a population of 2670 persons. It has a High School and a saw mill. Electricity has been extended to this place.

KANUBARI

Kanubari, about 144 km from Khonsa, is situated in the Longding Sub-division. It has a small population of only about 68 persons. Kanubari is connected with Longding as well as Sapekhati in the plains of Assam by road. A health unit has been established here. Tea plantation has been introduced in the Kanubari area on an experimental basis.

KHANU

Situated on the northern slope of the Patkai, Khanu is one of the large and important Wancho villages. It had satellite villages across the Patkai in Burma, which owed allegiance to it. Its nearest circle headquarters is Wakka.

Khanu was outside the sphere of regular administration till 1956. It was first visited by Dr. S. K. Chatterjee, then Medical Officer, Niauxa in response to a call from the villagers for medical aid.

KHELA

Khela was the headquarters of the district from 1955 to 1959. The headquarters were shifted to Khonsa in 1959. With a population of about 293 persons Khela is now a developed place in the Khonsa circle. It has a model garden for coffee and rubber, and nurseries for cardamom.

KHONSA

Khonsa is the district headquarters since 1959. An administrative centre was opened here in 1954. It has now developed into a town with electricity, telegraph, telephone and water-supply facilities. There is a regular bus-service between Khonsa and Naharkatiya in Assam. It has road communications with other sub-divisional headquarters in the district. Situated on the ledges and slants of hills, Khonsa is a beautiful place with picturesque spots all around. A Higher Secondary School and a model residential girls' school, a library and a museum, a 30 bedded district hospital, a district emporium and a craft centre are among its important institutions. The local people are the Noctes.

Lying at a high altitude surrounded by hills, Khonsa looks like a bowl-shaped place. The total population is about 2,857 persons. It enjoys a moderate climate.

LAJU

Laju is the biggest Nocte village in the district. Situated at an altitude of about 1676 metres, the place is inhabited by about 1,610 persons. Laju is a circle headquarters in the Khonsa Sub-division. It has a health unit and a craft centre.

The place has been electrified since 1970.

LAPTANG

Laptang is one of the old villages of the Noctes. One Khunbao of this village was the first Nocte chief. The Noctes call the village Long-than (*long* for stone, *than* for seat). The village is situated in the Khonsa sub-division. It is inhabited by about 374 persons.

LONGDING

Situated in the south-western part of the district, Longding is a beautiful

sub-divisional headquarters with a wide open view of hill ranges. The Wanchos constitute the local population of about 529 persons. Longding is connected with Khonsa, the district headquarters, by a road. There is a health unit, a Higher Secondary School and a craft centre.

Longding has been electrified since 1973.

LONGPHONG

Longphong is a village in the Longding sub-division. It is about 17.5 km from Longding by road. The local people are the Wanchos and the population is about 823 persons. An unit of the Bharat Seva Mission is situated at this place.

MIAO

Originally a Singpho village, Miao, about 147 km from Khonsa, has now become an important administrative centre and a sub-divisional headquarters. It is inhabited by a number of Singpho clans and the Tangsas. There is a bus service between Miao and Margherita. Most of the Chakma refugees from the erstwhile East Pakistan have been rehabilitated around Miao.

Miao has a 10 bedded health unit and a saw, mill. It has been provided with electricity since 1971. The population is about 742 persons.

NAMPONG

Namong, a circle headquarters, is situated in the north-eastern part of the district, about 153.6 km from Khonsa and 64 km from Margherita in Assam by road. It has a population of about 656 persons.

There is a health unit. Nampong has been electrified since 1969.

NAMSANG

Namsang is one of the old villages of the Noctes in the Khonsa Sub-division. It has now become an important circle headquarters. The population is about 360 persons. The Nocte name of the village is Thiniang, *thin* for village and *nyan* (*anyan*) for new, meaning new village. The name Namsang was given by the Ahom kings.

Namsang is about 59.2 km from the district headquarters at Khonsa. Electricity has been extended to this place in 1974.

NIAUSA

Situated in the Wancho area at a distance of 49.6 km from Khonsa.

Niausa, a circle headquarters in the Longding Sub-division, has a population of about 954 persons. The place is connected with Khonsa by road.

NINU

Ninu also spelt Nginu is the biggest Wanchos village inhabited by about 1,584 persons.

At this village, Lt. Holcombe and eighty persons of his survey party were massacred by the Wanchos in 1875¹. Punitive military expeditions sent out to avenge the massacre resulted in the destruction of the Ninu village. During the course of these expeditions Senua, Longkai and Nisa villages were also ravaged.

An interesting description of the Ninu village during the expedition as given by R. G. Woodthorpe is as follows :

"The scenery was magnificent ; a high, darkly-wooded range behind Ninu descends abruptly for about 1,500 feet, when it suddenly changes its precipices for beautiful open undulating country, well watered by a succession of clear, babbling streams, at the cool waters of which, in the deep shade of clumps of trees, dotted along their banks, magnificent *methna* (mithun) quench their thirst ; across the Dili, into which these streams all flow, rise other lofty hills wooded along the ridges, but cultivated below on the more gentle slopes, over which the cloud-shadows are lazily moving, and on which numerous villages glitter brightly. To our left the high peaks of the Patkai range lose their outline in the hot and hazy atmosphere ; it is a beautiful country and today basking in the still sunlight all is so calm and peaceful before us, it would seem almost impossible that treachery and murder could find a place here ; but the black cloud already darkening the sky and changing the blue of the air to a murky brown, the roar of the flames and crashing of timbers behind us, and the thought of the scene of the massacre, which is still before us, remind us of the eternal truth that even in earth's fairest spots the fiercest passions of man may make their home"

PONGCHAU

Pongchau, a circle headquarters in the Longding Sub-division, is situated in the south-western part of the district. It is connected with Khonsa, the district headquarters, via Longding by a 86.4 km road. The trijunction of Burma, Nagaland and Arunachal Pradesh is visible from this place. The

¹ See Chapter II for details.

² Verrier Elwin, India's North-East Frontier in the Nineteenth Century (London, 1962), p. 82.

view of the high hills gradually descending towards Nagaland is magnificent. It has an inter-village Middle School, a health unit and a craft centre. Electricity has been extended to Pongchau in 1973.

PRITNAGAR

Pritnagar is situated in the Vijoynagar circle, about 7 km south of Vijoynagar by a foot track. This place may be called a holiday resort for its scenic beauties and a beautiful lake.

RUSA

Rusa is an important Wanchos village in the Banfera Circle of the Longding Sub-division. It is inhabited by about 792 persons. The village was called Kholuniya by the Ahoms — a fact reminiscent of the old Ahom-tribal relations.

SOHA

Soha is situated at a distance of 19 km from Namsang by road. The Noctes constitute the local population of about 725 persons. Soha is famous for its orange. There is a health unit at this place.

VIOJYNAGAR

Situated at an altitude of about 1372 metres, Vijoynagar is a well-known circle headquarters in the Miao Sub-division. Relics of a Buddhist stupa and Buddha images have been discovered in the near vicinity of Vijoynagar. It has among other important institutions a health unit and a craft centre. Electricity has been extended to Vijoynagar. The population is about 257 persons. The place, locally called Jahu-Natu, has been named Vijoynagar after the name of the son of Maj General A.S. Guraya whose expedition led to the establishment of an outpost at this place in 1962.

WAKKA

Wakka is a large Wanchos village situated at an altitude of about 1372 metres. It has a health unit and a school. Wakka, a circle headquarters in the Longding Sub-division, is only 64 km from Khonsa. The total population of the place is about 1,202 persons. Wakka has been electrified since 1974.

WANNU

Wannu is a Wancho village in the Banfera circle inhabited by about 888 persons. It is said to be the first village established by the Wanchos after they had migrated to this district. Five families staying at Wannu village were Ralang, Arang, Pongla, Niyamik and Yanko. They are regarded as five original clans of the Wanchos. Among them the chief was selected from Ralang family. The village was the centre of migration of all the different clans of the Wanchos.



A landscape in Tirap



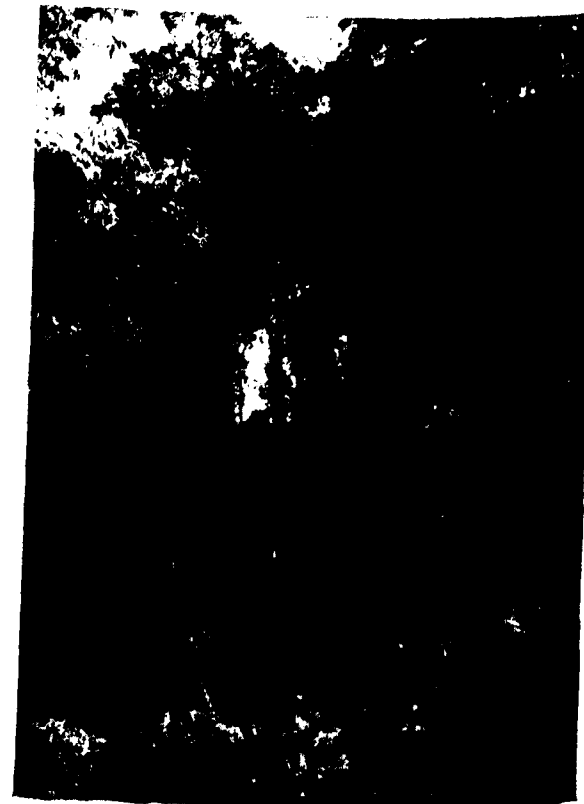
A topographic view from Miao



A riverscape



Wild elephants of the Namsang forest



A forest of tall trees in Deomali



A tamed elephant pulling a log from the forest



'There in our hills dawns a new era of progress'



A Nocte girl carrying water in bamboo tubes



The Wancho Chief of Nginu village



A Tangsa mother and her child



A Nocte girl with ornaments



A Tangsa man repairing his fishing net



A Waicho girl in ceremonial dress



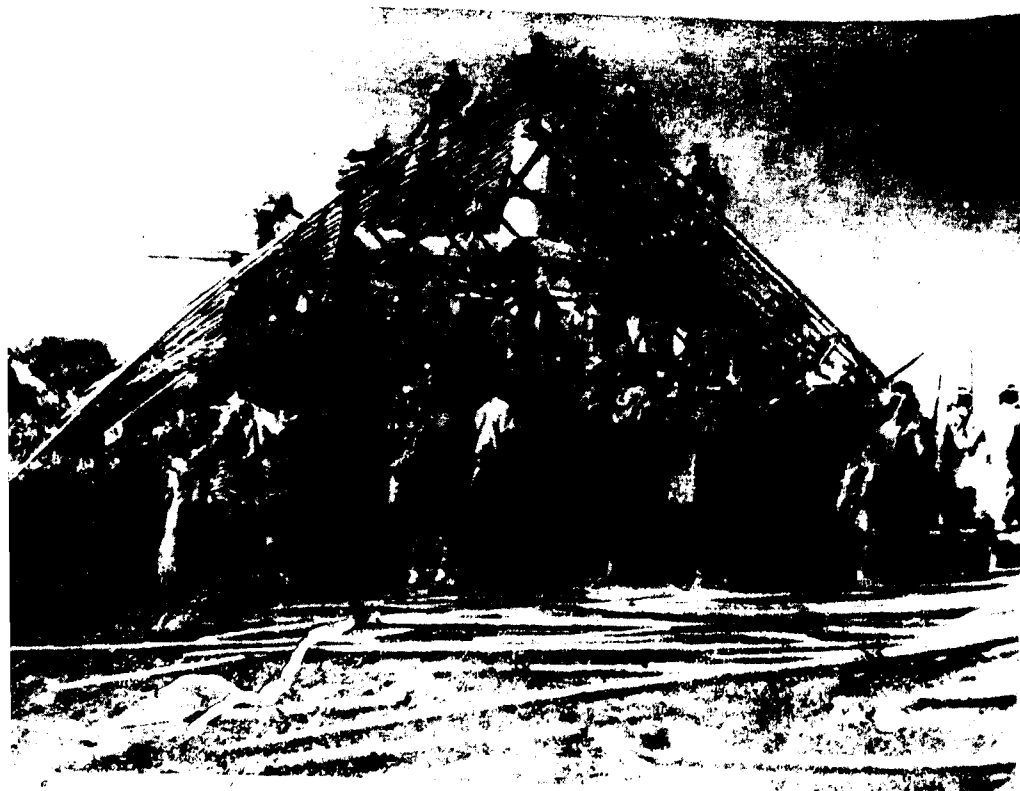
An old Tangsa lady carrying a basket



View of a Nocte village



A morung (dormitory) at the Nocte village of Laptang



A Nocte Chief's house under construction at Borduria



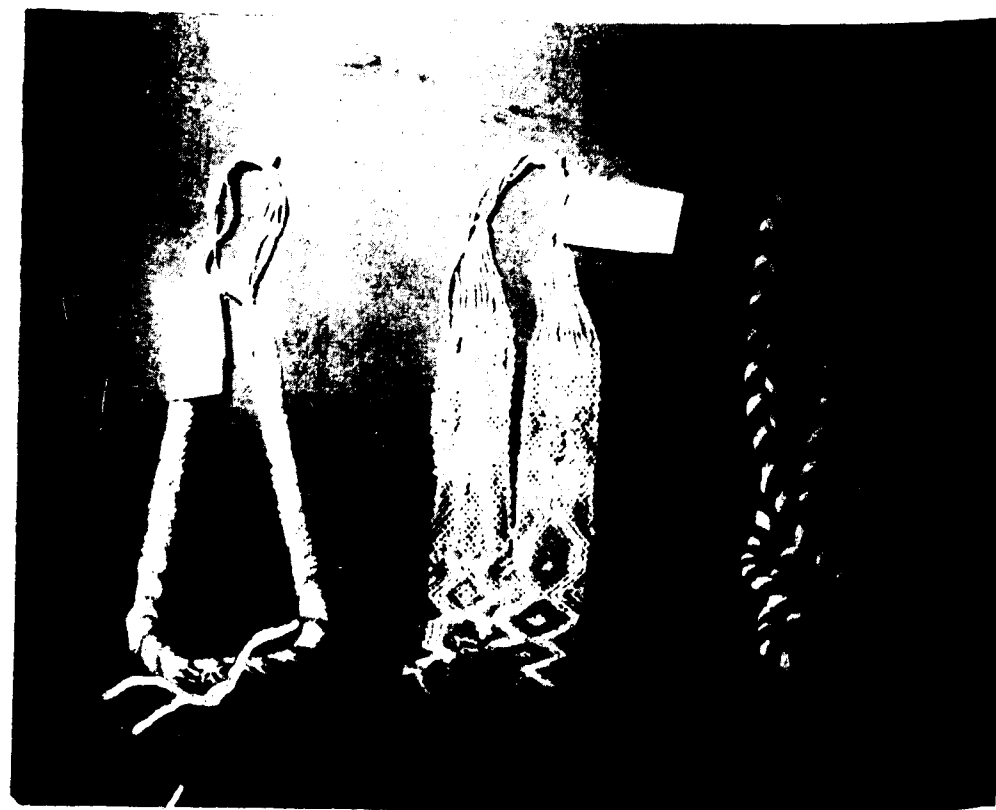
A Wancho house



Yobin (Lisu) girls in ceremonial dress



A group of Singpho boys on a festive occasion



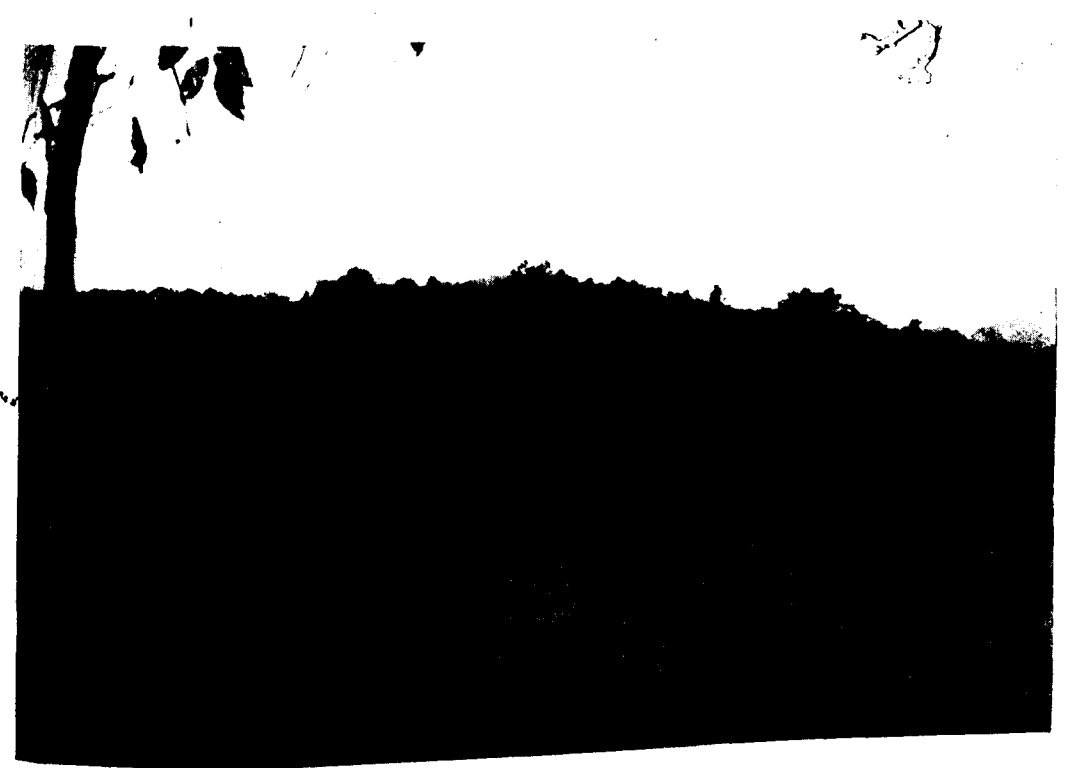
Bead necklaces of the Wanchos



A drummer



The Loku festival of the Noctes a group dance



Wet-rice cultivation in the Changlang area



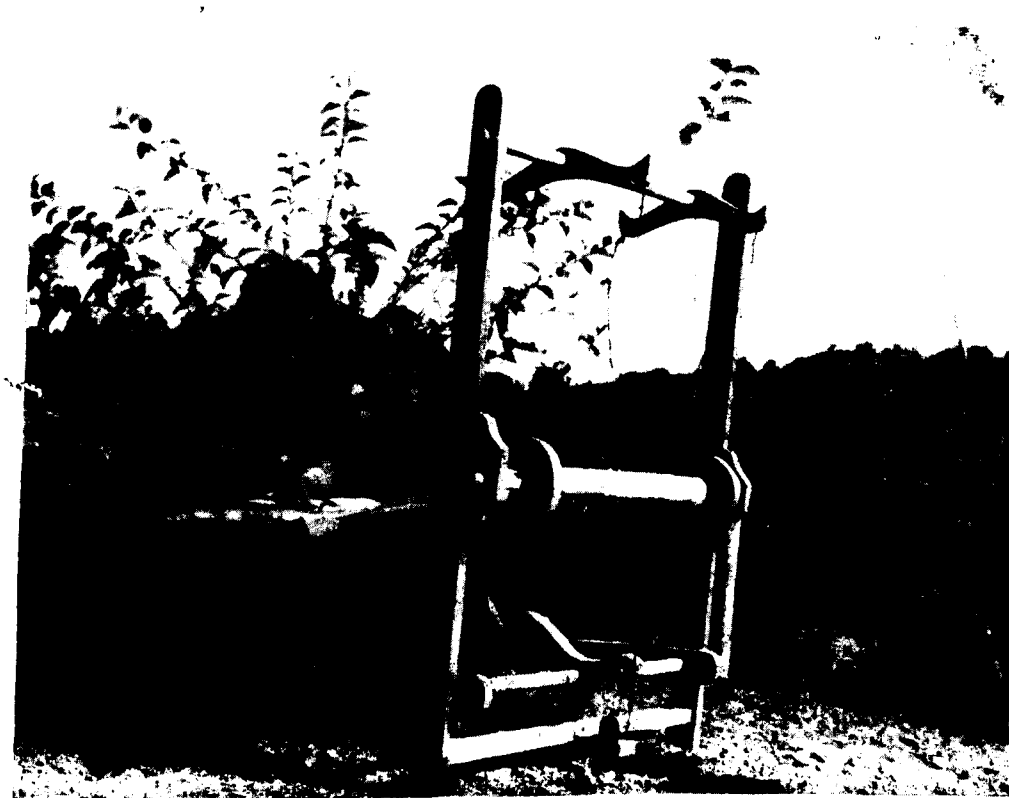
The Mo festival of the Tangsas



Rice-winnowing



Tangsa woman at her loin-loom



Weaving at a fly-shuttle loom



A Tangsa belle



Carpet-making in the Craft Centre at Changlang



A Wancho wood-carver



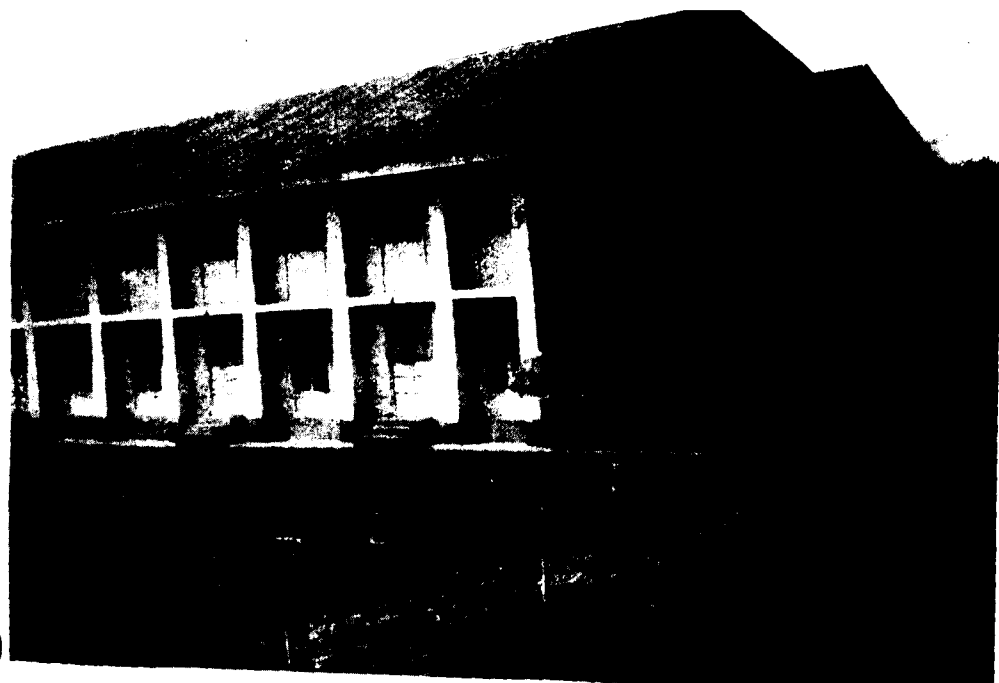
A view of the Lapnan village under electrification



A Wanchy youth with tattoo-marks



D.D.T. spraying in the Namsang village



An auditorium at Changlang



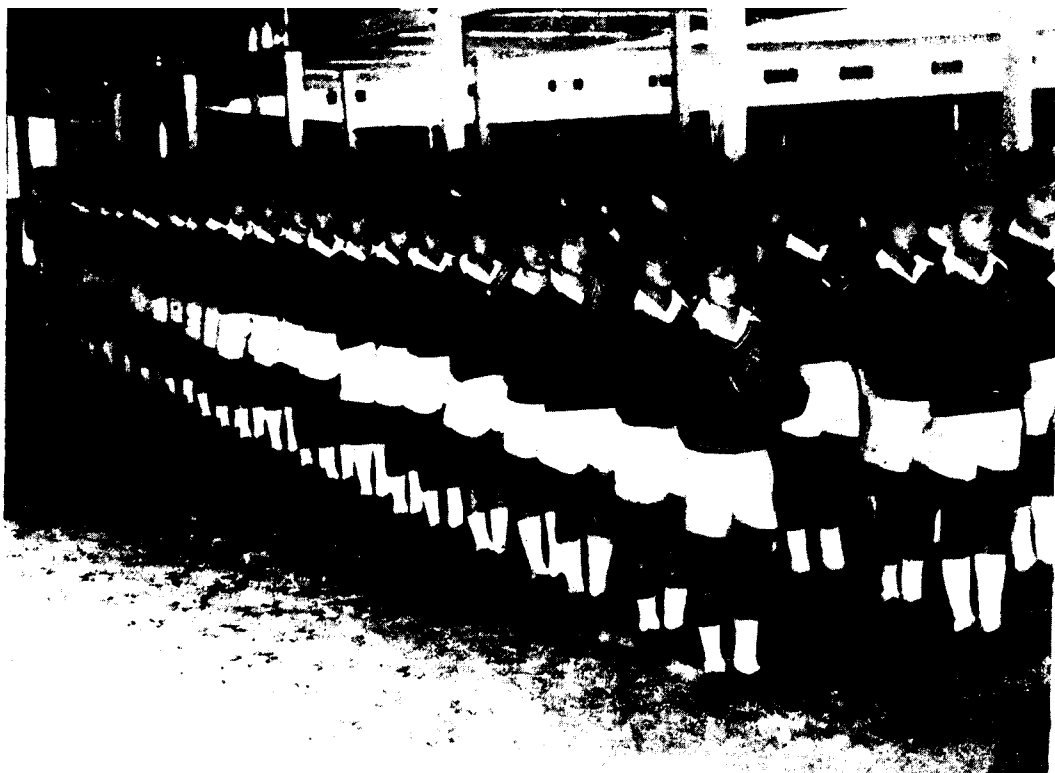
A village school at Khagam



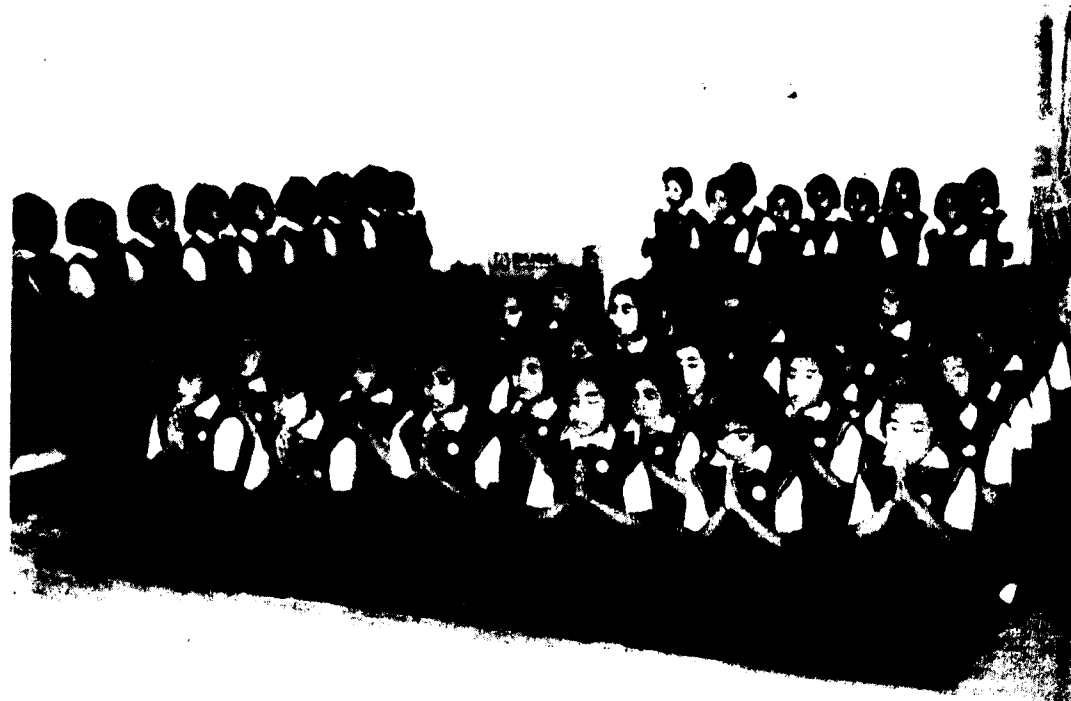
The girls' hostel at Changlang



The Ramkrishna Sarada Mission Girls' School at Khonsa



Boys at prayer at the Ramkrishna Mission School at Deomali



Girls at prayer at the Ramkrishna Sarada Mission School at Khonsa

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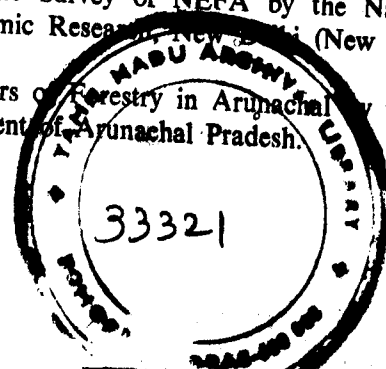
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